

**THE LITHOGEOCHEMICAL AND
MINERALOGICAL SETTING
OF TURBIDITE HOSTED
ARSENIC-GOLD
DEPOSITS IN THE
LOWER PALAEOZOIC OF SCOTLAND.**

by

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Volume Four

**Thesis submitted to the
University of Strathclyde for the Degree
of Doctor of Philosophy**

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December 1989.

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Microprobe Analyses: Glendinning Arsenopyrite (ASP6) Part 6

VAR. / ID.	771	772	773	774	775	776	777	778	779	780
Lab No.	377	378	379	380	381	382	383	386	387	388
X	842	847	852	857	868	873	878	893	898	903
Y	693	693	693	693	693	693	693	693	693	693
Fe	30.377	32.920	31.654	34.057	32.051	33.981	32.501	34.058	32.256	33.654
As	43.490	43.920	43.044	41.525	42.792	42.329	42.173	44.370	42.692	44.077
S	22.365	22.366	22.690	23.765	22.865	22.993	23.480	22.107	22.837	22.220
Sb	0.156	0.084	0.239	0.097	0.127	0.192	0.363	0.076	0.111	0.047
Ni	0.262	0.354	0.001	0.016	0.015	0.075	0.047	0.029	0.360	0.134
Hg	1.493	0.320	0.395	0.303	0.461	0.297	0.338	0.292	0.374	0.226
Au	0.006	0.000	0.027	0.000	0.064	0.442	0.100	0.017	2.371	0.048
Total	98.149	99.964	98.050	99.763	98.375	100.309	99.002	100.949	101.001	100.406
As%Aspy	31.631	31.156	31.003	29.051	30.672	29.780	29.891	31.265	30.300	31.161
Fe%Aspy	29.637	31.326	30.584	31.962	30.818	32.070	30.901	32.193	30.710	31.916
S%Aspy	38.012	37.076	38.192	38.853	38.299	37.803	38.890	36.402	37.876	36.709
AsForm	0.949	0.935	0.930	0.872	0.920	0.893	0.897	0.938	0.909	0.935
FeForm	0.889	0.940	0.918	0.959	0.924	0.962	0.927	0.966	0.921	0.957
SForm	1.140	1.112	1.146	1.166	1.149	1.134	1.167	1.092	1.136	1.101

TABLE 4.06

Microprobe Analyses: Glendinning Arsenopyrite (ASP6) Part 7

VAR. / ID.	781	782	783	784	785	786	787	788	789	790
Lab No.	389	390	393	394	395	396	397	398	399	400
X	908	913	816	826	837	842	847	852	857	862
Y	693	693	703	703	703	703	703	703	703	703
Fe	33.063	34.195	32.241	33.533	34.201	34.416	32.954	35.331	34.091	34.643
As	43.783	43.155	43.834	43.745	42.647	43.057	44.162	43.709	43.237	42.215
S	22.168	22.911	22.075	22.636	23.187	22.534	21.792	22.384	22.865	23.124
Sb	0.063	0.030	0.049	0.057	0.092	0.170	0.094	0.150	0.071	0.352
Ni	0.017	0.005	0.053	0.000	0.000	0.000	0.123	0.802	0.083	0.564
Hg	0.305	0.395	0.374	0.323	0.344	0.345	0.330	0.320	0.373	0.300
Au	0.013	0.000	0.000	0.003	0.010	0.000	0.000	0.007	0.008	0.008
Total	99.412	100.691	98.626	100.297	100.481	100.522	99.455	100.703	100.728	101.206
As%Aspy	31.247	30.234	31.556	30.854	29.844	30.297	31.628	30.788	30.301	29.362
Fe%Aspy	31.653	32.136	31.136	31.727	32.106	32.486	31.659	31.494	32.049	32.322
S%Aspy	36.971	37.509	37.137	37.309	37.918	37.053	36.471	36.845	37.446	37.585
AsForm	0.937	0.907	0.947	0.926	0.895	0.909	0.949	0.924	0.909	0.881
FeForm	0.950	0.964	0.934	0.952	0.963	0.975	0.950	0.945	0.961	0.970
SForm	1.109	1.125	1.114	1.119	1.138	1.112	1.094	1.105	1.123	1.128

TABLE 4.06

Microprobe Analyses: Glendinning Arsenopyrite (ASP6) Part 8

VAR. / ID.	791	792	793	794	795	796	797	798	799	800
Lab No.	401	402	403	404	405	406	407	408	409	410
X	879	884	889	897	902	907	912	917	922	927
Y	703	703	703	703	703	703	703	703	703	703
Fe	33.092	34.312	33.408	34.026	33.573	35.228	33.557	34.949	34.561	36.011
As	39.190	41.725	44.118	43.697	44.578	44.290	43.207	45.037	42.709	41.333
S	22.062	22.604	22.142	22.329	21.956	22.246	22.228	21.824	23.110	23.744
Sb	0.251	0.126	0.072	0.037	0.158	0.092	0.132	0.028	0.000	0.075
Ni	0.034	0.042	0.011	0.054	0.048	0.000	0.225	0.085	0.000	0.000
Hg	0.291	0.397	0.289	0.367	0.449	0.248	0.855	0.292	0.328	0.392
Au	0.000	0.050	0.007	0.020	0.046	0.000	0.000	0.000	0.088	0.000
Total	94.920	99.256	100.047	100.530	100.808	102.104	100.204	102.215	100.796	101.555
As%Aspy	28.934	29.619	31.324	30.825	31.556	30.825	30.675	31.461	29.818	28.443
Fe%Aspy	32.775	32.673	31.819	32.199	31.881	32.890	31.959	32.750	32.368	33.242
S%Aspy	38.064	37.496	36.737	36.809	36.320	36.181	36.878	35.626	37.705	38.183
AsForm	0.868	0.889	0.940	0.925	0.947	0.925	0.920	0.944	0.895	0.853
FeForm	0.983	0.980	0.955	0.966	0.956	0.987	0.959	0.983	0.971	0.997
SForm	1.142	1.125	1.102	1.104	1.090	1.086	1.106	1.069	1.131	1.145

TABLE 4.06

Microprobe Analyses: Glendinning Arsenopyrite (ASP6) Part 9

VAR. / ID.	801	802	803	804	805	806	807	808	809	810
Lab No.	411	412	413	414	415	416	417	418	419	421
X	932	937	939	820	825	830	835	840	844	854
Y	703	703	702	712	712	712	712	712	712	712
Fe	34.169	35.579	34.955	35.506	34.849	35.623	35.329	34.745	33.637	35.004
As	40.898	43.612	43.590	43.817	43.197	42.955	42.368	42.376	44.240	42.202
S	21.934	22.359	22.013	22.381	22.861	22.591	22.782	21.266	21.762	23.273
Sb	0.060	0.064	0.027	0.046	0.078	0.260	0.234	0.000	0.088	0.291
Ni	0.026	0.000	0.000	0.043	0.000	0.000	0.027	0.000	0.351	0.148
Hg	0.069	0.357	0.304	0.472	0.269	0.369	0.437	0.285	0.229	0.446
Au	0.044	0.000	0.305	0.000	0.000	0.046	0.000	0.000	0.000	0.000
Total	97.200	101.971	101.194	102.265	101.254	101.844	101.177	98.672	100.307	101.364
As%Aspy	29.614	30.336	30.661	30.427	30.099	29.861	29.558	30.533	31.419	29.291
Fe%Aspy	33.190	33.199	32.982	33.074	32.573	33.220	33.063	33.583	32.046	32.591
S%Aspy	37.115	36.345	36.184	36.319	37.224	36.700	37.141	35.807	36.117	37.747
AsForm	0.888	0.910	0.920	0.913	0.903	0.896	0.887	0.916	0.943	0.879
FeForm	0.996	0.996	0.989	0.992	0.977	0.997	0.992	1.008	0.961	0.978
SForm	1.113	1.090	1.086	1.090	1.117	1.101	1.114	1.074	1.084	1.132

TABLE 4.06

-2153-

Microprobe Analyses: Glendinning Arsenopyrite (ASP6) Part 10

VAR. / ID.	812	813	814	815	816	817
Lab No.	422	424	425	426	427	428
X	859	877	889	894	899	907
Y	712	712	712	712	712	712
Fe	35.320	33.851	35.257	35.433	34.697	35.106
As	42.562	41.902	41.931	41.637	42.539	43.961
S	22.902	21.530	23.600	23.838	23.044	22.170
Sb	0.169	0.171	0.114	0.298	0.116	0.108
Ni	0.089	0.016	0.027	0.844	0.377	0.380
Hg	0.303	0.301	0.334	0.000	0.435	0.292
Au	0.000	0.026	0.000	0.016	0.000	0.000
Total	101.345	97.797	101.263	102.066	101.208	102.017
As%Aspy	29.600	30.392	28.997	28.491	29.613	30.630
Fe%Aspy	32.951	32.936	32.707	32.524	32.401	32.812
S%Aspy	37.220	36.492	38.138	38.118	37.488	36.098
AsForm	0.888	0.912	0.870	0.855	0.888	0.919
FeForm	0.988	0.988	0.981	0.976	0.972	0.984
SForm	1.117	1.095	1.144	1.144	1.125	1.083

TABLE 4.06

-2134-

Microprobe Analyses: The Knife Arsenopyrite (ASP7) Part 1

VAR. / ID.	801	802	803	804	805	806	807	808	809	810
Lab No.	1	2	3	4	5	6	7	8	9	10
X	613	631	631	631	631	631	631	631	631	631
Y	72	77	82	87	92	97	102	107	112	117
Fe	34.517	34.308	34.779	35.030	34.686	35.337	35.816	35.712	35.380	35.722
As	40.276	40.328	41.040	40.689	40.555	38.400	38.730	37.703	37.392	39.122
S	22.076	22.089	22.145	22.689	22.340	24.131	23.763	25.146	24.906	23.314
Sb	0.157	0.092	0.129	0.082	0.592	0.855	0.646	0.549	0.388	0.295
Ni	0.000	0.004	0.000	0.000	0.003	0.002	0.004	0.006	0.015	0.000
Hg	0.358	0.455	0.316	0.533	0.496	0.318	0.378	0.526	0.424	0.283
Cu	0.046	0.058	0.043	0.000	0.033	0.000	0.075	0.047	0.034	0.017
Au	0.000	0.000	0.000	0.000	0.027	0.024	0.000	0.033	0.008	0.000
Ag	0.015	0.002	0.015	0.059	0.012	0.033	0.025	0.046	0.052	0.010
Total	97.445	97.336	98.467	99.082	98.744	99.100	99.437	99.768	98.599	98.763
As%Aspy	29.088	29.166	29.377	28.859	28.988	26.877	27.092	26.000	26.048	27.582
Fe%Aspy	33.441	33.284	33.395	33.329	33.259	33.178	33.609	33.035	33.062	33.785
S%Aspy	37.258	37.332	37.043	37.606	37.316	39.469	38.845	40.522	40.545	38.411
AsForm	0.873	0.875	0.881	0.866	0.870	0.806	0.813	0.780	0.781	0.827
FeForm	1.003	0.998	1.002	1.000	0.998	0.995	1.008	0.991	0.992	1.014
SForm	1.118	1.120	1.111	1.128	1.120	1.184	1.165	1.216	1.216	1.152

TABLE 4.07

Microprobe Analyses: The Knife Arsenopyrite (ASP7) Part 2

VAR. / ID.	811	812	813	814	815	816	817	818	819	820
Lab No.	11	12	13	14	15	16	17	18	19	20
X	631	631	631	631	631	642	642	642	642	642
Y	122	127	132	137	142	138	133	128	123	118
Fe	35.953	35.207	35.791	35.053	34.511	35.092	35.697	35.367	35.414	35.584
As	37.833	38.280	38.095	39.703	40.884	38.952	37.820	37.888	38.292	38.303
S	24.969	24.621	24.109	23.311	22.705	22.708	24.098	24.477	24.831	24.501
Sb	0.421	0.241	0.379	0.484	0.157	0.427	0.679	0.315	0.424	0.356
Ni	0.006	0.000	0.000	0.000	0.023	0.000	0.000	0.022	0.011	0.016
Hg	0.431	0.480	0.354	0.308	0.418	0.362	0.521	0.180	0.509	0.384
Cu	0.009	0.008	0.025	0.026	0.026	0.004	0.032	0.061	0.003	0.000
Au	0.008	0.000	0.000	0.008	0.040	0.011	0.000	0.000	0.002	0.000
Ag	0.006	0.000	0.006	0.032	0.021	0.046	0.018	0.032	0.033	0.023
Total	99.636	98.837	98.759	98.925	98.785	97.602	98.865	98.342	99.519	99.167
As%Aspy	26.118	26.698	26.669	28.025	29.082	27.917	26.507	26.511	26.533	26.656
Fe%Aspy	33.294	32.939	33.611	33.192	32.931	33.737	33.561	33.197	32.918	33.220
S%Aspy	40.281	40.128	39.441	38.452	37.743	38.032	39.468	40.024	40.208	39.846
AsForm	0.784	0.801	0.800	0.841	0.873	0.837	0.795	0.795	0.796	0.800
FeForm	0.999	0.988	1.008	0.996	0.988	1.012	1.007	0.996	0.988	0.997
SForm	1.208	1.204	1.183	1.154	1.132	1.141	1.184	1.201	1.206	1.195

TABLE 4.07

Microprobe Analyses: The Knife Arsenopyrite (ASP7) Part 3

VAR. / ID.	821	822	823	824	825	826	827	828	829	830
Lab No.	21	24	25	26	27	28	29	30	31	32
X	642	642	642	642	642	639	648	648	648	648
Y	103	98	93	88	83	83	92	97	102	107
Fe	35.406	35.184	35.357	34.183	34.073	34.759	35.051	34.984	35.350	35.496
As	38.338	38.517	37.341	39.808	40.428	39.710	41.331	41.054	39.389	37.898
S	23.894	23.742	23.681	21.996	22.060	22.471	22.219	22.668	24.007	24.054
Sb	0.559	0.558	0.778	0.076	0.123	0.157	0.046	0.143	0.331	0.698
Ni	0.038	0.016	0.000	0.006	0.019	0.000	0.038	0.024	0.054	0.011
Hg	0.366	0.480	0.449	0.285	0.358	0.375	0.376	0.327	0.271	0.503
Cu	0.054	0.015	0.069	0.041	0.045	0.022	0.023	0.039	0.049	0.073
Au	0.011	0.005	0.074	0.014	0.000	0.024	0.000	0.000	0.002	0.000
Ag	0.013	0.015	0.025	0.001	0.015	0.027	0.014	0.025	0.014	0.013
Total	98.679	98.532	97.774	96.410	97.121	97.545	99.098	99.264	99.467	98.746
As%Aspy	26.946	27.169	26.505	28.998	29.299	28.540	29.411	29.063	27.477	26.604
Fe%Aspy	33.382	33.292	33.666	33.402	33.125	33.511	33.459	33.222	33.079	33.426
S%Aspy	39.245	39.135	39.280	37.443	37.360	37.740	36.949	37.500	39.135	39.460
AsForm	0.808	0.815	0.795	0.870	0.879	0.856	0.882	0.872	0.824	0.798
FeForm	1.002	0.999	1.010	1.002	0.994	1.005	1.004	0.997	0.992	1.003
SForm	1.177	1.174	1.178	1.123	1.121	1.132	1.109	1.125	1.174	1.184

TABLE 4.07

Microprobe Analyses: The Knipe Arsenopyrite (ASP7) Part 4

VAR. / ID.	831	832	833	834	835	836	837	838	839	840
Lab No.	33	34	35	36	37	38	39	40	41	44
X	648	648	648	648	648	654	654	654	654	659
Y	112	117	122	127	132	126	121	116	101	110
Fe	35.510	35.600	35.703	36.008	34.746	34.865	35.021	34.861	34.764	36.486
As	37.816	38.445	35.991	35.853	40.232	36.822	37.317	38.743	37.771	36.575
S	25.198	24.603	25.626	25.721	23.717	24.320	24.174	23.184	24.098	25.408
Sb	0.452	0.422	0.330	0.322	0.072	0.272	0.318	0.214	0.554	0.524
Ni	0.002	0.000	0.007	0.000	0.006	0.004	0.000	0.001	0.001	0.008
Hg	0.657	0.480	0.410	0.452	0.555	0.580	0.479	0.386	0.509	0.375
Cu	0.026	0.067	0.040	0.000	0.019	0.031	0.030	0.018	0.024	0.011
Au	0.002	0.074	0.033	0.000	0.000	0.000	0.017	0.081	0.000	0.055
Ag	0.034	0.000	0.030	0.035	0.020	0.014	0.005	0.004	0.002	0.018
Total	99.697	99.691	98.170	98.391	99.367	96.908	97.361	97.492	97.723	99.460
As%Aspy	26.095	26.653	24.956	24.785	28.221	26.141	26.427	27.670	26.735	25.152
Fe%Aspy	32.871	33.108	33.210	33.392	32.695	33.203	33.270	33.399	33.008	33.659
S%Aspy	40.633	39.860	41.525	41.552	38.877	40.347	40.006	38.694	39.860	40.832
AsForm	0.783	0.800	0.749	0.744	0.847	0.784	0.793	0.830	0.802	0.755
FeForm	0.986	0.993	0.996	1.002	0.981	0.996	0.998	1.002	0.990	1.010
SForm	1.219	1.196	1.246	1.247	1.166	1.210	1.200	1.161	1.196	1.225

TABLE 4.07

Microprobe Analyses: The Knipe Arsenopyrite (ASP7) Part 5

VAR. / ID.	841	842	843	844	845	846	847	848	849
Lab No.	47	50	51	52	53	54	55	65	66
X	662	624	624	624	624	624	624	618	618
Y	117	126	121	116	111	106	101	111	116
Fe	34.580	33.764	34.550	34.409	35.180	34.586	33.949	34.739	34.174
As	38.714	41.159	41.476	39.774	38.628	39.672	40.608	39.348	40.674
S	24.153	23.140	22.051	22.657	23.824	23.470	22.370	23.479	23.260
Sb	0.573	0.116	0.096	0.305	0.339	0.100	0.094	0.097	0.099
Ni	0.021	0.043	0.045	0.006	0.011	0.000	0.003	0.000	0.003
Hg	0.427	0.346	0.304	0.538	0.337	0.368	0.419	0.530	0.369
Cu	0.006	0.000	0.068	0.053	0.008	0.048	0.045	0.006	0.005
Au	0.027	0.184	0.000	0.000	0.011	0.056	0.030	0.000	0.094
Ag	0.040	0.056	0.027	0.027	0.034	0.014	0.031	0.001	0.032
Total	98.541	98.808	98.617	97.769	98.372	98.314	97.549	98.200	98.710
As%Aspy	27.239	29.213	29.693	28.541	27.226	28.096	29.271	27.890	28.819
Fe%Aspy	32.638	32.147	33.180	33.122	33.262	32.858	32.827	33.031	32.481
S%Aspy	39.712	38.381	36.891	37.994	39.240	38.843	37.682	38.891	38.512
AsForm	0.817	0.876	0.891	0.856	0.817	0.843	0.878	0.837	0.865
FeForm	0.979	0.964	0.995	0.994	0.998	0.986	0.985	0.991	0.974
SForm	1.191	1.151	1.107	1.140	1.177	1.165	1.130	1.167	1.155

TABLE 4.07

Microprobe Analyses: The Knipe Arsenopyrite (ASP8) Part 1

VAR. / ID.	850	851	852	853	854	855	856	857	858	859
Lab No.	78	79	80	81	82	83	84	85	86	87
X	451	447	447	447	447	447	442	442	442	442
Y	486	482	487	492	497	502	477	482	487	492
Fe	35.027	35.192	34.512	34.678	34.598	34.180	35.122	35.231	35.053	34.625
As	41.473	41.176	42.132	42.156	44.016	43.886	38.990	40.482	41.575	42.373
S	21.842	22.251	21.779	21.520	20.461	20.141	23.454	22.302	22.041	21.613
Sb	0.452	0.259	0.312	0.321	0.011	0.137	0.670	0.438	0.429	0.234
Hg	0.431	0.406	0.402	0.390	0.607	0.454	0.379	0.418	0.546	0.341
Ni	0.016	0.013	0.017	0.021	0.026	0.008	0.047	0.003	0.018	0.000
Cu	0.041	0.051	0.020	0.097	0.049	0.047	0.026	0.000	0.049	0.015
Au	0.000	0.000	0.000	0.000	0.089	0.000	0.000	0.000	0.000	0.053
Ag	0.027	0.010	0.012	0.028	0.023	0.026	0.011	0.047	0.021	0.034
Total	99.309	99.358	99.186	99.211	99.880	98.879	98.699	98.921	99.732	99.288
As%Aspy	29.618	29.249	30.155	30.226	31.754	32.001	27.542	28.849	29.556	30.340
Fe%Aspy	33.555	33.534	33.135	33.354	33.482	33.433	33.281	33.680	33.428	33.258
S%Aspy	36.451	36.936	36.427	36.058	34.494	34.320	38.716	37.141	36.616	36.164
AsForm	0.888	0.877	0.905	0.907	0.953	0.960	0.826	0.865	0.887	0.910
FeForm	1.007	1.006	0.994	1.001	1.005	1.003	0.998	1.010	1.003	0.998
SForm	1.094	1.108	1.093	1.082	1.035	1.030	1.161	1.114	1.099	1.085

TABLE 4.08

Microprobe Analyses: The Knipe Arsenopyrite (ASP8) Part 2

VAR. / ID.	860	861	862	863	864	865	866	867	868	869
Lab No.	88	89	90	91	92	93	94	95	96	97
X	442	442	442	437	437	437	437	437	437	435
Y	497	502	507	517	512	507	502	497	492	487
Fe	34.159	33.906	33.970	33.602	34.594	34.398	33.799	33.922	34.758	34.872
As	43.046	43.782	43.992	43.446	42.561	43.529	44.649	43.921	43.349	42.167
S	20.586	20.179	20.132	20.239	20.140	20.137	19.969	19.356	20.775	21.318
Sb	0.001	0.200	0.172	0.094	0.162	0.186	0.213	0.058	0.020	0.098
Hg	0.331	0.374	0.313	0.472	0.220	0.417	0.277	0.406	0.398	0.274
Ni	0.027	0.003	0.032	0.027	0.030	0.019	0.007	0.021	0.044	0.034
Cu	0.035	0.040	0.059	0.058	0.057	0.039	0.047	0.050	0.048	0.038
Au	0.000	0.102	0.021	0.015	0.028	0.083	0.011	0.073	0.000	0.060
Ag	0.049	0.047	0.027	0.035	0.051	0.022	0.045	0.025	0.045	0.032
Total	98.234	98.633	98.718	97.988	97.843	98.830	99.017	97.832	99.437	98.893
As%Aspy	31.372	32.003	32.119	31.902	31.211	31.746	32.593	32.540	31.225	30.323
Fe%Aspy	33.396	33.246	33.270	33.099	34.031	33.652	33.098	33.713	33.585	33.640
S%Aspy	35.061	34.469	34.348	34.729	34.514	34.319	34.065	33.511	34.970	35.825
AsForm	0.941	0.960	0.964	0.957	0.936	0.952	0.978	0.976	0.937	0.910
FeForm	1.002	0.997	0.998	0.993	1.021	1.010	0.993	1.011	1.008	1.009
SForm	1.052	1.034	1.031	1.042	1.035	1.030	1.022	1.005	1.049	1.075

TABLE 4.08

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Microprobe Analyses: The Knipe Arsenopyrite (ASPB) Part 3

VAR. / ID.	870	871	872	873	874	875	876	877	878	879
Lab No.	98	99	100	101	102	103	104	105	106	107
X	437	437	437	431	431	431	431	431	431	431
Y	482	477	472	469	474	479	484	489	494	499
Fe	34.791	35.230	35.265	34.103	34.939	34.466	34.702	34.390	33.660	33.998
As	42.050	39.008	40.727	41.081	40.653	41.530	42.004	42.437	43.713	44.604
S	22.019	23.230	22.774	21.543	22.547	22.173	21.690	21.516	20.629	19.861
Sb	0.212	0.694	0.453	0.252	0.462	0.184	0.050	0.134	0.185	0.188
Hg	0.450	0.373	0.478	0.371	0.351	0.437	0.311	0.469	0.460	0.320
Ni	0.019	0.018	0.011	0.025	0.027	0.026	0.021	0.039	0.059	0.021
Cu	0.054	0.021	0.042	0.004	0.009	0.031	0.037	0.077	0.024	0.068
Au	0.050	0.030	0.000	0.043	0.000	0.000	0.018	0.037	0.000	0.018
Ag	0.030	0.000	0.015	0.020	0.040	0.008	0.003	0.018	0.022	0.036
Total	99.675	98.604	99.765	97.442	99.028	98.855	98.836	99.117	98.752	99.114
As%Aspy	29.907	27.630	28.725	29.870	28.893	29.679	30.117	30.470	31.796	32.558
Fe%Aspy	33.193	33.475	33.365	33.263	33.311	33.041	33.378	33.124	32.844	33.290
S%Aspy	36.597	38.452	37.536	36.605	37.448	37.029	36.343	36.102	35.065	33.879
AsForm	0.897	0.829	0.862	0.896	0.867	0.890	0.904	0.914	0.954	0.977
FeForm	0.996	1.004	1.001	0.998	0.999	0.991	1.001	0.994	0.985	0.999
SForm	1.098	1.154	1.126	1.098	1.123	1.111	1.090	1.083	1.052	1.016

TABLE 4.08

Microprobe Analyses: The Knipe Arsenopyrite (ASPB) Part 4

VAR. / ID.	880	881	882	883	884	885	886	887	888	889
Lab No.	108	109	110	111	113	114	115	116	117	118
X	431	431	431	431	426	426	426	426	426	426
Y	504	509	514	519	522	517	512	507	502	497
Fe	33.868	33.512	32.628	33.619	32.809	33.903	33.433	33.734	33.110	33.846
As	44.638	43.999	44.257	44.151	44.014	44.015	43.807	44.378	44.629	44.620
S	19.726	19.933	19.636	20.006	19.797	19.934	19.990	20.198	19.691	19.935
Sb	0.204	0.188	0.112	0.030	0.018	0.184	0.184	0.201	0.187	0.188
Hg	0.455	0.338	0.166	0.424	0.541	0.313	0.197	0.516	0.382	0.375
Ni	0.009	0.018	0.034	0.019	0.025	0.005	0.022	0.015	0.020	0.032
Cu	0.025	0.038	0.052	0.077	0.012	0.015	0.035	0.072	0.014	0.014
Au	0.000	0.073	0.000	0.070	0.024	0.070	0.008	0.000	0.057	0.083
Ag	0.017	0.018	0.027	0.035	0.019	0.041	0.015	0.039	0.042	0.001
Total	98.942	98.117	96.912	98.431	97.259	98.480	97.691	99.153	98.132	99.094
As%Aspy	32.698	32.380	32.986	32.382	32.707	32.272	32.297	32.327	32.958	32.580
Fe%Aspy	33.280	33.083	32.623	33.077	32.705	33.346	33.065	32.964	32.801	33.152
S%Aspy	33.767	34.280	34.201	34.289	34.378	34.155	34.440	34.383	33.982	34.015
AsForm	0.981	0.971	0.990	0.971	0.981	0.968	0.969	0.970	0.989	0.977
FeForm	0.998	0.993	0.979	0.992	0.981	1.000	0.992	0.989	0.984	0.995
SForm	1.013	1.028	1.026	1.029	1.031	1.025	1.033	1.031	1.020	1.020

TABLE 4.08

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Microprobe Analyses: The Knipe Arsenopyrite (ASP8) Part 5

VAR. / ID.	890	891	892	893	894	895	896	897	898	899
Lab No.	119	120	121	122	131	132	133	134	135	136
X	426	426	426	426	421	421	421	421	421	421
Y	492	487	482	477	488	493	500	506	511	516
Fe	33.528	34.177	35.063	34.861	33.755	33.608	33.543	33.965	34.077	33.743
As	43.592	41.643	41.333	41.692	42.326	43.487	43.886	44.429	43.718	44.162
S	20.529	22.005	22.105	22.113	21.429	20.551	19.822	20.013	20.248	19.925
Sb	0.181	0.287	0.309	0.073	0.018	0.021	0.160	0.224	0.197	0.217
Hg	0.301	0.589	0.275	0.389	0.244	0.441	0.363	0.540	0.454	0.369
Ni	0.022	0.023	0.006	0.018	0.028	0.022	0.016	0.049	0.039	0.030
Cu	0.076	0.069	0.019	0.040	0.002	0.035	0.075	0.049	0.050	0.058
Au	0.024	0.000	0.027	0.000	0.000	0.109	0.000	0.000	0.011	0.054
Ag	0.021	0.032	0.001	0.057	0.026	0.021	0.012	0.003	0.044	0.032
Total	98.274	98.825	99.138	99.243	97.828	98.295	97.877	99.272	98.838	98.590
As%Aspy	31.841	29.864	29.448	29.688	30.706	31.766	32.375	32.378	31.869	32.375
Fe%Aspy	32.852	32.879	33.511	33.300	32.850	32.932	33.194	33.204	33.323	33.183
S%Aspy	35.041	36.877	36.803	36.797	36.329	35.081	34.172	34.082	34.492	34.134
AsForm	0.955	0.896	0.883	0.891	0.921	0.953	0.971	0.971	0.956	0.971
FeForm	0.986	0.986	1.005	0.999	0.985	0.988	0.996	0.996	1.000	0.996
SForm	1.051	1.106	1.104	1.104	1.090	1.052	1.025	1.023	1.035	1.024

TABLE 4.08

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Microprobe Analyses: The Knipe Arsenopyrite (ASP8) Part 6

VAR. / ID.	900	901	902	903	904	905	906	907	908	909
Lab No.	137	138	139	140	141	142	143	155	156	162
X	421	414	414	414	414	420	420	413	413	408
Y	522	522	515	508	503	497	490	507	512	516
Fe	33.292	33.657	33.562	33.633	33.885	33.698	33.562	34.095	33.503	32.989
As	44.025	43.385	43.752	43.501	44.177	43.617	42.912	43.927	43.895	43.841
S	19.984	20.390	20.064	20.273	19.823	19.949	20.226	20.087	20.198	20.151
Sb	0.241	0.225	0.223	0.106	0.041	0.151	0.031	0.078	0.184	0.014
Hg	0.369	0.527	0.301	0.227	0.473	0.270	0.404	0.289	0.325	0.301
Ni	0.027	0.009	0.045	0.002	0.015	0.038	0.017	0.027	0.021	0.011
Cu	0.058	0.078	0.026	0.049	0.048	0.028	0.027	0.067	0.039	0.063
Au	0.037	0.000	0.086	0.000	0.093	0.070	0.008	0.050	0.000	0.037
Ag	0.002	0.052	0.012	0.040	0.016	0.014	0.019	0.019	0.035	0.004
Total	98.035	98.323	98.071	97.831	98.571	97.835	97.206	98.639	98.200	97.411
As%Aspy	32.422	31.747	32.161	31.932	32.416	32.130	31.684	32.085	32.188	32.376
Fe%Aspy	32.889	33.038	33.095	33.118	33.354	33.299	33.241	33.407	32.957	32.681
S%Aspy	34.392	34.867	34.466	34.776	33.992	34.341	34.898	34.287	34.612	34.776
AsForm	0.973	0.952	0.965	0.958	0.973	0.964	0.951	0.963	0.966	0.971
FeForm	0.987	0.991	0.993	0.993	1.001	0.999	0.997	1.002	0.989	0.980
SForm	1.032	1.046	1.034	1.043	1.020	1.030	1.047	1.029	1.038	1.043

TABLE 4.08

Microprobe Analyses: The Knipe Arsenopyrite (ASP8) Part 7

VAR. / ID.	910
Lab No.	163
X	408
Y	511
Fe	33.513
As	43.484
S	20.293
Sb	0.060
Hg	0.344
Ni	0.003
Cu	0.028
Au	0.083
Ag	0.047
Total	97.855
As%Aspy	31.943
Fe%Aspy	33.025
S%Aspy	34.836
AsForm	0.958
FeForm	0.991
SForm	1.045

TABLE 4.08

Microprobe Analyses: Talnogy Arsenopyrite (ASP9) Part 1

VAR. / ID.	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710
Lab No.	1	2	3	4	5	6	7	8	9	10
X	0	15	31	47	62	78	94	109	125	141
Y	750	750	750	750	750	750	750	750	750	750
Fe	34.805	34.585	34.694	34.910	34.770	35.030	34.710	34.300	34.786	35.171
As	45.551	45.981	42.726	44.495	46.179	44.470	43.688	45.551	45.393	43.471
S	20.387	20.407	20.419	20.692	20.578	20.748	20.516	20.355	20.702	20.283
Ni	0.047	0.000	0.025	0.000	0.007	0.030	0.009	0.016	0.000	0.005
Sb	0.056	0.026	0.035	0.075	0.047	0.073	0.035	0.030	0.029	0.045
Cu	0.000	0.000	0.000	0.050	0.000	0.020	0.040	0.000	0.005	0.000
Zn	0.013	0.007	0.010	0.017	0.060	0.047	0.004	0.051	0.022	0.000
Au	0.053	0.006	0.026	0.000	0.003	0.014	0.054	0.000	0.051	0.028
Ag	0.001	0.000	0.000	0.000	0.004	0.000	0.024	0.005	0.015	0.000
Total	100.913	101.012	97.935	100.239	101.648	100.432	99.080	100.308	101.003	99.003
As%Aspy	32.534	32.822	31.174	31.827	32.746	31.739	31.586	32.716	32.305	31.479
Fe%Aspy	33.347	33.117	33.957	33.497	33.075	33.538	33.664	33.047	33.209	34.165
S%Aspy	34.027	34.041	34.815	34.587	34.100	34.605	34.662	34.164	34.429	34.323
AsForm	0.976	0.985	0.935	0.955	0.982	0.952	0.948	0.982	0.969	0.944
FeForm	1.000	0.993	1.019	1.005	0.992	1.006	1.010	0.991	0.996	1.025
SForm	1.021	1.021	1.044	1.038	1.023	1.038	1.040	1.025	1.033	1.030

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 2

VAR. / ID.	1711	1712	1713	1714	1715	1716	1717	1718	1719	1720
Lab No.	11	12	13	14	15	16	17	18	19	20
X	156	172	188	203	219	235	250	266	282	297
Y	750	750	750	750	750	750	750	750	750	750
Fe	34.631	34.827	34.966	34.853	34.773	34.629	34.795	34.770	34.707	34.529
As	46.693	46.306	45.601	45.968	46.023	45.736	46.414	46.577	46.104	46.304
S	20.528	20.707	20.723	21.033	20.767	20.368	20.483	20.564	20.554	20.785
Ni	0.028	0.000	0.015	0.004	0.000	0.033	0.008	0.000	0.001	0.021
Sb	0.017	0.035	0.048	0.033	0.059	0.090	0.037	0.056	0.053	0.025
Cu	0.036	0.075	0.025	0.024	0.000	0.000	0.026	0.019	0.060	0.026
Zn	0.001	0.033	0.062	0.027	0.052	0.012	0.063	0.000	0.064	0.000
Au	0.000	0.056	0.000	0.064	0.033	0.055	0.000	0.000	0.096	0.017
Ag	0.014	0.000	0.000	0.004	0.012	0.000	0.020	0.011	0.022	0.000
Total	101.948	102.039	101.440	102.010	101.719	100.923	101.846	101.997	101.661	101.707
As%Aspy	33.064	32.706	32.322	32.375	32.568	32.688	32.893	32.954	32.716	32.776
Fe%Aspy	32.896	32.997	33.247	32.929	33.008	33.200	33.079	33.000	33.038	32.787
S%Aspy	33.969	34.177	34.325	34.617	34.341	34.018	33.922	34.000	34.084	34.381
AsForm	0.992	0.981	0.970	0.971	0.977	0.981	0.987	0.989	0.982	0.983
FeForm	0.987	0.990	0.997	0.988	0.990	0.996	0.992	0.990	0.991	0.984
SForm	1.019	1.025	1.030	1.038	1.030	1.020	1.018	1.020	1.023	1.031

TABLE 4.09

Microprobe Analyses: Talnoy Arsenopyrite (ASP9) Part 3

VAR. / ID.	1721	1722	1723	1724	1725	1726	1727	1728	1729	1730
Lab No.	21	22	23	24	25	26	27	28	29	30
X	313	329	345	0	15	31	47	62	78	94
Y	750	750	750	770	770	770	770	770	770	770
Fe	34.731	34.958	34.524	35.428	34.832	34.524	34.549	34.584	34.738	34.101
As	44.846	43.540	45.490	46.458	43.308	43.567	46.141	44.963	44.369	45.723
S	20.497	20.365	20.689	20.389	20.750	20.681	20.537	20.959	20.283	20.507
Ni	0.004	0.016	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000
Sb	0.060	0.037	0.028	0.020	0.048	0.059	0.012	0.054	0.033	0.038
Cu	0.000	0.022	0.038	0.004	0.000	0.010	0.023	0.000	0.041	0.079
Zn	0.052	0.003	0.024	0.028	0.000	0.057	0.049	0.009	0.052	0.000
Au	0.000	0.019	0.018	0.082	0.092	0.002	0.020	0.063	0.004	0.043
Ag	0.000	0.000	0.000	0.016	0.002	0.023	0.004	0.000	0.000	0.000
Total	100.190	98.960	100.811	102.425	99.032	98.923	101.359	100.632	99.520	100.491
As%Aspy	32.162	31.527	32.436	32.781	31.249	31.493	32.815	32.025	32.036	32.771
Fe%Aspy	33.413	33.956	33.022	33.534	33.715	33.478	32.960	33.043	33.646	32.787
S%Aspy	34.352	34.460	34.473	33.620	34.988	34.935	34.131	34.884	34.224	34.347
AsForm	0.965	0.946	0.973	0.984	0.938	0.945	0.984	0.961	0.961	0.983
FeForm	1.002	1.019	0.991	1.006	1.012	1.004	0.989	0.991	1.009	0.984
SForm	1.031	1.034	1.034	1.009	1.050	1.048	1.024	1.046	1.027	1.030

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 4

VAR. / ID.	1731	1732	1733	1734	1735	1736	1737	1738	1739	1740
Lab No.	31	32	33	34	35	36	37	38	39	40
X	109	125	141	156	172	188	203	219	235	250
Y	770	770	770	770	770	770	770	770	770	770
Fe	34.947	34.607	35.369	35.474	34.849	34.654	34.375	35.206	34.759	34.653
As	46.565	45.092	46.080	46.211	45.733	45.488	46.602	45.863	45.543	46.473
S	20.623	20.665	20.737	21.010	20.544	20.538	20.731	20.769	20.939	20.886
Ni	0.010	0.014	0.000	0.015	0.012	0.030	0.000	0.029	0.029	0.000
Sb	0.062	0.066	0.037	0.035	0.043	0.030	0.023	0.049	0.043	0.071
Cu	0.008	0.000	0.031	0.000	0.037	0.020	0.030	0.015	0.017	0.068
Zn	0.013	0.010	0.053	0.029	0.059	0.030	0.021	0.045	0.000	0.035
Au	0.000	0.006	0.000	0.000	0.000	0.020	0.000	0.000	0.000	0.026
Ag	0.025	0.000	0.002	0.000	0.000	0.000	0.000	0.006	0.007	0.028
Total	102.253	100.460	102.309	102.774	101.277	100.810	101.782	101.982	101.337	102.240
As%Aspy	32.855	32.236	32.426	32.322	32.517	32.470	32.996	32.351	32.256	32.737
Fe%Aspy	33.077	33.188	33.387	33.285	33.239	33.183	32.650	33.314	33.025	32.745
S%Aspy	34.003	34.524	34.101	34.341	34.135	34.259	34.302	34.236	34.657	34.382
AsForm	0.986	0.967	0.973	0.970	0.975	0.974	0.990	0.971	0.968	0.982
FeForm	0.992	0.996	1.002	0.998	0.997	0.996	0.979	0.999	0.991	0.982
SForm	1.020	1.036	1.023	1.030	1.024	1.028	1.029	1.027	1.040	1.031

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 5

VAR. / ID.	1741	1742	1743	1744	1745	1746	1747	1748	1749	1750
Lab No.	41	42	43	44	45	46	47	48	49	50
X	266	282	297	313	329	345	0	15	31	47
Y	770	770	770	770	770	770	791	791	791	791
Fe	35.243	35.233	34.942	34.698	34.927	34.911	34.385	35.052	34.980	35.072
As	45.646	44.403	46.131	46.714	44.522	45.011	46.560	44.412	44.784	46.343
S	20.712	20.477	20.856	20.565	20.657	20.195	20.463	20.773	20.721	20.300
Ni	0.000	0.000	0.003	0.000	0.035	0.042	0.004	0.000	0.031	0.000
Sb	0.001	0.032	0.036	0.038	0.040	0.028	0.061	0.012	0.062	0.061
Cu	0.038	0.025	0.018	0.043	0.042	0.054	0.049	0.004	0.018	0.021
Zn	0.042	0.001	0.062	0.040	0.009	0.070	0.068	0.006	0.004	0.050
Au	0.000	0.000	0.000	0.025	0.013	0.000	0.059	0.016	0.000	0.020
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.005
Total	101.682	100.171	102.048	102.123	100.245	100.311	101.649	100.275	100.602	101.872
As%Aspy	32.278	31.814	32.519	33.026	31.851	32.324	33.090	31.723	31.935	32.877
Fe%Aspy	33.431	33.864	33.042	32.907	33.519	33.631	32.782	33.586	33.461	33.376
S%Aspy	34.226	34.286	34.356	33.976	34.534	33.891	33.985	34.674	34.529	33.654
AsForm	0.968	0.954	0.976	0.991	0.956	0.970	0.993	0.952	0.958	0.986
FeForm	1.003	1.016	0.991	0.987	1.006	1.009	0.984	1.008	1.004	1.001
SForm	1.027	1.029	1.031	1.019	1.036	1.017	1.020	1.040	1.036	1.010

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 6

VAR. / ID.	1751	1752	1753	1754	1755	1756	1757	1758	1759	1760
Lab No.	51	52	53	54	55	56	57	58	59	60
X	62	78	94	109	125	141	156	172	188	203
Y	791	791	791	791	791	791	791	791	791	791
Fe	35.318	35.441	34.814	35.241	34.968	34.657	35.058	34.915	34.926	35.121
As	43.512	43.855	46.557	45.354	44.371	45.986	45.962	44.119	44.917	45.414
S	20.633	21.040	20.312	20.519	20.781	20.627	20.600	20.613	20.452	21.249
Ni	0.001	0.010	0.000	0.000	0.000	0.000	0.039	0.003	0.000	0.000
Sb	0.026	0.046	0.030	0.033	0.038	0.065	0.053	0.028	0.037	0.046
Cu	0.003	0.058	0.000	0.024	0.034	0.007	0.011	0.020	0.036	0.000
Zn	0.028	0.009	0.020	0.000	0.068	0.021	0.026	0.041	0.071	0.055
Au	0.000	0.003	0.013	0.025	0.000	0.000	0.034	0.034	0.000	0.000
Ag	0.000	0.014	0.001	0.003	0.009	0.011	0.015	0.001	0.000	0.000
Total	99.521	100.476	101.747	101.199	100.269	101.374	101.798	99.774	100.439	101.885
As%Aspy	31.268	31.170	33.073	32.249	31.696	32.670	32.533	31.688	32.151	31.920
Fe%Aspy	34.046	33.791	33.175	33.614	33.508	33.028	33.288	33.640	33.535	33.114
S%Aspy	34.649	34.946	33.719	34.095	34.690	34.245	34.074	34.597	34.209	34.902
AsForm	0.938	0.935	0.992	0.967	0.951	0.980	0.976	0.951	0.965	0.958
FeForm	1.021	1.014	0.995	1.008	1.005	0.991	0.999	1.009	1.006	0.993
SForm	1.039	1.048	1.012	1.023	1.041	1.027	1.022	1.038	1.026	1.047

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 7

VAR. / ID.	1761	1762	1763	1764	1765	1766	1767	1768	1769	1770
Lab No.	61	62	63	64	65	66	67	68	69	70
X	219	235	250	266	282	297	313	329	345	0
Y	791	791	791	791	791	791	791	791	791	812
Fe	34.868	35.470	34.575	34.800	34.423	34.803	34.277	34.604	35.249	35.053
As	43.004	43.617	43.903	45.801	43.834	44.737	45.714	46.448	43.654	44.605
S	20.501	20.932	21.245	20.907	20.700	20.475	20.450	20.532	20.556	20.381
Ni	0.015	0.002	0.016	0.000	0.006	0.011	0.042	0.000	0.003	0.015
Sb	0.067	0.030	0.040	0.022	0.043	0.061	0.073	0.033	0.023	0.044
Cu	0.028	0.012	0.000	0.014	0.015	0.000	0.016	0.029	0.054	0.000
Zn	0.067	0.008	0.043	0.024	0.040	0.032	0.029	0.036	0.021	0.059
Au	0.025	0.000	0.000	0.009	0.009	0.047	0.079	0.000	0.038	0.000
Ag	0.000	0.001	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.011
Total	98.575	100.072	99.822	101.577	99.077	100.166	100.680	101.682	99.598	100.168
As%Aspy	31.193	31.120	31.354	32.391	31.651	32.098	32.731	32.955	31.384	32.003
Fe%Aspy	33.927	33.948	33.123	33.014	33.343	33.497	32.922	32.935	33.994	33.737
S%Aspy	34.750	34.900	35.456	34.552	34.929	34.329	34.217	34.042	34.535	34.172
AsForm	0.936	0.934	0.941	0.972	0.950	0.963	0.982	0.989	0.942	0.960
FeForm	1.018	1.018	0.994	0.990	1.000	1.005	0.988	0.988	1.020	1.012
SForm	1.043	1.047	1.064	1.037	1.048	1.030	1.026	1.021	1.036	1.025

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 8

VAR. / ID.	1771	1772	1773	1774	1775	1776	1777	1778	1779	1780
Lab No.	71	72	73	74	75	76	77	78	79	80
X	15	31	47	62	78	94	109	125	141	156
Y	812	812	812	812	812	812	812	812	812	812
Fe	34.381	35.080	34.868	34.533	34.580	35.149	34.748	34.910	35.290	35.048
As	45.982	43.651	44.483	45.800	44.526	44.079	44.568	45.533	45.757	43.646
S	20.215	20.500	20.438	20.842	20.494	20.915	20.067	20.843	20.434	20.315
Ni	0.010	0.000	0.000	0.019	0.003	0.000	0.031	0.010	0.018	0.000
Sb	0.073	0.078	0.081	0.037	0.021	0.039	0.033	0.040	0.039	0.054
Cu	0.008	0.013	0.000	0.036	0.015	0.044	0.028	0.000	0.034	0.011
Zn	0.017	0.027	0.024	0.043	0.037	0.023	0.035	0.059	0.000	0.049
Au	0.018	0.018	0.000	0.016	0.032	0.032	0.005	0.000	0.000	0.063
Ag	0.000	0.000	0.004	0.000	0.000	0.005	0.000	0.002	0.000	0.015
Total	100.704	99.367	99.898	101.326	99.708	100.286	99.515	101.397	101.572	99.201
As%Aspy	32.977	31.468	31.980	32.488	32.057	31.435	32.247	32.252	32.467	31.566
Fe%Aspy	33.076	33.924	33.626	32.860	33.398	33.625	33.726	33.171	33.590	34.002
S%Aspy	33.879	34.535	34.336	34.549	34.481	34.856	33.930	34.501	33.882	34.334
AsForm	0.989	0.944	0.959	0.975	0.962	0.943	0.967	0.968	0.974	0.947
FeForm	0.992	1.018	1.009	0.986	1.002	1.009	1.012	0.995	1.008	1.020
SForm	1.016	1.036	1.030	1.036	1.034	1.046	1.018	1.035	1.016	1.030

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 9

VAR. / ID.	1781	1782	1783	1784	1785	1786	1787	1788	1789	1790
Lab No.	81	82	83	84	85	86	87	88	89	90
X	172	188	203	219	235	250	266	282	297	313
Y	812	812	812	812	812	812	812	812	812	812
Fe	34.711	34.609	34.839	35.434	34.953	34.881	35.526	34.910	34.984	35.258
As	46.473	46.552	45.074	45.383	46.013	45.787	45.204	46.311	45.996	45.781
S	20.248	20.814	21.044	20.611	20.958	20.850	21.352	20.424	21.336	21.019
Ni	0.000	0.011	0.000	0.000	0.016	0.000	0.000	0.000	0.005	0.000
Sb	0.012	0.010	0.005	0.080	0.032	0.044	0.039	0.000	0.028	0.081
Cu	0.038	0.023	0.020	0.023	0.013	0.078	0.036	0.032	0.000	0.036
Zn	0.031	0.011	0.039	0.021	0.044	0.060	0.008	0.015	0.000	0.000
Au	0.080	0.021	0.021	0.061	0.041	0.009	0.000	0.023	0.050	0.046
Ag	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.015	0.003
Total	101.596	102.051	101.042	101.613	102.070	101.709	102.165	101.721	102.414	102.224
As%Aspy	33.083	32.856	31.953	32.140	32.404	32.360	31.648	32.859	32.202	32.170
Fe%Aspy	33.147	32.767	33.130	33.662	33.020	33.070	33.365	33.228	32.855	33.236
S%Aspy	33.684	34.329	34.861	34.110	34.491	34.435	34.934	33.865	34.906	34.516
AsForm	0.993	0.986	0.959	0.964	0.972	0.971	0.950	0.986	0.966	0.965
FeForm	0.994	0.983	0.994	1.010	0.991	0.992	1.001	0.997	0.986	0.997
SForm	1.010	1.030	1.046	1.023	1.035	1.033	1.048	1.016	1.047	1.036

TABLE 4.09

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Microprobe Analyses: Talnoy Arsenopyrite (ASP9) Part 10

VAR. / ID.	1791	1792	1793	1794	1795	1796	1797	1798	1799	1800
Lab No.	91	92	93	94	95	96	97	98	99	100
X	329	345	0	15	31	47	62	78	94	109
Y	812	812	832	832	832	832	832	832	832	832
Fe	34.690	34.412	34.547	34.833	34.818	34.707	34.624	34.621	34.993	34.814
As	44.045	45.274	45.853	43.816	45.976	45.991	43.887	43.948	46.081	45.753
S	20.351	20.411	20.840	20.464	20.418	20.790	20.395	20.739	20.724	20.729
Ni	0.024	0.018	0.006	0.022	0.003	0.000	0.014	0.000	0.048	0.011
Sb	0.025	0.086	0.039	0.034	0.034	0.017	0.004	0.026	0.033	0.047
Cu	0.069	0.000	0.011	0.025	0.017	0.015	0.011	0.000	0.027	0.000
Zn	0.007	0.000	0.000	0.000	0.065	0.027	0.060	0.000	0.017	0.027
Au	0.016	0.030	0.000	0.000	0.021	0.053	0.002	0.014	0.000	0.041
Ag	0.007	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	99.234	100.231	101.309	99.194	101.352	101.600	98.997	99.348	101.923	101.422
As%Aspy	31.851	32.520	32.531	31.649	32.717	32.569	31.780	31.646	32.547	32.452
Fe%Aspy	33.652	33.157	32.879	33.752	33.237	32.970	33.633	33.442	33.154	33.125
S%Aspy	34.391	34.261	34.551	34.542	33.954	34.405	34.512	34.897	34.205	34.359
AsForm	0.956	0.976	0.976	0.950	0.982	0.977	0.953	0.949	0.976	0.974
FeForm	1.010	0.995	0.986	1.013	0.997	0.989	1.009	1.003	0.995	0.994
SForm	1.032	1.028	1.037	1.036	1.019	1.032	1.035	1.047	1.026	1.031

TABLE 4.09

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Microprobe Analyses: Talnoy Arsenopyrite (ASP9) Part 11

VAR. / ID.	1801	1802	1803	1804	1805	1806	1807	1808	1809	1810
Lab No.	101	102	103	104	105	106	107	108	109	110
X	125	141	156	172	188	203	219	235	250	266
Y	832	832	832	832	832	832	832	832	832	832
Fe	34.799	34.421	34.806	34.795	34.884	34.689	35.248	35.174	34.881	35.105
As	45.585	45.542	45.566	43.317	45.834	46.686	46.165	45.421	45.311	45.957
S	20.714	20.799	20.456	20.608	20.635	20.698	21.194	21.116	20.737	21.014
Ni	0.000	0.000	0.016	0.023	0.011	0.009	0.012	0.000	0.000	0.014
Sb	0.044	0.026	0.006	0.023	0.031	0.034	0.040	0.059	0.023	0.000
Cu	0.016	0.092	0.000	0.015	0.044	0.020	0.025	0.038	0.015	0.049
Zn	0.023	0.049	0.023	0.060	0.041	0.033	0.008	0.039	0.039	0.009
Au	0.016	0.000	0.034	0.016	0.014	0.000	0.000	0.000	0.000	0.030
Ag	0.000	0.011	0.000	0.000	0.000	0.002	0.007	0.000	0.007	0.000
Total	101.197	100.940	100.907	98.857	101.494	102.171	102.699	101.847	101.013	102.178
As%Aspy	32.387	32.412	32.519	31.324	32.509	32.951	32.270	31.969	32.217	32.306
Fe%Aspy	33.166	32.862	33.321	33.753	33.191	32.843	33.052	33.210	33.269	33.104
S%Aspy	34.391	34.592	34.115	34.825	34.202	34.139	34.620	34.732	34.456	34.521
AsForm	0.972	0.972	0.976	0.940	0.975	0.988	0.968	0.959	0.966	0.969
FeForm	0.995	0.986	1.000	1.013	0.996	0.985	0.992	0.996	0.998	0.993
SForm	1.032	1.038	1.023	1.045	1.026	1.024	1.039	1.042	1.034	1.036

TABLE 4.09

Microprobe Analyses: Talnoy Arsenopyrite (ASP9) Part 12

VAR. / ID.	1811	1812	1813	1814	1815	1816	1817	1818	1819	1820
Lab No.	111	112	113	114	115	116	117	118	119	120
X	282	297	313	329	345	0	15	31	47	62
Y	832	832	832	832	832	853	853	853	853	853
Fe	35.038	34.819	35.083	35.114	34.888	34.368	34.847	34.705	34.679	34.734
As	45.376	46.367	45.941	46.444	46.104	45.909	46.441	46.485	44.887	45.904
S	21.375	20.602	21.184	20.516	20.885	20.150	20.771	20.537	20.529	20.373
Ni	0.000	0.000	0.000	0.033	0.000	0.026	0.001	0.000	0.019	0.027
Sb	0.012	0.011	0.040	0.033	0.044	0.024	0.039	0.039	0.010	0.054
Cu	0.003	0.000	0.027	0.036	0.017	0.013	0.036	0.044	0.036	0.020
Zn	0.000	0.044	0.015	0.037	0.053	0.011	0.001	0.046	0.004	0.048
Au	0.032	0.021	0.014	0.000	0.000	0.025	0.037	0.000	0.033	0.000
Ag	0.000	0.000	0.000	0.000	0.000	0.017	0.014	0.000	0.006	0.000
Total	101.836	101.864	102.304	102.213	101.991	100.543	102.187	101.856	100.203	101.160
As%Aspy	31.876	32.818	32.220	32.791	32.509	32.981	32.747	32.931	32.183	32.729
Fe%Aspy	33.018	33.060	33.006	33.256	33.000	33.121	32.962	32.980	33.354	33.221
S%Aspy	35.090	34.076	34.719	33.849	34.414	33.828	34.226	33.998	34.396	33.945
AsForm	0.956	0.985	0.967	0.984	0.975	0.989	0.982	0.988	0.965	0.982
FeForm	0.991	0.992	0.990	0.998	0.990	0.994	0.989	0.989	1.001	0.997
SForm	1.053	1.022	1.042	1.015	1.032	1.015	1.027	1.020	1.032	1.018

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 13

VAR. / ID.	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830
Lab No.	121	122	123	124	125	126	127	128	129	130
X	78	94	109	125	141	156	172	188	203	219
Y	853	853	853	853	853	853	853	853	853	853
Fe	34.791	35.256	35.405	34.976	34.468	34.584	34.789	34.804	34.871	35.563
As	45.849	45.373	45.133	46.123	46.753	44.721	45.725	46.684	44.899	45.023
S	20.288	20.651	20.597	20.315	20.209	20.427	20.089	20.266	20.529	20.434
Ni	0.004	0.000	0.002	0.000	0.000	0.003	0.020	0.022	0.000	0.000
Sb	0.038	0.072	0.025	0.059	0.049	0.030	0.061	0.040	0.044	0.013
Cu	0.035	0.055	0.006	0.039	0.078	0.035	0.008	0.016	0.031	0.039
Zn	0.000	0.054	0.029	0.058	0.000	0.007	0.055	0.023	0.009	0.037
Au	0.000	0.000	0.017	0.000	0.000	0.037	0.051	0.000	0.053	0.035
Ag	0.000	0.000	0.000	0.005	0.000	0.006	0.000	0.000	0.000	0.000
Total	101.005	101.461	101.214	101.575	101.557	99.850	100.798	101.855	100.436	101.144
As%Aspy	32.749	32.157	32.049	32.789	33.315	32.188	32.779	33.150	32.129	32.024
Fe%Aspy	33.336	33.519	33.726	33.354	32.947	33.391	33.455	33.152	33.474	33.933
S%Aspy	33.865	34.202	34.179	33.749	33.652	34.357	33.654	33.629	34.329	33.965
AsForm	0.983	0.965	0.961	0.984	0.999	0.966	0.983	0.994	0.964	0.961
FeForm	1.000	1.006	1.012	1.001	0.988	1.002	1.004	0.995	1.004	1.018
SForm	1.016	1.026	1.025	1.013	1.010	1.031	1.010	1.009	1.030	1.019

TABLE 4.09

Microprobe Analyses: Talnoy Arsenopyrite (ASP9) Part 14

VAR. / ID.	1831	1832	1833	1834	1835	1836	1837	1838	1839	1840
Lab No.	131	132	133	134	135	136	137	138	139	140
X	235	250	266	282	297	313	329	345	0	15
Y	853	853	853	853	853	853	853	853	874	874
Fe	34.809	35.231	35.207	34.666	35.426	35.195	35.272	34.952	34.607	35.033
As	45.777	45.156	44.531	45.683	45.757	44.360	44.440	43.674	45.603	45.402
S	20.781	20.583	21.110	21.226	20.938	20.891	21.290	20.478	20.490	20.262
Ni	0.000	0.010	0.002	0.000	0.014	0.000	0.027	0.000	0.000	0.000
Sb	0.016	0.035	0.069	0.006	0.023	0.017	0.056	0.038	0.027	0.050
Cu	0.026	0.030	0.023	0.001	0.032	0.047	0.048	0.000	0.047	0.055
Zn	0.035	0.001	0.050	0.002	0.029	0.013	0.031	0.085	0.019	0.042
Au	0.033	0.000	0.058	0.038	0.042	0.000	0.000	0.000	0.000	0.028
Ag	0.000	0.000	0.002	0.000	0.000	0.000	0.009	0.011	0.000	0.024
Total	101.477	101.046	101.052	101.622	102.261	100.523	101.173	99.238	100.793	100.896
As%Aspy	32.437	32.120	31.528	32.214	32.149	31.579	31.368	31.524	32.573	32.449
Fe%Aspy	33.087	33.617	33.438	32.792	33.389	33.610	33.397	33.842	33.159	33.588
S%Aspy	34.410	34.214	34.926	34.978	34.378	34.754	35.117	34.541	34.201	33.841
AsForm	0.973	0.964	0.946	0.966	0.965	0.947	0.941	0.946	0.977	0.974
FeForm	0.993	1.008	1.003	0.984	1.002	1.008	1.002	1.015	0.995	1.008
SForm	1.032	1.026	1.048	1.049	1.031	1.043	1.054	1.036	1.026	1.015

TABLE 4.09

Microprobe Analyses: Talnotry Arsenopyrite (ASP9) Part 15

VAR. / ID.	1841	1842	1843	1844	1845	1846	1847	1848	1849	1850
Lab No.	141	142	143	144	145	146	147	148	149	150
X	31	47	62	78	94	109	125	141	156	172
Y	874	874	874	874	874	874	874	874	874	874
Fe	34.919	34.712	34.432	34.823	34.851	34.285	34.543	34.964	34.637	33.841
As	43.311	43.039	43.074	45.573	44.690	45.349	45.100	42.473	43.249	45.119
S	20.615	20.372	20.835	20.882	21.152	20.568	20.343	20.440	21.005	20.520
Ni	0.000	0.031	0.009	0.000	0.000	0.000	0.010	0.000	0.025	0.025
Sb	0.029	0.013	0.026	0.008	0.060	0.021	0.055	0.052	0.010	0.048
Cu	0.034	0.020	0.027	0.043	0.000	0.043	0.031	0.009	0.008	0.011
Zn	0.000	0.026	0.038	0.009	0.039	0.015	0.069	0.032	0.000	0.029
Au	0.000	0.076	0.006	0.135	0.000	0.022	0.029	0.013	0.000	0.054
Ag	0.000	0.000	0.000	0.000	0.011	0.000	0.006	0.000	0.000	0.016
Total	98.908	98.289	98.447	101.473	100.803	100.303	100.186	97.983	98.934	99.663
As%Aspy	31.297	31.338	31.200	32.275	31.704	32.509	32.410	30.951	31.149	32.552
Fe%Aspy	33.849	33.904	33.456	33.083	33.166	32.970	33.300	34.179	33.464	32.752
S%Aspy	34.812	34.663	35.267	34.559	35.066	34.456	34.163	34.808	35.353	34.596
AsForm	0.939	0.940	0.936	0.968	0.951	0.975	0.972	0.928	0.934	0.977
FeForm	1.015	1.017	1.004	0.993	0.995	0.989	0.999	1.025	1.004	0.983
SForm	1.044	1.040	1.058	1.037	1.052	1.034	1.025	1.044	1.061	1.038

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9)

Part 16

VAR. / ID.	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860
Lab No.	151	152	153	154	155	156	157	158	159	160
X	188	203	219	235	250	266	282	297	313	329
Y	874	874	874	874	874	874	874	874	874	874
Fe	34.240	34.685	35.121	34.847	34.891	33.837	33.338	35.102	34.443	35.166
As	46.221	46.452	45.756	45.388	46.006	45.978	44.645	44.818	44.759	46.364
S	20.480	20.865	21.268	21.003	21.020	21.000	21.057	21.112	21.429	21.190
Ni	0.021	0.003	0.008	0.021	0.000	0.000	0.012	0.000	0.004	0.020
Sb	0.092	0.012	0.011	0.000	0.050	0.027	0.035	0.027	0.030	0.008
Cu	0.002	0.002	0.029	0.000	0.035	0.004	0.000	0.035	0.016	0.025
Zn	0.000	0.052	0.029	0.028	0.096	0.026	0.000	0.052	0.000	0.029
Au	0.000	0.011	0.043	0.000	0.024	0.004	0.054	0.033	0.020	0.000
Ag	0.000	0.006	0.023	0.000	0.000	0.001	0.000	0.000	0.000	0.000
Total	101.056	102.088	102.288	101.287	102.122	100.877	99.141	101.179	100.701	102.802
As%Aspy	32.992	32.754	32.068	32.128	32.371	32.725	32.204	31.702	31.724	32.389
Fe%Aspy	32.785	32.808	33.019	33.089	32.932	32.307	32.259	33.308	32.748	32.954
S%Aspy	34.161	34.381	34.832	34.742	34.562	34.929	35.495	34.898	35.493	34.592
AsForm	0.990	0.983	0.962	0.964	0.971	0.982	0.966	0.951	0.952	0.972
FeForm	0.984	0.984	0.991	0.993	0.988	0.969	0.968	0.999	0.982	0.989
SForm	1.025	1.031	1.045	1.042	1.037	1.048	1.065	1.047	1.065	1.038

TABLE 4.09

Microprobe Analyses: Talnotry Arsenopyrite (ASP9) Part 17

VAR. / ID.	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870
Lab No.	161	162	163	164	165	166	167	168	169	170
X	345	0	15	31	47	62	78	94	109	125
Y	874	894	894	894	894	894	894	894	894	894
Fe	35.080	34.824	35.175	35.049	34.568	35.098	34.373	34.903	34.973	34.601
As	46.499	44.150	44.246	45.983	45.950	45.863	46.206	44.941	45.813	45.357
S	20.755	20.703	20.585	20.620	20.540	20.476	20.670	20.882	20.954	21.223
Ni	0.012	0.036	0.000	0.000	0.000	0.000	0.012	0.000	0.012	0.005
Sb	0.042	0.038	0.048	0.058	0.042	0.015	0.024	0.048	0.023	0.035
Cu	0.019	0.012	0.000	0.009	0.000	0.058	0.055	0.033	0.019	0.036
Zn	0.012	0.026	0.054	0.006	0.029	0.000	0.021	0.032	0.025	0.017
Au	0.040	0.020	0.035	0.026	0.067	0.000	0.027	0.049	0.000	0.044
Ag	0.001	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.012
Total	102.460	99.809	100.143	101.755	101.196	101.510	101.388	100.888	101.819	101.330
As%Aspy	32.711	31.679	31.686	32.554	32.727	32.556	32.829	31.945	32.314	32.058
Fe%Aspy	33.104	33.520	33.791	33.286	33.027	33.422	32.760	33.281	33.091	32.806
S%Aspy	34.120	34.715	34.449	34.114	34.186	33.967	34.319	34.687	34.538	35.054
AsForm	0.981	0.950	0.951	0.977	0.982	0.977	0.985	0.958	0.969	0.962
FeForm	0.993	1.006	1.014	0.999	0.991	1.003	0.983	0.998	0.993	0.984
SForm	1.024	1.041	1.033	1.023	1.026	1.019	1.030	1.041	1.036	1.052

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 18

VAR. / ID.	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880
Lab No.	171	172	173	174	175	176	177	178	179	180
X	141	156	172	188	203	219	235	250	266	282
Y	894	894	894	894	894	894	894	894	894	894
Fe	34.886	34.726	35.095	34.722	35.131	35.355	35.037	35.419	34.795	34.892
As	45.256	45.493	45.831	45.161	44.322	43.783	44.068	44.932	44.110	44.778
S	20.611	20.611	20.441	20.922	20.818	20.801	20.752	20.714	20.527	20.769
Ni	0.019	0.017	0.020	0.001	0.023	0.000	0.000	0.021	0.022	0.000
Sb	0.031	0.023	0.023	0.061	0.040	0.051	0.034	0.029	0.023	0.043
Cu	0.055	0.045	0.000	0.013	0.017	0.054	0.000	0.033	0.017	0.017
Zn	0.006	0.000	0.023	0.000	0.000	0.054	0.010	0.052	0.000	0.040
Au	0.095	0.000	0.031	0.008	0.018	0.045	0.000	0.011	0.000	0.000
Ag	0.019	0.001	0.000	0.000	0.000	0.000	0.011	0.010	0.010	0.000
Total	100.978	100.916	101.464	100.888	100.369	100.143	99.912	101.221	99.504	100.539
As%Aspy	32.237	32.418	32.561	32.100	31.618	31.275	31.567	31.865	31.774	31.936
Fe%Aspy	33.336	33.195	33.447	33.107	33.619	33.878	33.667	33.696	33.622	33.382
S%Aspy	34.310	34.323	33.937	34.752	34.705	34.722	34.737	34.329	34.554	34.615
AsForm	0.967	0.973	0.977	0.963	0.949	0.938	0.947	0.956	0.953	0.958
FeForm	1.000	0.996	1.003	0.993	1.009	1.016	1.010	1.011	1.009	1.002
SForm	1.029	1.030	1.018	1.043	1.041	1.042	1.042	1.030	1.037	1.038

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 19

VAR. / ID.	1882	1883	1884	1885	1886	1887	1888	1891	1892	1893
Lab No.	182	183	184	185	186	187	188	191	192	193
X	313	329	345	0	15	31	47	94	109	125
Y	894	894	894	915	915	915	915	915	915	915
Fe	32.553	32.847	33.238	33.896	32.504	32.445	33.123	34.950	34.512	34.846
As	42.496	43.328	40.646	41.473	43.345	44.052	44.710	45.009	45.388	45.292
S	21.498	21.517	20.772	20.783	21.066	20.856	20.776	20.715	20.928	20.725
Ni	0.004	0.031	0.014	0.000	0.000	0.002	0.027	0.000	0.008	0.006
Sb	0.045	0.053	0.039	0.022	0.010	0.053	0.045	0.033	0.034	0.037
Cu	0.020	0.054	0.021	0.000	0.012	0.037	0.065	0.000	0.015	0.008
Zn	0.032	0.028	0.038	0.009	0.020	0.019	0.033	0.008	0.039	0.029
Au	0.007	0.000	0.052	0.016	0.045	0.000	0.050	0.000	0.000	0.002
Ag	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	96.655	97.858	94.822	96.199	97.002	97.464	98.829	100.715	100.924	100.945
As%Aspy	31.133	31.433	30.354	30.598	31.816	32.293	32.425	32.074	32.263	32.227
Fe%Aspy	31.992	31.966	33.297	33.547	32.005	31.905	32.224	33.410	32.908	33.260
S%Aspy	36.805	36.479	36.250	35.832	36.135	35.728	35.210	34.496	34.763	34.461
AsForm	0.934	0.943	0.911	0.918	0.955	0.969	0.973	0.962	0.968	0.967
FeForm	0.960	0.959	0.999	1.006	0.960	0.957	0.967	1.002	0.987	0.998
SForm	1.104	1.094	1.087	1.075	1.084	1.072	1.056	1.035	1.043	1.034

TABLE 4.09

Microprobe Analyses: Talnothy Arsenopyrite (ASP9) Part 20

VAR. / ID.	1894	1895	1896	1899
Lab No.	194	195	196	199
X	141	156	172	250
Y	915	915	915	915
Fe	34.841	34.720	34.638	34.351
As	45.664	46.212	45.848	45.775
S	20.986	20.972	20.858	20.157
Ni	0.011	0.000	0.024	0.000
Sb	0.047	0.040	0.014	0.044
Cu	0.011	0.046	0.019	0.016
Zn	0.011	0.037	0.013	0.000
Au	0.000	0.009	0.028	0.000
Ag	0.032	0.012	0.007	0.014
Total	101.603	102.048	101.449	100.357
As%Aspy	32.264	32.560	32.482	32.928
Fe%Aspy	33.022	32.816	32.919	33.148
S%Aspy	34.650	34.530	34.533	33.884
AsForm	0.968	0.977	0.975	0.988
FeForm	0.991	0.984	0.988	0.994
SForm	1.039	1.036	1.036	1.016

TABLE 4.09

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 1

VAR. / ID.	911	912	913	916	921	922	923	924	925	926
Lab No.	1	2	3	10	11	12	13	14	15	16
X	5944	5939	5934	5937	5942	5947	5952	5957	5957	5952
Y	8541	8541	8541	8546	8546	8546	8546	8546	85512	8551
Fe	34.906	34.605	34.422	34.305	35.480	35.133	35.161	34.933	34.500	35.803
As	42.448	39.519	42.780	43.233	43.482	42.692	42.055	43.193	42.849	41.449
S	23.370	22.587	22.537	22.427	23.059	22.857	22.901	22.064	22.014	23.245
Sb	0.040	0.059	0.045	0.022	0.000	0.042	0.047	0.000	0.037	0.047
Ni	0.000	0.000	0.000	0.000	0.000	0.021	0.000	0.005	0.000	0.000
Au	0.115	0.047	0.000	0.115	0.076	0.000	0.008	0.013	0.000	0.060
Ag	0.038	0.031	0.015	0.037	0.040	0.024	0.024	0.032	0.007	0.034
Total	100.917	96.848	99.799	100.139	102.137	100.769	100.196	100.240	99.407	100.638
As%Aspy	29.482	28.472	30.199	30.501	29.984	29.791	29.453	30.493	30.476	28.809
Fe%Aspy	32.522	33.445	32.596	32.466	32.820	32.888	33.033	33.083	32.916	33.382
S%Aspy	37.931	38.028	37.178	36.974	37.158	37.273	37.480	36.401	36.589	37.756
AsForm	0.885	0.854	0.906	0.915	0.900	0.894	0.884	0.915	0.914	0.864
FeForm	0.976	1.003	0.978	0.974	0.985	0.987	0.991	0.993	0.988	1.002
SForm	1.138	1.141	1.115	1.109	1.115	1.118	1.124	1.092	1.098	1.133

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 2

VAR. / ID.	927	928	929	930	931	932	935	936	937	938
Lab No.	17	18	19	20	21	22	25	26	27	28
X	5947	5942	5937	5932	5927	5922	5913	5921	5926	5931
Y	8551	8551	8551	8551	8551	8551	8555	8555	8555	8555
Fe	35.015	34.961	34.933	35.188	34.270	34.134	33.032	34.375	34.018	32.427
As	41.666	43.214	43.404	42.030	43.788	43.822	44.242	43.725	42.823	43.129
S	22.921	22.850	22.681	22.748	22.657	23.445	23.901	23.040	23.087	23.092
Sb	0.026	0.061	0.044	0.001	0.014	0.000	0.001	0.000	0.034	0.025
Ni	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.086	0.118	0.065	0.191	0.142	0.042	0.055	0.065	0.031	0.076
Ag	0.015	0.027	0.054	0.031	0.033	0.040	0.031	0.032	0.024	0.048
Total	99.741	101.231	101.181	100.189	100.904	101.483	101.262	101.237	100.017	98.797
As%Aspy	29.286	30.091	30.277	29.497	30.666	30.339	30.628	30.423	30.060	30.660
Fe%Aspy	33.014	32.657	32.688	33.128	32.195	31.701	30.676	32.084	32.033	30.923
S%Aspy	37.648	37.182	36.972	37.308	37.079	37.931	38.666	37.461	37.872	38.362
AsForm	0.879	0.903	0.908	0.885	0.920	0.910	0.919	0.913	0.902	0.920
FeForm	0.990	0.980	0.981	0.994	0.966	0.951	0.920	0.963	0.961	0.928
SForm	1.129	1.115	1.109	1.119	1.112	1.138	1.160	1.124	1.136	1.151

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 3

VAR. / ID.	939	940	941	942	943	944	945	946	947	948
Lab No.	29	30	31	32	33	34	35	36	37	38
X	5936	5942	5947	5952	5957	5957	5947	5942	5937	5932
Y	8555	8555	8555	8555	8555	8560	8560	8560	8560	8560
Fe	34.170	33.607	35.247	34.757	35.548	34.682	34.541	35.015	35.072	35.374
As	43.615	43.022	40.744	42.492	43.405	41.838	41.744	42.231	42.942	43.519
S	22.940	23.201	22.872	22.716	22.201	22.346	22.177	22.946	22.470	22.754
Sb	0.071	0.031	0.030	0.061	0.027	0.074	0.022	0.021	0.027	0.033
Ni	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.014	0.000	0.000
Au	0.126	0.000	0.000	0.057	0.039	0.000	0.023	0.102	0.000	0.089
Ag	0.067	0.025	0.024	0.045	0.033	0.037	0.043	0.027	0.034	0.030
Total	100.989	99.886	98.917	100.128	101.267	98.977	98.550	100.356	100.545	101.799
As%Aspy	30.458	30.221	28.792	29.863	30.344	29.746	29.826	29.550	30.126	30.176
Fe%Aspy	32.010	31.668	33.412	32.767	33.336	33.077	33.107	32.867	33.007	32.903
S%Aspy	37.436	38.085	37.770	37.307	36.269	37.127	37.029	37.521	36.839	36.869
AsForm	0.914	0.907	0.864	0.896	0.910	0.892	0.895	0.887	0.904	0.905
FeForm	0.960	0.950	1.003	0.983	1.000	0.992	0.993	0.986	0.990	0.987
SForm	1.123	1.143	1.133	1.119	1.088	1.114	1.111	1.126	1.105	1.106

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TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 4

VAR. / ID.	949	950	951	952	953	954	955	956	957	958
Lab No.	39	40	41	42	43	44	45	46	47	48
X	5927	5922	5917	5912	5911	5921	5928	5933	5938	5943
Y	8560	8560	8560	8560	8565	8565	8565	8565	8565	8565
Fe	35.155	34.989	34.933	34.891	34.831	34.306	34.851	35.071	35.424	35.038
As	42.857	42.264	42.646	43.293	44.739	43.897	43.902	43.433	42.849	42.360
S	23.074	22.660	22.712	22.677	21.623	21.715	22.447	22.470	22.498	22.579
Sb	0.024	0.016	0.039	0.000	0.012	0.004	0.038	0.015	0.017	0.033
Ni	0.000	0.000	0.000	0.000	0.020	0.018	0.000	0.000	0.000	0.000
Au	0.010	0.021	0.000	0.078	0.018	0.037	0.015	0.000	0.036	0.047
Ag	0.026	0.009	0.013	0.030	0.048	0.017	0.026	0.050	0.039	0.031
Total	101.146	99.959	100.343	100.969	101.291	99.994	101.279	101.039	100.863	100.088
As%Aspy	29.767	29.726	29.903	30.245	31.492	31.196	30.667	30.366	29.965	29.792
Fe%Aspy	32.755	33.012	32.858	32.698	32.889	32.705	32.657	32.892	33.232	33.057
S%Aspy	37.452	37.245	37.216	37.022	35.568	36.063	36.642	36.712	36.767	37.109
AsForm	0.893	0.892	0.897	0.907	0.945	0.936	0.920	0.911	0.899	0.894
FeForm	0.983	0.990	0.986	0.981	0.987	0.981	0.980	0.987	0.997	0.992
SForm	1.124	1.117	1.117	1.111	1.067	1.082	1.099	1.101	1.103	1.113

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 5

VAR. / ID.	959	960	961	962	963	964	965	966	967	968
Lab No.	49	50	51	52	53	54	55	56	57	58
X	5948	5953	5943	5938	5933	5926	5921	5916	5911	5907
Y	8565	8565	8571	8571	8571	8571	8571	8571	8571	8577
Fe	35.446	35.177	34.896	34.925	35.013	35.138	35.329	34.907	34.900	35.007
As	42.526	43.312	43.645	42.355	43.199	43.581	43.066	42.143	44.481	43.883
S	22.423	22.297	21.768	21.972	21.981	21.766	22.144	21.751	20.835	21.781
Sb	0.023	0.058	0.060	0.040	0.019	0.062	0.033	0.044	0.003	0.004
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.004	0.000
Au	0.026	0.000	0.037	0.076	0.010	0.008	0.105	0.102	0.087	0.113
Ag	0.041	0.038	0.030	0.032	0.044	0.027	0.025	0.021	0.033	0.011
Total	100.485	100.882	100.436	99.400	100.266	100.582	100.702	98.985	100.343	100.799
As%Aspy	29.837	30.359	30.867	30.119	30.512	30.769	30.268	30.124	31.761	30.948
Fe%Aspy	33.361	33.076	33.106	33.315	33.174	33.278	33.308	33.471	33.429	33.118
S%Aspy	36.765	36.522	35.976	36.512	36.281	35.911	36.369	36.332	34.765	35.896
AsForm	0.895	0.911	0.926	0.904	0.915	0.923	0.908	0.904	0.953	0.928
FeForm	1.001	0.992	0.993	1.000	0.995	0.998	0.999	1.004	1.003	0.994
SForm	1.103	1.096	1.079	1.095	1.088	1.077	1.091	1.090	1.043	1.077

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 6

VAR. / ID.	969	970	971	973	974	975	976	977	978	979
Lab No.	59	60	61	63	64	65	66	67	68	69
X	5916	5921	5926	5936	5941	5946	5951	5941	5936	5931
Y	8577	8577	8577	8577	8577	8577	8577	8583	8583	8583
Fe	34.171	34.480	35.372	35.172	35.088	35.000	35.704	34.934	35.242	35.420
As	44.142	43.966	41.780	42.958	41.631	42.506	42.866	43.250	41.753	42.397
S	21.397	20.663	22.646	22.945	22.603	22.892	22.126	22.619	22.519	22.427
Sb	0.001	0.036	0.029	0.030	0.020	0.026	0.008	0.033	0.037	0.031
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.000
Au	0.140	0.068	0.076	0.068	0.039	0.091	0.034	0.000	0.128	0.000
Ag	0.055	0.044	0.010	0.012	0.026	0.047	0.044	0.025	0.013	0.035
Total	99.906	99.257	99.913	101.185	99.407	100.562	100.782	100.877	99.692	100.310
As%Aspy	31.513	31.725	29.380	29.871	29.408	29.717	30.078	30.239	29.459	29.781
Fe%Aspy	32.724	33.375	33.367	32.808	33.249	32.825	33.607	32.764	33.355	33.375
S%Aspy	35.697	34.843	37.215	37.285	37.312	37.400	36.281	36.956	37.129	36.813
AsForm	0.946	0.952	0.882	0.896	0.882	0.892	0.902	0.907	0.884	0.893
FeForm	0.982	1.001	1.001	0.984	0.998	0.985	1.008	0.983	1.001	1.001
SForm	1.071	1.045	1.116	1.118	1.119	1.122	1.088	1.109	1.114	1.104

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 7

VAR. / ID.	980	981	982	983	984	985	986	987	988	989
Lab No.	70	71	72	73	74	75	76	77	78	79
X	5926	5921	5916	5911	5920	5926	5931	5936	5941	5946
Y	8583	8583	8583	8583	8589	8589	8589	8589	8589	8589
Fe	34.824	35.316	34.719	34.712	34.841	35.328	34.957	34.981	35.051	34.783
As	43.477	43.710	42.219	44.228	43.937	43.874	41.337	41.726	42.992	42.952
S	22.197	21.744	21.984	21.495	22.662	22.588	22.134	21.959	22.073	22.119
Sb	0.000	0.031	0.042	0.028	0.009	0.000	0.000	0.010	0.033	0.001
Ni	0.000	0.011	0.010	0.000	0.034	0.000	0.000	0.000	0.014	0.000
Au	0.081	0.000	0.055	0.055	0.052	0.063	0.068	0.065	0.089	0.086
Ag	0.044	0.025	0.027	0.026	0.030	0.042	0.011	0.036	0.025	0.023
Total	100.623	100.837	99.056	100.544	101.565	101.895	98.507	98.817	100.277	99.964
As%Aspy	30.591	30.793	30.104	31.350	30.571	30.446	29.529	29.780	30.344	30.387
Fe%Aspy	32.869	33.375	33.209	33.006	32.519	32.887	33.498	33.490	33.186	33.010
S%Aspy	36.497	35.797	36.632	35.605	36.848	36.630	36.949	36.690	36.407	36.568
AsForm	0.918	0.924	0.903	0.941	0.917	0.914	0.886	0.893	0.910	0.912
FeForm	0.986	1.001	0.996	0.990	0.976	0.987	1.005	1.005	0.996	0.990
SForm	1.095	1.074	1.099	1.068	1.105	1.099	1.109	1.101	1.092	1.097

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 8

VAR. / ID.	990	991	992	993	1068	1069	1071	1072	1075	1077
Lab No.	80	81	92	83	168	169	171	172	175	177
X	5934	5928	5923	5916	1294	1240	1215	1205	1182	1210
Y	8592	8592	8593	8593	9141	9141	9141	9141	9146	9146
Fe	34.841	34.707	34.589	34.630	34.783	35.517	35.020	33.750	35.101	35.374
As	42.889	41.697	41.209	41.887	42.564	42.894	43.122	43.621	43.748	42.630
S	22.225	22.508	22.295	22.520	20.885	22.898	22.449	22.062	22.490	22.607
Sb	0.017	0.021	0.001	0.006	0.012	0.058	0.000	0.009	0.019	0.000
Ni	0.000	0.013	0.028	0.012	0.000	0.000	0.019	0.007	0.000	0.000
Au	0.000	0.063	0.089	0.073	0.060	0.115	0.071	0.066	0.000	0.052
Ag	0.026	0.048	0.048	0.010	0.035	0.027	0.021	0.033	0.034	0.012
Total	99.998	99.057	98.259	99.138	98.339	101.509	100.702	99.548	101.392	100.675
As%Aspy	30.291	29.585	29.475	29.703	30.825	29.757	30.234	31.044	30.502	29.824
Fe%Aspy	33.009	33.034	33.187	32.941	33.791	33.053	32.938	32.220	32.830	33.197
S%Aspy	36.681	37.320	37.264	37.318	35.345	37.122	36.782	36.691	36.644	36.959
AsForm	0.909	0.888	0.884	0.891	0.925	0.893	0.907	0.931	0.915	0.895
FeForm	0.990	0.991	0.996	0.988	1.014	0.992	0.988	0.967	0.985	0.996
SForm	1.100	1.120	1.118	1.120	1.060	1.114	1.104	1.101	1.099	1.109

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 9

VAR. / ID.	1079	1080	1082	1083	1084	1085	1086	1087	1088	1089
Lab No.	179	180	182	183	184	185	186	187	188	189
X	1266	1234	1278	1286	1294	1302	1307	1307	1299	1291
Y	9146	9146	9148	9148	9148	9148	9148	9156	9156	9156
Fe	34.349	35.185	35.021	34.610	35.198	35.232	34.446	34.775	34.679	34.829
As	43.882	43.571	43.654	43.560	44.432	44.561	44.002	44.201	43.483	44.691
S	22.117	18.646	21.160	22.048	21.623	21.635	20.740	21.223	21.466	21.755
Sb	0.020	0.000	0.015	0.031	0.008	0.016	0.000	0.000	0.000	0.013
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
Au	0.000	0.000	0.068	0.000	0.092	0.000	0.100	0.058	0.026	0.087
Ag	0.032	0.000	0.021	0.046	0.020	0.033	0.016	0.038	0.026	0.016
Total	100.400	97.402	99.939	100.295	101.373	101.477	99.304	100.295	99.681	101.391
As%Aspy	30.973	32.433	31.152	30.771	31.239	31.290	31.719	31.461	31.016	31.406
Fe%Aspy	32.523	35.133	33.525	32.797	33.197	33.186	33.309	33.204	33.182	32.832
S%Aspy	36.480	32.434	35.287	36.396	35.527	35.501	34.937	35.301	35.781	35.725
AsForm	0.929	0.973	0.935	0.923	0.937	0.939	0.952	0.944	0.931	0.942
FeForm	0.976	1.054	1.006	0.984	0.996	0.996	0.999	0.996	0.996	0.985
SForm	1.094	0.973	1.059	1.092	1.066	1.065	1.048	1.059	1.073	1.072

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 10

VAR. / ID.	1090	1091	1092	1094	1095	1096	1097	1098	1099	1100
Lab No.	190	191	192	194	195	196	197	198	199	200
X	1283	1275	1245	1232	1224	1216	1175	1167	1159	1149
Y	9156	9156	9156	9156	9156	9156	9156	9156	9156	9166
Fe	35.238	34.985	35.012	34.856	35.635	35.649	35.505	34.328	34.582	34.426
As	44.488	44.482	43.371	42.338	42.709	43.029	43.160	43.869	44.419	43.835
S	21.818	22.265	22.257	20.455	22.257	22.509	22.549	22.953	21.654	22.428
Sb	0.021	0.017	0.000	0.008	0.043	0.078	0.054	0.065	0.000	0.000
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.014
Au	0.060	0.000	0.010	0.000	0.097	0.070	0.000	0.037	0.021	0.118
Ag	0.030	0.039	0.040	0.019	0.050	0.034	0.048	0.039	0.022	0.041
Total	101.655	101.788	100.690	97.676	100.791	101.369	101.335	101.291	100.698	100.862
As%Aspy	31.154	31.002	30.461	30.923	29.946	29.975	30.061	30.541	31.406	30.757
Fe%Aspy	33.102	32.709	32.987	34.151	33.517	33.314	33.174	32.059	32.800	32.403
S%Aspy	35.704	36.263	36.530	34.913	36.468	36.643	36.702	37.343	35.778	36.775
AsForm	0.935	0.930	0.914	0.928	0.899	0.899	0.902	0.916	0.942	0.923
FeForm	0.993	0.981	0.990	1.025	1.006	0.999	0.995	0.962	0.984	0.972
SForm	1.071	1.088	1.096	1.047	1.094	1.099	1.101	1.120	1.073	1.103

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 11

VAR. / ID.	1101	1102	1103	1104	1105	1107	1108	1109	1110	1111
Lab No.	201	202	203	204	205	207	208	209	210	211
X	1160	1168	1178	1187	1195	1213	1221	1230	1238	1245
Y	9166	9166	9166	9166	9166	9166	9166	9166	9166	9166
Fe	35.273	35.040	35.589	35.368	35.380	35.299	35.218	35.374	35.409	35.190
As	44.101	44.789	44.160	44.231	44.314	44.507	43.690	44.301	44.090	44.137
S	21.904	21.419	21.163	21.722	21.777	21.990	22.640	22.215	22.196	21.816
Sb	0.029	0.067	0.044	0.035	0.066	0.077	0.075	0.028	0.054	0.084
Ni	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.000	0.020	0.000
Au	0.102	0.000	0.023	0.068	0.047	0.047	0.060	0.063	0.084	0.116
Ag	0.034	0.007	0.021	0.008	0.026	0.034	0.026	0.038	0.036	0.053
Total	101.443	101.322	101.023	101.432	101.610	101.954	101.709	101.724	101.889	101.396
As%Aspy	30.908	31.565	31.223	31.042	31.045	31.051	30.356	30.679	30.709	30.983
Fe%Aspy	33.162	33.127	33.755	33.297	33.249	33.036	32.824	33.082	33.083	33.137
S%Aspy	35.874	35.276	34.966	35.625	35.652	35.851	36.759	36.192	36.127	35.787
AsForm	0.927	0.947	0.937	0.931	0.931	0.932	0.911	0.920	0.921	0.930
FeForm	0.995	0.994	1.013	0.999	0.998	0.991	0.985	0.993	0.993	0.994
SForm	1.076	1.058	1.049	1.069	1.070	1.076	1.103	1.086	1.084	1.074

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 12

VAR. / ID.	1112	1113	1114	1118	1119	1120	1121	1122	1123	1124
Lab No.	212	213	214	218	219	220	221	222	223	224
X	1253	1261	1268	1294	1286	1278	1270	1262	1254	1229
Y	9166	9166	9166	9176	9176	9176	9176	9176	9176	9176
Fe	34.899	35.099	35.080	35.456	35.772	34.798	35.800	35.422	34.938	35.384
As	42.162	43.374	43.290	42.277	43.078	44.024	43.775	43.145	44.185	42.926
S	22.893	22.349	21.948	21.054	22.423	22.383	22.725	22.711	21.790	22.837
Sb	0.000	0.029	0.064	0.000	0.015	0.045	0.084	0.058	0.047	0.079
Ni	0.008	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.002	0.000
Au	0.123	0.000	0.000	0.121	0.000	0.081	0.015	0.021	0.045	0.047
Ag	0.037	0.015	0.030	0.023	0.030	0.012	0.028	0.033	0.015	0.029
Total	100.122	100.866	100.412	98.931	101.318	101.353	102.427	101.390	101.022	101.302
As%Aspy	29.575	30.393	30.551	30.393	30.021	30.767	30.194	30.003	31.109	29.842
Fe%Aspy	32.840	32.992	33.210	34.193	33.441	32.623	33.124	33.043	32.998	32.998
S%Aspy	37.527	36.596	36.196	35.370	36.517	36.555	36.629	36.907	35.851	37.100
AsForm	0.887	0.912	0.917	0.912	0.901	0.923	0.906	0.900	0.933	0.895
FeForm	0.985	0.990	0.996	1.026	1.003	0.979	0.994	0.991	0.990	0.990
SForm	1.126	1.098	1.086	1.061	1.095	1.097	1.099	1.107	1.076	1.113

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 13

VAR. / ID.	1125	1126	1127	1128	1129	1130	1131	1132	1134	1135
Lab No.	225	226	227	228	229	230	231	232	234	235
X	1213	1205	1197	1189	1181	1173	1165	1141	1145	1153
Y	9176	9176	9176	9176	9176	9176	9176	9176	9184	9184
Fe	35.908	35.054	35.400	35.493	35.392	34.922	35.817	35.128	35.276	34.811
As	41.800	43.027	43.472	41.278	42.935	42.658	41.673	43.417	42.355	42.061
S	20.361	22.108	22.298	22.000	21.899	22.549	22.477	21.442	21.792	22.423
Sb	0.037	0.013	0.050	0.035	0.059	0.049	0.050	0.030	0.019	0.036
Ni	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.021	0.000	0.000
Au	0.000	0.021	0.107	0.042	0.065	0.065	0.042	0.000	0.107	0.000
Ag	0.010	0.037	0.033	0.027	0.038	0.052	0.031	0.025	0.021	0.020
Total	98.116	100.260	101.360	98.879	100.388	100.295	100.090	100.063	99.570	99.351
As%Aspy	30.382	30.353	30.366	29.408	30.306	29.980	29.282	30.856	30.110	29.789
Fe%Aspy	35.012	33.172	33.171	33.921	33.511	32.923	33.761	33.489	33.640	33.073
S%Aspy	34.584	36.445	36.398	36.627	36.122	37.033	36.908	35.610	36.202	37.112
AsForm	0.912	0.911	0.911	0.882	0.909	0.900	0.879	0.926	0.903	0.894
FeForm	1.051	0.995	0.995	1.018	1.005	0.988	1.013	1.005	1.009	0.992
SForm	1.038	1.093	1.092	1.099	1.084	1.111	1.107	1.068	1.086	1.113

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TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 14

VAR. / ID.	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145
Lab No.	236	237	238	239	240	241	242	243	244	245
X	1161	1169	1177	1185	1193	1201	1209	1217	1225	1233
Y	9184	9184	9184	9184	9184	9184	9184	9184	9184	9184
Fe	35.150	35.373	35.610	35.289	35.662	35.450	35.386	35.155	35.155	34.768
As	42.451	42.959	41.472	42.382	41.920	43.217	44.027	43.658	43.148	42.511
S	22.118	22.083	22.052	22.383	22.174	22.062	22.339	22.382	20.422	23.356
Sb	0.064	0.055	0.017	0.035	0.067	0.050	0.063	0.056	0.056	0.037
Ni	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000
Au	0.000	0.042	0.000	0.042	0.073	0.005	0.079	0.026	0.026	0.159
Ag	0.043	0.035	0.040	0.045	0.039	0.026	0.045	0.027	0.027	0.034
Total	99.826	100.547	99.191	100.176	99.948	100.810	101.939	101.304	98.834	100.865
As%Aspy	30.031	30.234	29.452	29.826	29.586	30.354	30.617	30.491	31.246	29.555
Fe%Aspy	33.356	33.395	33.924	33.315	33.763	33.400	33.010	32.936	34.150	32.425
S%Aspy	36.564	36.319	36.597	36.811	36.571	36.211	36.303	36.529	34.559	37.946
AsForm	0.901	0.907	0.884	0.895	0.888	0.911	0.919	0.915	0.938	0.887
FeForm	1.001	1.002	1.018	0.999	1.013	1.002	0.990	0.988	1.025	0.973
SForm	1.097	1.090	1.098	1.104	1.097	1.086	1.089	1.096	1.037	1.138

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 15

VAR. / ID.	1146	1147	1148	1149	1150	1151	1152	1153	1154	1156
Lab No.	246	247	248	249	250	251	252	253	255	256
X	1241	1249	1257	1265	1273	1281	1289	1297	1295	1287
Y	9184	9184	9184	9184	9184	9184	9184	9184	9193	9193
Fe	34.534	35.305	35.193	34.931	34.999	35.438	35.042	35.120	35.352	35.381
As	42.904	43.523	43.597	43.818	42.573	42.123	43.757	42.795	43.552	42.615
S	22.828	22.010	22.226	22.397	22.172	22.111	21.376	22.037	22.072	21.651
Sb	0.091	0.039	0.008	0.016	0.031	0.054	0.100	0.017	0.003	0.028
Ni	0.000	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.047	0.000	0.044	0.155	0.010	0.000	0.870	0.086	0.002	0.000
Ag	0.038	0.019	0.043	0.015	0.013	0.000	0.036	0.061	0.030	0.027
Total	100.442	100.896	101.111	101.348	99.798	99.726	101.181	100.116	101.011	99.702
As%Aspy	30.071	30.574	30.531	30.617	30.115	29.797	31.004	30.246	30.546	30.286
Fe%Aspy	32.469	33.269	33.061	32.742	33.211	33.628	33.307	33.297	33.261	33.731
S%Aspy	37.390	36.131	36.373	36.571	36.651	36.551	35.394	36.397	36.176	35.958
AsForm	0.902	0.917	0.916	0.919	0.904	0.894	0.930	0.908	0.916	0.909
FeForm	0.974	0.998	0.992	0.982	0.996	1.009	0.999	0.999	0.998	1.012
SForm	1.122	1.084	1.091	1.097	1.100	1.097	1.062	1.062	1.085	1.079

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 16

VAR. / ID.	1157	1158	1159	1160	1161	1162	1163	1165	1166	1167
Lab No.	257	258	259	260	261	262	263	265	266	267
X	1279	1271	1263	1254	1246	1238	1230	1214	1206	1198
Y	9193	9193	9193	9193	9193	9193	9193	9193	9193	9193
Fe	35.209	35.291	35.447	35.287	35.477	35.203	35.340	35.494	35.010	34.994
As	42.588	43.728	43.889	42.055	42.435	43.766	43.373	41.088	42.256	42.561
S	22.146	22.355	22.547	22.453	22.101	22.085	21.769	22.267	21.917	21.949
Sb	0.054	0.043	0.022	0.047	0.024	0.036	0.021	0.058	0.053	0.052
Ni	0.000	0.000	0.009	0.000	0.018	0.000	0.000	0.000	0.000	0.000
Au	0.084	0.052	0.005	0.000	0.015	0.005	0.052	0.005	0.094	0.026
Ag	0.038	0.034	0.037	0.039	0.046	0.031	0.000	0.031	0.030	0.033
Total	100.119	101.503	101.956	99.881	100.116	101.126	100.555	98.943	99.360	99.615
As%Aspy	30.063	30.498	30.440	29.634	29.937	30.682	30.612	29.183	30.070	30.215
Fe%Aspy	33.340	33.018	32.980	33.355	33.574	33.105	33.460	33.817	33.420	33.326
S%Aspy	36.532	36.435	36.544	36.972	36.436	36.181	35.905	36.958	36.447	36.413
AsForm	0.902	0.915	0.913	0.889	0.898	0.920	0.919	0.876	0.902	0.906
FeForm	1.000	0.991	0.989	1.001	1.007	0.993	1.004	1.015	1.003	1.000
SForm	1.096	1.093	1.096	1.109	1.093	1.085	1.077	1.109	1.093	1.092

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 17

VAR. / ID.	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177
Lab No.	268	269	270	271	272	273	274	275	276	277
X	1190	1182	1174	1166	1158	1150	1142	1134	1145	1153
Y	9193	9193	9193	9193	9193	9193	9193	9193	9203	9203
Fe	35.520	35.749	34.957	35.483	35.360	34.854	35.186	34.688	35.370	34.454
As	44.143	44.026	43.403	43.041	42.115	41.681	41.844	41.536	42.313	44.719
S	22.050	22.417	22.321	21.947	22.405	22.519	21.823	22.286	22.147	21.206
Sb	0.057	0.036	0.077	0.060	0.029	0.038	0.043	0.014	0.022	0.015
Ni	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.023	0.102	0.094	0.000	0.070	0.005	0.010	0.002	0.021	0.071
Ag	0.028	0.030	0.043	0.012	0.019	0.021	0.017	0.026	0.040	0.045
Total	101.821	102.378	100.895	100.543	99.998	99.118	98.923	98.552	99.913	100.510
As%Aspy	30.787	30.474	30.443	30.316	29.666	29.540	29.871	29.632	29.890	31.815
Fe%Aspy	33.232	33.194	32.891	33.527	33.412	33.136	33.694	33.196	33.516	32.882
S%Aspy	35.937	36.260	36.586	36.125	36.881	37.296	36.405	37.153	36.559	35.256
AsForm	0.924	0.914	0.913	0.910	0.890	0.886	0.896	0.889	0.897	0.955
FeForm	0.997	0.996	0.987	1.006	1.003	0.994	1.011	0.996	1.006	0.987
SForm	1.078	1.088	1.098	1.084	1.106	1.119	1.092	1.115	1.097	1.058

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 18

VAR. / ID.	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187
Lab No.	278	278	280	281	282	283	284	285	286	287
X	1162	1171	1180	1188	1219	1227	1234	1242	1250	1258
Y	9203	9203	9203	9203	9203	9203	9203	9203	9203	9203
Fe	34.826	35.208	34.927	35.142	35.112	34.790	34.457	33.912	35.122	34.800
As	43.896	43.729	42.192	44.283	44.064	43.685	44.350	43.737	44.042	43.672
S	22.077	21.727	21.531	22.169	22.067	21.845	22.043	22.235	21.989	22.135
Sb	0.038	0.012	0.000	0.024	0.060	0.065	0.045	0.029	0.028	0.004
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.006	0.000	0.000
Au	0.018	0.039	0.043	0.047	0.044	0.000	0.039	0.079	0.008	0.205
Ag	0.011	0.021	0.021	0.016	0.047	0.052	0.045	0.006	0.026	0.017
Total	100.866	100.736	98.714	101.681	101.394	100.437	100.990	100.004	101.215	100.833
As%Aspy	30.860	30.845	30.269	30.908	30.853	30.877	31.195	30.965	30.889	30.717
Fe%Aspy	32.843	33.315	33.613	32.903	32.979	32.986	32.512	32.207	33.044	32.835
S%Aspy	36.270	35.814	36.096	36.159	36.107	36.082	36.232	36.786	36.040	36.383
AsForm	0.926	0.925	0.908	0.927	0.926	0.926	0.936	0.929	0.927	0.922
FeForm	0.985	0.999	1.008	0.987	0.989	0.990	0.975	0.966	0.991	0.985
SForm	1.088	1.074	1.083	1.085	1.083	1.082	1.087	1.104	1.081	1.092

TABLE 4.10

Microprobe Analyses: Cairngaroch Arsenopyrite (ASP10) Part 19

VAR. / ID.	1188	1189	1190	1191	1192	1195	1196	1197	1198	1199
Lab No.	288	289	290	291	292	295	296	297	298	299
X	1266	1274	1282	1290	1296	1277	1269	1261	1253	1245
Y	9203	9203	9203	9203	9203	9212	9212	9212	9212	9212
Fe	35.159	34.341	34.833	35.807	34.873	35.365	34.979	35.581	35.005	35.514
As	43.840	44.035	45.021	43.796	42.251	43.696	43.529	41.864	42.327	43.759
S	21.894	21.904	21.558	22.239	21.275	21.857	22.500	22.804	22.545	22.284
Sb	0.033	0.076	0.000	0.012	0.003	0.034	0.024	0.018	0.049	0.041
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.000	0.031	0.005	0.000	0.000	0.029	0.136	0.091	0.042	0.000
Ag	0.026	0.040	0.044	0.035	0.024	0.022	0.039	0.022	0.049	0.026
Total	100.952	100.427	101.461	101.889	98.426	101.003	101.207	100.380	100.017	101.624
As%Aspy	30.829	31.148	31.670	30.450	30.448	30.715	30.413	29.287	29.797	30.490
Fe%Aspy	33.166	32.585	32.869	33.396	33.711	33.347	32.784	33.391	33.057	33.195
S%Aspy	35.978	36.206	35.438	36.132	35.828	35.904	36.737	37.280	37.089	36.285
AsForm	0.925	0.934	0.950	0.914	0.914	0.922	0.913	0.879	0.894	0.915
FeForm	0.995	0.978	0.986	1.002	1.011	1.000	0.984	1.002	0.992	0.996
SForm	1.079	1.086	1.063	1.084	1.075	1.077	1.102	1.118	1.113	1.089

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 20

VAR. / ID.	1200	1201	1202	1203	1205	1206	1207	1208	1209	1210
Lab No.	300	301	302	303	305	306	307	308	309	310
X	1237	1230	1212	1204	1188	1180	1171	1164	1156	1148
Y	9212	9212	9212	9212	9212	9212	9212	9212	9212	9212
Fe	35.397	35.286	34.882	35.139	35.284	35.558	34.431	34.917	35.015	35.211
As	43.872	43.485	42.394	43.120	44.626	42.464	43.424	44.164	44.840	43.248
S	22.173	22.153	22.198	22.595	20.972	20.940	22.225	21.763	21.555	22.390
Sb	0.038	0.060	0.024	0.010	0.042	0.000	0.042	0.020	0.034	0.071
Ni	0.000	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.044	0.068	0.023	0.063	0.050	0.000	0.081	0.000	0.021	0.013
Ag	0.027	0.035	0.034	0.045	0.051	0.033	0.071	0.044	0.025	0.041
Total	101.551	101.116	99.555	100.972	101.025	98.995	100.274	100.908	101.490	100.974
As%Aspy	30.631	30.470	30.044	30.128	31.639	30.523	30.655	31.122	31.527	30.268
Fe%Aspy	33.152	33.168	33.161	32.935	33.557	34.286	32.606	33.008	33.025	33.058
S%Aspy	36.176	36.275	36.762	36.893	34.746	35.174	36.665	35.839	35.416	36.619
AsForm	0.919	0.914	0.901	0.904	0.949	0.916	0.920	0.934	0.946	0.908
FeForm	0.995	0.995	0.995	0.988	1.007	1.029	0.978	0.990	0.991	0.992
SForm	1.085	1.088	1.103	1.107	1.042	1.055	1.100	1.075	1.063	1.099

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 21

VAR. / ID.	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220
Lab No.	311	312	313	314	315	316	317	318	319	320
X	1140	1135	1135	1149	1157	1164	1172	1180	1188	1196
Y	9212	9212	9222	9222	9222	9222	9222	9222	9222	9222
Fe	35.728	34.987	34.923	35.889	35.696	35.444	35.100	35.324	35.366	35.538
As	42.916	42.457	43.711	43.461	43.386	42.243	43.864	43.102	43.827	43.813
S	22.202	22.861	22.465	22.473	22.466	22.581	21.587	21.829	22.110	22.230
Sb	0.053	0.040	0.000	0.054	0.076	0.073	0.015	0.037	0.055	0.037
Ni	0.000	0.000	0.000	0.008	0.023	0.000	0.000	0.000	0.000	0.018
Au	0.000	0.052	0.023	0.055	0.094	0.198	0.031	0.000	0.071	0.005
Ag	0.038	0.025	0.024	0.036	0.021	0.034	0.031	0.031	0.050	0.019
Total	100.937	100.422	101.146	101.976	101.762	100.573	100.628	100.323	101.479	101.660
As%Aspy	30.056	29.716	30.550	30.137	30.151	29.602	31.013	30.451	30.641	30.533
Fe%Aspy	33.566	32.849	32.742	33.384	33.277	33.319	33.290	33.478	33.168	33.222
S%Aspy	36.336	37.391	36.691	36.417	36.485	36.978	35.667	36.040	36.123	36.202
AsForm	0.902	0.892	0.917	0.904	0.905	0.888	0.930	0.914	0.919	0.916
FeForm	1.007	0.986	0.982	1.002	0.998	1.000	0.999	1.004	0.995	0.997
SForm	1.090	1.122	1.101	1.092	1.094	1.109	1.070	1.081	1.084	1.086

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TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 22

VAR. / ID.	1221	1222	1225	1226	1227	1228	1229	1230	1231	1232
Lab No.	321	322	325	326	327	328	329	330	331	332
X	1206	1214	1270	1278	1286	1291	1278	1270	1262	1254
Y	9222	9222	9223	9223	9223	9223	9233	9233	9233	9233
Fe	35.880	35.618	35.033	34.938	35.317	34.820	35.140	35.265	35.665	34.732
As	44.150	43.398	43.365	44.419	44.324	43.711	44.130	44.213	44.172	42.567
S	22.462	22.866	22.239	21.681	21.611	22.834	22.306	21.855	22.208	21.734
Sb	0.065	0.038	0.014	0.022	0.003	0.000	0.016	0.047	0.000	0.033
Ni	0.000	0.028	0.005	0.000	0.034	0.000	0.000	0.001	0.000	0.000
Au	0.068	0.081	0.034	0.182	0.013	0.008	0.000	0.021	0.050	0.089
Ag	0.035	0.032	0.042	0.029	0.036	0.046	0.018	0.014	0.058	0.025
Total	102.660	102.061	100.732	101.271	101.338	101.419	101.610	101.416	102.153	99.180
As%Aspy	30.477	29.987	30.456	31.269	31.153	30.394	30.770	30.996	30.681	30.401
Fe%Aspy	33.225	33.014	33.005	32.993	33.298	32.479	32.868	33.165	33.231	33.275
S%Aspy	36.235	36.922	36.499	35.666	35.495	37.103	36.346	35.805	36.047	36.273
AsForm	0.914	0.900	0.914	0.938	0.935	0.912	0.923	0.930	0.920	0.912
FeForm	0.997	0.990	0.990	0.990	0.999	0.975	0.986	0.995	0.997	0.998
SForm	1.087	1.108	1.095	1.070	1.065	1.113	1.090	1.074	1.081	1.088

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 23

VAR. / ID.	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242
Lab No.	333	334	335	336	337	338	339	340	341	342
X	1245	1237	1229	1221	1213	1206	1199	1192	1184	1176
Y	9233	9233	9233	9233	9233	9233	9233	9233	9233	9233
Fe	34.885	35.455	35.100	35.122	35.322	35.425	34.997	35.201	34.686	35.298
As	44.436	44.033	43.880	44.075	44.122	43.823	43.696	44.316	43.905	43.440
S	21.913	21.924	22.181	22.219	22.209	22.450	22.239	21.971	22.245	22.827
Sb	0.032	0.076	0.034	0.072	0.045	0.045	0.018	0.021	0.067	0.014
Ni	0.000	0.000	0.000	0.000	0.022	0.000	0.000	0.000	0.000	0.000
Au	0.031	0.000	0.000	0.063	0.081	0.076	0.050	0.000	0.113	0.102
Ag	0.038	0.022	0.061	0.039	0.028	0.030	0.036	0.020	0.008	0.018
Total	101.335	101.510	101.256	101.590	101.829	101.849	101.036	101.529	101.024	101.699
As%Aspy	31.184	30.816	30.715	30.777	30.745	30.457	30.628	31.010	30.809	30.126
Fe%Aspy	32.840	33.285	32.958	32.899	33.017	33.027	32.906	33.043	32.651	32.838
S%Aspy	35.936	35.855	36.283	36.257	36.164	36.462	36.427	35.928	36.478	36.994
AsForm	0.936	0.925	0.922	0.923	0.922	0.914	0.919	0.930	0.924	0.904
FeForm	0.985	0.999	0.989	0.987	0.991	0.991	0.987	0.991	0.980	0.985
SForm	1.078	1.076	1.089	1.088	1.085	1.094	1.093	1.078	1.094	1.110

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 24

VAR. / ID.	1243	1244	1246	1247	1248	1249	1250	1251	1252	1253
Lab No.	343	344	346	347	348	349	350	351	352	353
X	1168	1160	1143	1135	1130	1144	1152	1160	1168	1176
Y	9233	9233	9233	9233	9244	9244	9244	9244	9244	9244
Fe	35.149	35.692	35.206	35.246	35.051	35.158	35.278	35.464	35.703	35.205
As	44.033	43.971	43.813	43.180	43.273	44.315	44.778	42.508	41.875	43.799
S	22.649	22.051	22.401	22.893	22.856	21.443	21.729	22.012	22.014	22.142
Sb	0.023	0.072	0.019	0.008	0.009	0.017	0.024	0.026	0.026	0.019
Ni	0.000	0.036	0.000	0.011	0.000	0.007	0.013	0.000	0.000	0.000
Au	0.058	0.089	0.065	0.047	0.154	0.087	0.000	0.078	0.000	0.000
Ag	0.043	0.023	0.005	0.031	0.033	0.037	0.035	0.042	0.022	0.007
Total	101.955	101.934	101.509	101.416	101.376	101.064	101.857	100.130	99.640	101.172
As%Aspy	30.541	30.638	30.547	29.983	30.094	31.281	31.327	30.021	29.647	30.675
Fe%Aspy	32.703	33.360	32.927	32.830	32.700	33.292	33.109	33.598	33.909	33.075
S%Aspy	36.710	35.904	36.498	37.147	37.145	35.372	35.525	36.328	36.422	36.238
AsForm	0.916	0.919	0.916	0.900	0.903	0.938	0.940	0.901	0.890	0.920
FeForm	0.981	1.001	0.988	0.985	0.981	0.999	0.993	1.008	1.017	0.992
SForm	1.101	1.077	1.095	1.114	1.114	1.061	1.066	1.090	1.093	1.087

TABLE 4.10

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Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 25

VAR. / ID.	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263
Lab No.	354	355	356	357	358	359	360	361	362	363
X	1184	1192	1200	1208	1216	1224	1232	1240	1248	1256
Y	9244	9244	9244	9244	9244	9244	9244	9244	9244	9244
Fe	35.324	35.771	34.308	35.430	34.715	35.070	35.007	35.676	34.822	35.030
As	43.658	41.258	42.403	43.630	42.179	43.009	43.795	43.532	42.754	43.133
S	22.443	22.224	22.667	22.349	22.014	21.445	21.748	22.259	22.211	22.271
Sb	0.059	0.054	0.075	0.042	0.000	0.033	0.027	0.000	0.020	0.019
Ni	0.036	0.019	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000
Au	0.068	0.065	0.023	0.000	0.052	0.113	0.000	0.010	0.068	0.023
Ag	0.026	0.055	0.026	0.040	0.009	0.010	0.026	0.045	0.019	0.048
Total	101.614	99.446	99.502	101.491	98.982	99.680	100.603	101.522	99.894	100.524
As%Aspy	30.399	29.199	29.973	30.417	30.078	30.669	30.926	30.348	30.232	30.328
Fe%Aspy	32.994	33.960	32.532	33.135	33.208	33.546	33.161	33.364	33.030	33.041
S%Aspy	36.519	36.755	37.443	36.411	36.684	35.735	35.888	36.263	36.702	36.594
AsForm	0.912	0.876	0.899	0.913	0.902	0.920	0.928	0.910	0.907	0.910
FeForm	0.990	1.019	0.976	0.994	0.996	1.007	0.995	1.001	0.991	0.991
SForm	1.096	1.103	1.123	1.092	1.100	1.072	1.077	1.088	1.101	1.098

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 26

VAR. / ID.	1264	1265	1267	1268	1269	1270	1271	1272	1273	1274
Lab No.	364	365	367	368	369	370	371	372	373	374
X	1264	1274	1275	1267	1259	1250	1242	1234	1227	1218
Y	9244	9244	9254	9254	9254	9254	9254	9254	9254	9254
Fe	35.258	35.054	34.869	35.023	34.625	35.184	34.908	35.174	35.823	34.901
As	43.971	43.027	43.545	42.638	42.723	43.992	44.440	43.147	43.624	44.657
S	22.081	21.414	21.698	22.089	21.846	21.793	21.478	22.512	21.812	21.679
Sb	0.002	0.035	0.015	0.061	0.016	0.047	0.000	0.000	0.000	0.000
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009
Au	0.102	0.131	0.029	0.008	0.060	0.047	0.029	0.099	0.015	0.021
Ag	0.036	0.027	0.047	0.018	0.032	0.030	0.036	0.038	0.049	0.024
Total	101.450	99.688	100.203	99.837	99.302	101.093	100.891	100.970	101.323	101.291
As%Aspy	30.763	30.694	30.866	30.177	30.456	30.940	31.407	30.172	30.573	31.410
Fe%Aspy	33.090	33.544	33.155	33.251	33.111	33.195	33.095	32.995	33.678	32.931
S%Aspy	36.101	35.698	35.941	36.534	36.393	35.818	35.472	36.788	35.722	35.634
AsForm	0.923	0.921	0.926	0.905	0.914	0.928	0.942	0.905	0.917	0.942
FeForm	0.993	1.006	0.995	0.998	0.993	0.996	0.993	0.990	1.010	0.988
SForm	1.083	1.071	1.078	1.096	1.092	1.074	1.064	1.104	1.072	1.069

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 27

VAR. / ID.	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284
Lab No.	375	376	377	378	379	380	381	382	383	384
X	1210	1202	1194	1186	1177	1168	1160	1152	1143	1134
Y	9250	9254	9254	9254	9254	9254	9254	9254	9254	9254
Fe	35.322	35.383	35.502	35.141	34.999	35.128	35.148	35.499	34.174	34.893
As	43.976	43.469	43.983	43.408	42.896	44.119	44.652	42.466	43.321	43.342
S	21.807	22.414	22.156	22.255	21.959	22.037	21.823	21.735	21.876	22.365
Sb	0.037	0.068	0.058	0.049	0.034	0.016	0.049	0.053	0.030	0.015
Ni	0.000	0.003	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.002
Au	0.000	0.034	0.008	0.000	0.000	0.087	0.063	0.002	0.031	0.000
Ag	0.019	0.041	0.057	0.046	0.031	0.028	0.016	0.065	0.033	0.030
Total	101.161	101.412	101.764	100.899	99.925	101.415	101.751	99.820	99.465	100.647
As%Aspy	30.892	30.313	30.659	30.437	30.377	30.895	31.255	30.127	30.869	30.427
Fe%Aspy	33.285	33.100	33.197	33.054	33.248	32.999	33.003	33.784	32.666	32.860
S%Aspy	35.798	36.526	36.090	36.466	36.340	36.062	35.696	36.034	36.427	36.690
AsForm	0.927	0.910	0.920	0.913	0.911	0.927	0.938	0.904	0.926	0.913
FeForm	0.999	0.993	0.996	0.992	0.998	0.990	0.990	1.014	0.980	0.986
SForm	1.074	1.096	1.083	1.094	1.090	1.082	1.071	1.081	1.093	1.101

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 28

VAR. / ID.	1285	1286	1287	1288	1289	1290	1291	1293	1294	1295
Lab No.	385	386	387	388	389	390	391	393	394	395
X	1133	1145	1153	1161	1169	1177	1185	1199	1207	1215
Y	9264	9264	9264	9264	9264	9264	9264	9264	9264	9264
Fe	34.918	34.692	34.725	34.824	35.117	34.972	35.431	34.937	35.034	35.227
As	42.418	43.499	44.422	43.183	42.649	43.101	44.136	43.659	44.834	44.081
S	21.633	21.700	21.653	21.763	21.905	21.888	21.944	21.889	21.560	22.225
Sb	0.015	0.020	0.006	0.018	0.012	0.006	0.006	0.068	0.026	0.028
Ni	0.000	0.000	0.004	0.000	0.000	0.000	0.007	0.000	0.004	0.000
Au	0.081	0.044	0.053	0.029	0.063	0.050	0.068	0.066	0.068	0.071
Ag	0.035	0.046	0.027	0.029	0.038	0.033	0.039	0.041	0.042	0.042
Total	99.100	100.001	100.890	99.846	99.784	100.050	101.631	100.660	101.568	101.674
As%Aspy	30.325	30.892	31.360	30.670	30.247	30.523	30.862	30.795	31.509	30.751
Fe%Aspy	33.487	33.050	32.885	33.179	33.409	33.222	33.235	33.057	33.029	32.966
S%Aspy	36.141	36.014	35.722	36.121	36.303	36.222	35.858	36.080	35.409	36.232
AsForm	0.910	0.927	0.941	0.920	0.908	0.916	0.926	0.924	0.945	0.923
FeForm	1.005	0.992	0.987	0.996	1.002	0.997	0.997	0.992	0.991	0.989
SForm	1.084	1.080	1.072	1.084	1.089	1.087	1.076	1.082	1.062	1.087

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 29

VAR. / ID.	1296	1297	1298	1299	1300	1301	1302	1303	1306	1307
Lab No.	396	397	398	399	400	401	402	403	406	407
X	1223	1230	1238	1245	1253	1261	1268	1276	1272	1264
Y	9264	9264	9264	9264	9264	9264	9264	9264	9273	9273
Fe	34.854	35.212	35.466	35.030	35.286	35.157	34.666	34.530	35.044	35.155
As	44.080	43.975	43.880	43.398	43.476	44.430	44.066	43.504	42.991	43.161
S	21.456	22.004	21.838	22.190	21.558	21.748	21.746	20.529	21.525	22.136
Sb	0.005	0.021	0.034	0.058	0.008	0.035	0.054	0.030	0.002	0.026
Ni	0.000	0.000	0.000	0.000	0.000	0.040	0.000	0.000	0.000	0.000
Au	0.103	0.089	0.050	0.023	0.000	0.000	0.145	0.010	0.000	0.000
Ag	0.024	0.036	0.036	0.039	0.020	0.024	0.022	0.000	0.039	0.024
Total	100.522	101.337	101.304	100.738	100.348	101.434	100.699	98.603	99.601	100.502
As%Aspy	31.255	30.816	30.781	30.494	30.789	31.178	31.144	31.566	30.636	30.378
Fe%Aspy	33.152	33.100	33.374	33.019	33.521	33.095	32.867	33.609	33.499	33.191
S%Aspy	35.552	36.033	35.799	36.437	35.677	35.664	35.916	34.809	35.845	36.408
AsForm	0.938	0.925	0.924	0.915	0.924	0.935	0.934	0.947	0.919	0.911
FeForm	0.995	0.993	1.001	0.991	1.006	0.993	0.986	1.008	1.005	0.996
SForm	1.067	1.081	1.074	1.093	1.070	1.070	1.077	1.044	1.075	1.092

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 30

VAR. / ID.	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317
Lab No.	408	409	410	411	412	413	414	415	416	417
X	1256	1248	1240	1232	1224	1215	1207	1199	1191	1183
Y	9273	9273	9273	9273	9273	9273	9273	9273	9273	9273
Fe	34.487	35.286	34.202	35.074	35.258	35.287	35.215	35.202	34.632	34.817
As	43.926	43.646	43.886	43.573	44.556	44.649	44.093	43.414	44.520	44.510
S	22.041	22.030	22.184	21.638	21.916	21.793	21.520	22.058	22.065	21.481
Sb	0.009	0.039	0.006	0.050	0.046	0.025	0.031	0.017	0.038	0.038
Ni	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.008
Au	0.045	0.037	0.005	0.013	0.108	0.060	0.045	0.000	0.134	0.084
Ag	0.019	0.046	0.025	0.033	0.034	0.027	0.041	0.029	0.051	0.045
Total	100.527	101.084	100.308	100.381	101.926	101.841	100.945	100.720	101.440	100.983
As%Aspy	30.992	30.622	30.986	30.849	31.121	31.230	31.120	30.528	31.209	31.454
Fe%Aspy	32.641	33.210	32.394	33.311	33.035	33.109	33.341	33.205	32.567	33.005
S%Aspy	36.341	36.119	36.603	35.799	35.772	35.621	35.493	36.246	36.146	35.473
AsForm	0.930	0.919	0.930	0.926	0.934	0.937	0.934	0.916	0.936	0.944
FeForm	0.979	0.996	0.972	0.999	0.991	0.993	1.000	0.996	0.977	0.990
SForm	1.090	1.084	1.098	1.074	1.073	1.069	1.065	1.087	1.084	1.064

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TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 31

VAR. / ID.	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327
Lab No.	418	419	420	421	422	423	424	425	426	427
X	1175	1166	1158	1150	1142	1134	1128	1126	1142	1150
Y	9273	9273	9273	9273	9273	9273	9273	9283	9283	9283
Fe	35.073	34.785	35.307	34.914	34.630	35.004	34.833	34.830	34.937	34.863
As	43.949	44.503	44.823	43.831	44.092	44.484	43.105	42.489	43.755	44.761
S	21.823	22.106	21.653	21.468	21.786	21.576	23.266	23.366	21.443	21.674
Sb	0.065	0.001	0.025	0.041	0.017	0.000	0.018	0.045	0.000	0.028
Ni	0.000	0.000	0.000	0.000	0.000	0.020	0.000	0.000	0.000	0.001
Au	0.137	0.000	0.000	0.084	0.108	0.018	0.026	0.133	0.000	0.097
Ag	0.045	0.041	0.049	0.049	0.041	0.035	0.016	0.042	0.029	0.011
Total	101.092	101.436	101.857	100.387	100.674	101.137	101.264	100.905	100.164	101.435
As%Aspy	30.924	31.153	31.381	31.102	31.152	31.345	29.886	29.522	31.087	31.469
Fe%Aspy	33.105	32.665	33.159	33.234	32.821	33.087	32.397	32.464	33.297	32.879
S%Aspy	35.884	36.162	35.426	35.599	35.970	35.528	37.696	37.939	35.602	35.608
AsForm	0.928	0.935	0.942	0.933	0.935	0.940	0.897	0.886	0.933	0.944
FeForm	0.993	0.980	0.995	0.997	0.985	0.993	0.972	0.974	0.999	0.987
SForm	1.077	1.085	1.063	1.068	1.079	1.066	1.131	1.138	1.068	1.068

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 32

VAR. / ID.	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337
Lab No.	428	429	430	431	432	433	434	435	436	437
X	1158	1166	1174	1182	1190	1198	1207	1218	1232	1172
Y	9283	9283	9283	9283	9283	9283	9283	9283	9283	9293
Fe	35.149	34.570	35.163	34.197	34.844	35.196	34.909	35.130	35.075	34.976
As	44.336	43.929	43.886	44.506	44.163	43.743	44.045	43.594	42.488	43.127
S	21.267	21.391	21.453	21.435	21.671	22.180	22.060	22.090	22.463	22.155
Sb	0.033	0.017	0.027	0.022	0.000	0.080	0.006	0.000	0.000	0.008
Ni	0.014	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000
Au	0.000	0.063	0.071	0.108	0.095	0.000	0.050	0.042	0.031	0.105
Ag	0.040	0.044	0.033	0.028	0.043	0.034	0.044	0.033	0.023	0.051
Total	100.839	100.014	100.633	100.296	100.816	101.247	101.114	100.889	100.080	100.422
As%Aspy	31.388	31.298	31.069	31.667	31.186	30.615	30.913	30.618	29.908	30.393
Fe%Aspy	33.381	33.040	33.393	32.640	33.007	33.044	32.867	33.098	33.121	33.065
S%Aspy	35.184	35.615	35.491	35.640	35.761	36.277	36.182	36.256	36.951	36.486
AsForm	0.942	0.939	0.932	0.950	0.936	0.919	0.928	0.919	0.897	0.912
FeForm	1.002	0.991	1.002	0.979	0.990	0.991	0.986	0.993	0.994	0.992
SForm	1.056	1.069	1.065	1.069	1.073	1.088	1.086	1.088	1.109	1.095

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 33

VAR. / ID.	1338	1339	1340	1341	1342	1343	1344	1345	1349	1350
Lab No.	438	439	440	441	442	443	444	445	449	450
X	1162	1152	1143	1135	1127	1132	1139	1122	690	695
Y	9293	9293	9293	9293	9293	9301	9301	9303	368	368
Fe	35.953	35.473	34.450	35.008	34.109	33.901	34.111	34.179	34.278	33.515
As	43.438	43.932	43.854	42.839	43.041	43.736	42.775	41.239	42.700	43.785
S	22.079	22.171	21.572	21.487	21.988	22.166	21.538	22.849	20.980	20.613
Sb	0.056	0.033	0.026	0.024	0.005	0.013	0.027	0.021	0.026	0.017
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000
Au	0.102	0.000	0.000	0.031	0.000	0.087	0.039	0.062	0.045	0.042
Ag	0.032	0.019	0.037	0.060	0.044	0.028	0.063	0.048	0.034	0.051
Total	101.660	101.628	99.939	99.449	99.187	99.931	98.560	98.398	98.063	98.023
As%Aspy	30.300	30.644	31.208	30.582	30.697	31.003	30.785	29.340	30.994	31.966
Fe%Aspy	33.642	33.193	32.887	33.525	32.633	32.236	32.932	32.621	33.377	32.822
S%Aspy	35.991	36.140	35.875	35.845	36.646	36.718	36.223	37.989	35.587	35.167
AsForm	0.909	0.919	0.936	0.918	0.921	0.930	0.924	0.880	0.930	0.959
FeForm	1.009	0.996	0.987	1.006	0.979	0.967	0.988	0.979	1.001	0.985
SForm	1.080	1.084	1.076	1.075	1.099	1.102	1.087	1.140	1.068	1.055

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 34

VAR. / ID.	1351	1352	1353	1354	1355	1356	1359	1360	1361	1362
Lab No.	451	452	453	454	455	456	459	460	461	462
X	700	700	695	690	685	680	678	683	688	693
Y	368	378	374	374	374	374	381	381	381	381
Fe	34.230	34.719	34.582	35.750	34.925	35.026	34.188	35.026	34.842	35.261
As	45.008	43.892	43.523	42.874	43.392	43.415	42.805	43.659	43.534	43.417
S	19.533	21.715	21.616	22.245	22.688	22.310	21.834	22.035	21.917	22.129
Sb	0.003	0.000	0.018	0.023	0.000	0.003	0.003	0.003	0.000	0.012
Ni	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.010	0.047	0.000	0.039	0.113	0.000	0.000	0.094	0.000	0.115
Ag	0.025	0.012	0.066	0.017	0.029	0.020	0.030	0.025	0.027	0.058
Total	98.909	100.385	99.805	100.948	101.147	100.774	98.860	100.842	100.320	100.992
As%Aspy	32.919	31.077	30.981	30.012	30.275	30.456	30.638	30.704	30.764	30.463
Fe%Aspy	33.585	32.976	33.022	33.570	32.688	32.960	32.826	33.044	33.029	33.188
S%Aspy	33.386	35.929	35.957	36.389	36.992	36.573	36.520	36.214	36.194	36.284
AsForm	0.988	0.932	0.929	0.900	0.908	0.914	0.919	0.921	0.923	0.914
FeForm	1.008	0.989	0.991	1.007	0.981	0.989	0.985	0.991	0.991	0.996
SForm	1.002	1.078	1.079	1.092	1.110	1.097	1.096	1.086	1.086	1.089

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 35

VAR. / ID.	1363	1364	1365	1366	1367	1368	1369	1372	1373	1374
Lab No.	463	464	465	466	467	468	469	472	473	474
X	698	703	707	711	697	692	687	675	680	685
Y	381	381	381	387	387	387	387	392	392	392
Fe	34.857	35.045	34.731	34.850	34.777	34.801	34.832	35.577	35.205	34.941
As	43.313	44.193	44.174	44.624	44.407	43.396	44.017	43.909	44.424	42.433
S	22.100	21.436	21.681	21.434	21.340	22.286	22.537	22.102	21.778	21.318
Sb	0.000	0.055	0.001	0.040	0.016	0.000	0.004	0.000	0.033	0.044
Ni	0.020	0.010	0.000	0.000	0.011	0.015	0.000	0.000	0.000	0.000
Au	0.000	0.066	0.023	0.000	0.066	0.063	0.129	0.100	0.008	0.050
Ag	0.040	0.016	0.031	0.000	0.051	0.022	0.029	0.023	0.046	0.022
Total	100.330	100.821	100.641	100.948	100.668	100.583	101.548	101.711	101.494	98.808
As%Aspy	30.552	31.258	31.227	31.539	31.492	30.514	30.678	30.633	31.153	30.487
Fe%Aspy	32.982	33.252	32.935	33.042	33.083	32.826	32.566	33.295	33.118	33.676
S%Aspy	36.429	35.431	35.816	35.402	35.365	36.619	36.706	36.034	35.689	35.793
AsForm	0.917	0.938	0.937	0.946	0.945	0.915	0.920	0.919	0.935	0.915
FeForm	0.990	0.998	0.988	0.991	0.993	0.985	0.977	0.999	0.994	1.010
SForm	1.093	1.063	1.074	1.062	1.061	1.099	1.101	1.081	1.071	1.074

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 36

VAR. / ID.	1375	1376	1377	1378	1379	1380	1393	1394	1395	1396
Lab No.	475	476	477	478	479	480	493	494	495	496
X	690	695	700	705	710	715	667	672	677	683
Y	392	392	392	392	392	392	403	8403	403	403
Fe	34.262	34.683	34.467	34.923	34.218	34.953	34.812	35.036	35.319	34.979
As	42.982	43.898	43.880	42.906	44.342	44.067	43.841	43.869	44.282	44.676
S	21.565	20.471	20.737	21.426	21.655	21.880	22.381	21.946	21.712	22.089
Sb	0.012	0.009	0.000	0.000	0.000	0.001	0.040	0.019	0.026	0.000
Ni	0.000	0.000	0.000	0.000	0.011	0.026	0.000	0.000	0.000	0.014
Au	0.023	0.092	0.008	0.097	0.111	0.002	0.042	0.039	0.045	0.066
Ag	0.019	0.018	0.018	0.041	0.015	0.030	0.021	0.038	0.039	0.021
Total	98.863	99.171	99.110	99.393	100.352	100.959	101.137	100.947	101.423	101.845
As%Aspy	30.841	31.738	31.662	30.672	31.467	31.002	30.680	30.849	31.084	31.182
Fe%Aspy	32.978	33.638	33.361	33.489	32.574	32.987	32.680	33.050	33.258	32.750
S%Aspy	36.160	34.586	34.966	35.793	35.912	35.972	36.601	36.064	35.616	36.028
AsForm	0.925	0.952	0.950	0.920	0.944	0.930	0.920	0.926	0.933	0.936
FeForm	0.989	1.009	1.001	1.005	0.977	0.990	0.980	0.992	0.998	0.983
SForm	1.085	1.038	1.049	1.074	1.077	1.079	1.098	1.082	1.069	1.081

TABLE 4.10

Microprobe Analyses: Cairnngarroch Arsenopyrite (ASP10) Part 37

VAR. / ID.	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406
Lab No.	497	498	1399	500	501	502	503	504	505	506
X	689	694	699	704	709	714	720	706	701	696
Y	403	403	403	8403	403	403	403	411	411	411
Fe	35.199	35.119	35.574	35.121	35.315	34.709	34.662	34.983	34.341	34.800
As	43.952	43.966	44.170	43.596	41.946	42.975	44.193	41.795	43.244	44.955
S	21.928	21.992	21.871	21.462	22.063	22.664	22.080	21.792	22.173	21.242
Sb	0.013	0.046	0.022	0.016	0.000	0.000	0.000	0.022	0.002	0.006
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032
Au	0.108	0.129	0.047	0.000	0.063	0.057	0.058	0.002	0.018	0.071
Ag	0.043	0.047	0.036	0.034	0.039	0.044	0.046	0.046	0.014	0.035
Total	101.243	101.299	101.720	100.229	99.426	100.449	101.039	98.640	99.792	101.141
As%Aspy	30.845	30.836	30.876	30.942	29.764	30.147	31.047	29.919	30.638	31.799
Fe%Aspy	33.137	33.042	33.358	33.438	33.615	32.662	32.666	33.593	32.638	33.021
S%Aspy	35.962	36.045	35.727	35.596	36.585	37.154	36.249	36.455	36.711	35.113
AsForm	0.925	0.925	0.926	0.928	0.893	0.905	0.932	0.898	0.919	0.954
FeForm	0.994	0.991	1.001	1.003	1.009	0.980	0.980	1.008	0.979	0.991
SForm	1.079	1.081	1.072	1.068	1.098	1.115	1.087	1.094	1.101	1.053

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 38

VAR. / ID.	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416
Lab No.	507	508	509	510	511	512	513	514	515	516
X	691	686	681	676	671	666	671	683	688	693
Y	411	411	411	411	411	411	411	417	417	417
Fe	34.766	35.126	34.306	35.007	34.757	33.466	33.821	34.716	34.362	34.215
As	41.706	42.976	44.127	43.614	42.395	43.158	43.168	41.692	42.633	43.614
S	22.020	21.645	21.062	22.352	21.919	23.242	23.532	21.659	21.813	22.064
Sb	0.000	0.036	0.015	0.006	0.000	0.020	0.012	0.028	0.029	0.000
Ni	0.004	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.000	0.000
Au	0.073	0.034	0.121	0.113	0.036	0.102	0.102	0.073	0.128	0.089
Ag	0.034	0.055	0.048	0.038	0.049	0.069	0.058	0.024	0.027	0.032
Total	98.603	99.872	99.679	101.130	99.156	100.069	100.693	98.192	98.992	100.014
As%Aspy	29.820	30.533	31.643	30.525	30.220	30.291	30.058	30.008	30.499	30.904
Fe%Aspy	33.346	33.478	33.000	32.867	33.235	31.508	31.591	33.519	32.975	32.522
S%Aspy	36.793	35.937	35.294	36.557	36.512	38.120	38.291	36.429	36.465	36.535
AsForm	0.895	0.916	0.949	0.916	0.907	0.909	0.902	0.900	0.915	0.927
FeForm	1.000	1.004	0.990	0.986	0.997	0.945	0.948	1.006	0.989	0.976
SForm	1.104	1.078	1.059	1.097	1.095	1.144	1.149	1.093	1.094	1.096

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TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 39

VAR. / ID.	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426
Lab No.	517	518	519	520	521	522	523	524	525	526
X	698	703	708	712	698	693	688	683	678	692
Y	417	417	417	417	424	424	424	424	424	434
Fe	34.643	34.949	33.900	34.660	34.985	34.616	35.050	34.564	32.723	33.833
As	41.955	41.691	44.769	42.982	43.120	44.117	44.877	42.387	41.800	43.323
S	21.846	21.762	21.501	21.855	21.945	22.125	21.783	22.226	24.874	23.835
Sb	0.000	0.001	0.002	0.000	0.001	0.025	0.000	0.000	0.077	0.027
Ni	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.000
Au	0.044	0.086	0.098	0.042	0.047	0.037	0.071	0.036	0.088	0.152
Ag	0.036	0.042	0.031	0.020	0.026	0.025	0.013	0.024	0.052	0.042
Total	98.524	98.531	100.301	99.559	100.124	100.960	101.794	99.237	99.614	101.212
As%Aspy	30.071	29.888	31.853	30.575	30.502	30.998	31.419	30.121	29.040	29.979
Fe%Aspy	33.308	33.610	32.355	33.074	33.197	32.627	32.918	32.949	30.496	31.406
S%Aspy	36.591	36.458	35.749	36.330	36.276	36.328	35.638	36.909	40.383	38.543
AsForm	0.902	0.897	0.956	0.917	0.915	0.930	0.943	0.904	0.871	0.900
FeForm	0.999	1.008	0.971	0.992	0.996	0.979	0.988	0.989	0.915	0.942
SForm	1.098	1.094	1.072	1.090	1.088	1.090	1.069	1.107	1.212	1.156

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 40

VAR. / ID.	1427	1428	1433	1435	1436	1437	1440	1441	1442	1443
Lab No.	527	528	533	535	536	537	540	541	542	543
X	697	701	1371	1378	1369	1364	1367	1375	1382	1390
Y	434	434	1366	1371	1371	1371	1379	1379	1379	1379
Fe	34.846	35.255	34.281	34.520	34.374	34.231	34.542	35.003	34.790	35.210
As	42.808	43.014	43.572	42.921	44.139	42.451	42.325	43.004	43.948	43.489
S	21.955	21.976	21.564	21.221	21.482	21.521	21.462	22.083	21.956	22.194
Sb	0.006	0.000	0.000	0.035	0.056	0.000	0.037	0.038	0.005	0.013
Ni	0.000	0.003	0.025	0.000	0.000	0.024	0.000	0.006	0.000	0.000
Au	0.092	0.097	0.045	0.108	0.105	0.018	0.000	0.015	0.000	0.000
Ag	0.037	0.029	0.016	0.025	0.023	0.010	0.048	0.013	0.032	0.024
Total	99.744	100.374	99.503	98.830	100.179	98.255	98.414	100.162	100.731	100.930
As%Aspy	30.377	30.351	31.121	30.901	31.406	30.605	30.478	30.368	30.960	30.495
Fe%Aspy	33.170	33.370	32.845	33.339	32.810	33.105	33.366	33.158	32.877	33.120
S%Aspy	36.407	36.236	35.992	35.703	35.720	36.258	36.115	36.442	36.145	36.368
AsForm	0.911	0.911	0.934	0.927	0.942	0.918	0.914	0.911	0.929	0.915
FeForm	0.995	1.001	0.985	1.000	0.984	0.993	1.001	0.995	0.986	0.994
SForm	1.092	1.087	1.080	1.071	1.072	1.088	1.084	1.093	1.084	1.091

TABLE 4.10

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Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 41

VAR. / ID.	1444	1446	1447	1448	1449	1450	1451	1452	1453	1456
Lab No.	544	546	547	548	549	550	551	552	555	556
X	1396	1413	1405	1397	1389	1381	1373	1364	1365	1373
Y	1379	1388	1388	1388	1388	1388	1388	1388	1396	1396
Fe	34.978	35.004	35.280	35.376	35.386	35.152	35.318	34.648	35.054	34.857
As	42.724	43.815	42.385	42.272	43.702	42.053	43.571	44.182	43.468	44.077
S	21.734	22.000	22.592	22.890	22.573	22.296	22.072	21.644	22.576	22.093
Sb	0.009	0.001	0.019	0.020	0.025	0.065	0.040	0.000	0.000	0.025
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.001	0.007	0.000
Au	0.008	0.055	0.060	0.089	0.015	0.000	0.026	0.008	0.123	0.000
Ag	0.025	0.032	0.031	0.019	0.016	0.041	0.000	0.025	0.049	0.011
Total	99.478	100.907	100.367	100.666	101.717	99.607	101.041	100.508	101.277	101.063
As%Aspy	30.417	30.807	29.731	29.504	30.358	29.745	30.559	31.277	30.326	30.934
Fe%Aspy	33.405	33.015	33.197	33.121	32.975	33.353	33.229	32.903	32.806	32.816
S%Aspy	36.159	36.147	37.033	37.334	36.644	36.853	36.176	35.805	36.806	36.234
AsForm	0.913	0.924	0.892	0.885	0.911	0.892	0.917	0.938	0.910	0.928
FeForm	1.002	0.991	0.996	0.994	0.989	1.001	0.997	0.987	0.984	0.985
SForm	1.085	1.084	1.111	1.120	1.099	1.106	1.085	1.074	1.104	1.087

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 42

VAR. / ID.	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466
Lab No.	557	558	559	560	561	562	563	564	565	566
X	1381	1389	1397	1411	1418	1426	1433	1477	1438	1430
Y	1396	1396	1396	1396	1396	1396	1396	1403	1403	1403
Fe	35.534	35.535	35.145	35.174	35.559	34.976	34.664	35.150	34.092	35.588
As	43.001	43.161	44.028	43.037	42.524	43.634	43.722	41.654	43.881	43.279
S	22.679	22.491	22.314	23.094	22.518	22.345	21.801	22.314	22.410	22.835
Sb	0.035	0.042	0.026	0.049	0.000	0.000	0.007	0.000	0.000	0.035
Ni	0.000	0.005	0.000	0.000	0.000	0.000	0.007	0.012	0.000	0.000
Au	0.021	0.002	0.021	0.026	0.049	0.105	0.047	0.018	0.047	0.070
Ag	0.042	0.035	0.033	0.024	0.038	0.041	0.037	0.052	0.043	0.030
Total	101.312	101.271	101.567	101.404	100.688	101.101	100.285	99.200	100.473	101.837
As%Aspy	29.919	30.089	30.710	29.836	29.760	30.548	30.959	29.540	30.895	29.961
Fe%Aspy	33.166	33.231	32.885	32.711	33.382	32.847	32.926	33.439	32.199	33.049
S%Aspy	36.875	36.640	36.372	37.414	36.826	36.557	36.074	36.980	36.872	36.942
AsForm	0.898	0.903	0.921	0.895	0.893	0.916	0.929	0.886	0.927	0.899
FeForm	0.995	0.997	0.987	0.981	1.002	0.985	0.988	1.003	0.966	0.992
SForm	1.106	1.099	1.091	1.122	1.105	1.097	1.082	1.109	1.106	1.108

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 43

VAR. / ID.	1467	1468	1469	1470	1471	1472	1473	1474	1475	1478
Lab No.	567	568	569	570	571	572	573	574	575	578
X	1421	1412	1394	1386	1378	1370	1363	1363	1371	1378
Y	1403	1403	1403	1403	1403	1403	1403	1411	1411	1411
Fe	35.093	35.055	34.673	35.515	35.500	34.544	34.463	34.464	34.801	34.564
As	42.286	43.246	44.200	43.553	41.874	43.572	43.447	43.461	42.765	42.648
S	22.487	22.563	22.216	22.304	22.347	21.790	21.979	21.938	21.712	22.046
Sb	0.000	0.045	0.035	0.030	0.054	0.005	0.000	0.058	0.000	0.072
Ni	0.000	0.000	0.012	0.000	0.000	0.000	0.004	0.004	0.000	0.022
Au	0.146	0.000	0.044	0.047	0.055	0.058	0.081	0.000	0.015	0.042
Ag	0.060	0.031	0.029	0.025	0.027	0.051	0.030	0.037	0.032	0.016
Total	100.072	100.940	101.209	101.474	99.857	100.020	100.004	99.962	99.325	99.410
As%Aspy	29.777	30.232	30.974	30.378	29.532	30.926	30.792	30.818	30.500	30.326
Fe%Aspy	33.150	32.874	32.594	33.230	33.586	32.890	32.765	32.783	33.294	32.970
S%Aspy	37.004	36.860	36.381	36.355	36.830	36.141	36.402	36.353	36.186	36.634
AsForm	0.893	0.907	0.929	0.911	0.886	0.928	0.924	0.925	0.915	0.910
FeForm	0.995	0.986	0.978	0.997	1.008	0.987	0.983	0.984	0.999	0.989
SForm	1.110	1.106	1.091	1.091	1.105	1.084	1.092	1.091	1.086	1.099

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASPI0) Part 44

VAR. / ID.	1479	1480	1481	1482	1483	1484	1486	1487	1488	1489
Lab No.	579	580	581	582	583	584	586	587	588	589
X	1386	1394	1402	1410	1418	1434	1442	1449	1452	1448
Y	1411	1411	1411	1411	1411	1411	1411	1411	1411	1419
Fe	34.952	35.655	35.466	35.207	35.811	35.229	35.048	35.120	35.124	35.554
As	42.952	42.488	42.425	43.306	43.625	42.627	43.585	42.085	42.364	43.086
S	22.796	22.452	22.563	22.480	22.189	22.601	22.433	22.134	22.112	22.613
Sb	0.007	0.028	0.015	0.031	0.021	0.000	0.000	0.045	0.001	0.000
Ni	0.001	0.007	0.000	0.000	0.000	0.000	0.000	0.022	0.004	0.009
Au	0.086	0.015	0.102	0.050	0.000	0.000	0.055	0.036	0.050	0.026
Ag	0.036	0.019	0.015	0.038	0.019	0.039	0.032	0.030	0.029	0.048
Total	100.830	100.664	100.586	101.112	101.665	100.496	101.153	99.472	99.684	101.336
As%Aspy	30.000	29.747	29.712	30.256	30.392	29.866	30.465	29.845	30.003	29.988
Fe%Aspy	32.748	33.487	33.320	32.996	33.466	33.111	32.862	33.410	33.369	33.195
S%Aspy	37.208	36.734	36.927	36.702	36.124	37.004	36.642	36.681	36.596	36.779
AsForm	0.900	0.892	0.891	0.908	0.912	0.896	0.914	0.895	0.900	0.900
FeForm	0.983	1.005	1.000	0.990	1.004	0.993	0.986	1.002	1.001	0.996
SForm	1.116	1.102	1.108	1.101	1.084	1.110	1.099	1.100	1.098	1.103

TABLE 4.10

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Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 45

VAR. / ID.	1490	1491	1492	1493	1494	1495	1496	1497	1498	1499
Lab No.	590	591	592	593	594	595	596	597	598	599
X	1440	1432	1424	1416	1408	1399	1391	1383	1375	1368
Y	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419
Fe	35.854	34.746	35.620	34.955	35.081	35.197	35.550	35.501	35.770	34.976
As	43.312	43.258	43.813	43.624	43.541	43.673	43.869	43.650	43.053	43.395
S	22.432	22.360	22.498	22.338	22.582	22.560	22.526	22.502	22.541	22.478
Sb	0.042	0.066	0.014	0.045	0.042	0.001	0.063	0.054	0.028	0.036
Ni	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.000	0.060	0.100	0.000	0.000	0.084	0.000	0.063	0.139	0.021
Ag	0.015	0.022	0.025	0.055	0.013	0.034	0.052	0.016	0.023	0.015
Total	101.655	100.512	102.070	101.031	101.259	101.549	102.060	101.786	101.554	100.921
As%Aspy	30.106	30.421	30.376	30.549	30.362	30.399	30.407	30.328	29.940	30.371
Fe%Aspy	33.431	32.778	33.128	32.837	32.815	32.865	33.054	33.089	33.369	32.837
S%Aspy	36.437	36.746	36.451	36.556	36.798	36.697	36.487	36.536	36.632	36.763
AsForm	0.903	0.913	0.911	0.917	0.911	0.912	0.912	0.910	0.898	0.911
FeForm	1.003	0.983	0.994	0.985	0.985	0.986	0.992	0.993	1.001	0.985
SForm	1.093	1.102	1.094	1.097	1.104	1.101	1.095	1.096	1.099	1.103

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TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 46

VAR. / ID.	1500	1501	1502	1503	1504	1505	1506	1507	1508	1509
Lab No.	600	601	602	603	604	605	606	607	608	609
X	1361	1353	1355	1373	1381	1389	1396	1403	1408	1415
Y	1419	1419	1427	1427	1427	1427	1427	1427	1427	1427
Fe	34.425	34.003	34.972	35.444	35.685	35.411	35.201	35.365	36.150	35.498
As	43.660	41.941	42.482	43.136	42.978	43.151	44.062	43.479	42.946	43.616
S	21.800	22.981	21.643	23.518	22.724	22.296	22.467	22.642	22.638	22.626
Sb	0.006	0.020	0.031	0.020	0.035	0.056	0.029	0.053	0.044	0.018
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000
Au	0.000	0.044	0.057	0.000	0.118	0.015	0.044	0.000	0.052	0.000
Ag	0.036	0.030	0.025	0.026	0.051	0.038	0.019	0.014	0.033	0.035
Total	99.927	99.019	99.210	102.144	101.591	100.967	101.841	101.551	101.863	101.793
As%Aspy	31.006	29.681	30.338	29.612	29.835	30.213	30.629	30.221	29.739	30.259
Fe%Aspy	32.795	32.279	33.502	32.639	33.231	33.259	32.825	32.974	33.580	33.035
S%Aspy	36.179	38.005	36.118	37.728	36.864	36.481	36.496	36.777	36.633	36.681
AsForm	0.930	0.891	0.910	0.888	0.895	0.906	0.919	0.907	0.892	0.908
FeForm	0.984	0.969	1.005	0.979	0.997	0.998	0.985	0.989	1.008	0.991
SForm	1.085	1.140	1.084	1.132	1.106	1.094	1.095	1.103	1.099	1.100

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 47

VAR. / ID.	1510	1511	1512	1513	1514	1515	1516	1517	1518	1519
Lab No.	610	611	612	613	614	615	616	617	618	619
X	1421	1429	1437	1444	1450	1446	1438	1429	1421	1413
Y	1427	1427	1427	1427	1427	1436	1436	1436	1436	1436
Fe	34.797	34.797	35.437	35.098	34.753	35.189	35.594	34.721	34.448	35.383
As	42.655	42.655	43.808	43.503	43.160	43.235	43.215	43.948	43.181	43.007
S	22.686	22.686	22.807	22.353	22.363	22.636	22.197	22.253	22.704	22.756
Sb	0.000	0.000	0.000	0.000	0.006	0.000	0.054	0.049	0.068	0.055
Ni	0.000	0.000	0.000	0.000	0.009	0.000	0.009	0.021	0.000	0.000
Au	0.013	0.013	0.089	0.094	0.029	0.078	0.065	0.084	0.071	0.107
Ag	0.029	0.029	0.033	0.029	0.027	0.023	0.032	0.019	0.038	0.006
Total	100.180	100.180	102.174	101.077	100.347	101.161	101.166	101.095	100.510	101.314
As%Aspy	29.960	29.960	30.275	30.448	30.376	30.154	30.236	30.813	30.293	29.923
Fe%Aspy	32.786	32.786	32.852	32.953	32.811	32.922	33.407	32.656	32.418	33.024
S%Aspy	37.236	37.236	36.833	36.560	36.781	36.893	36.293	36.460	37.221	36.999
AsForm	0.899	0.899	0.908	0.914	0.911	0.905	0.907	0.924	0.909	0.898
FeForm	0.984	0.984	0.986	0.989	0.984	0.988	1.002	0.980	0.973	0.991
SForm	1.117	1.117	1.105	1.097	1.103	1.107	1.089	1.094	1.117	1.110

TABLE 4.10

Microprobe Analyses: Cairnngarroch Arsenopyrite (ASP10) Part 48

VAR. / ID.	1520	1521	1522	1523	1524	1525	1526	1527	1528	1529
Lab No.	620	621	622	623	624	625	626	627	628	629
X	1405	1397	1390	1382	1374	1365	1357	1350	1350	1358
Y	1436	1436	1436	1436	1436	1436	1436	1436	1444	1444
Fe	35.638	35.407	35.491	34.952	35.251	34.789	35.507	34.257	34.345	35.525
As	43.209	42.307	43.181	43.631	42.249	43.203	43.286	41.733	41.779	42.965
S	22.833	22.497	22.504	22.588	22.487	22.300	22.235	23.283	23.075	22.341
Sb	0.039	0.061	0.045	0.040	0.038	0.065	0.059	0.048	0.055	0.015
Ni	0.000	0.000	0.000	0.017	0.000	0.000	0.003	0.003	0.021	0.012
Au	0.000	0.120	0.044	0.023	0.065	0.031	0.086	0.070	0.000	0.065
Ag	0.039	0.037	0.006	0.031	0.026	0.030	0.012	0.052	0.025	0.032
Total	101.758	100.429	101.271	101.282	100.116	100.418	101.188	99.446	99.300	100.955
As%Aspy	29.918	29.692	30.106	30.431	29.721	30.413	30.279	29.350	29.452	30.067
Fe%Aspy	33.102	33.334	33.194	32.701	33.265	32.852	33.318	32.318	32.479	33.349
S%Aspy	36.945	36.897	36.666	36.815	36.967	36.684	36.346	38.264	38.014	36.535
AsForm	0.898	0.891	0.903	0.913	0.892	0.913	0.909	0.881	0.884	0.902
FeForm	0.993	1.000	0.996	0.981	0.998	0.986	1.000	0.970	0.975	1.001
SForm	1.108	1.107	1.100	1.105	1.109	1.100	1.090	1.148	1.140	1.096

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 49

VAR. / ID.	1530	1531	1532	1533	1534	1535	1536	1537	1538	1539
Lab No.	630	631	632	633	634	635	636	637	638	639
X	1366	1366	1382	1388	1395	1403	1411	1418	1426	1435
Y	1444	1444	1444	1444	1444	1444	1444	1444	1444	1444
Fe	35.525	35.362	35.212	35.911	35.883	34.815	35.725	35.513	35.430	35.465
As	42.965	43.315	43.766	42.990	42.324	43.286	43.166	42.593	42.626	43.426
S	22.341	22.530	22.395	22.736	22.466	22.605	22.694	22.233	22.487	22.478
Sb	0.015	0.052	0.023	0.063	0.015	0.072	0.085	0.037	0.026	0.073
Ni	0.012	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000
Au	0.065	0.057	0.000	0.047	0.000	0.026	0.094	0.086	0.000	0.073
Ag	0.032	0.030	0.054	0.029	0.022	0.000	0.022	0.025	0.043	0.048
Total	100.955	101.346	101.450	101.776	100.710	100.813	101.786	100.487	100.612	101.563
As%Aspy	30.067	30.190	30.523	29.778	29.601	30.295	29.930	29.940	29.861	30.234
Fe%Aspy	33.349	33.062	32.942	33.368	33.665	32.687	33.228	33.487	33.295	33.122
S%Aspy	36.535	36.696	36.499	36.802	36.717	36.972	36.771	36.521	36.812	36.571
AsForm	0.902	0.906	0.916	0.893	0.888	0.909	0.898	0.898	0.896	0.907
FeForm	1.001	0.992	0.988	1.001	1.010	0.981	0.997	1.005	0.999	0.994
SForm	1.096	1.101	1.095	1.104	1.102	1.109	1.103	1.096	1.104	1.097

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 50

VAR. / ID.	1540	1541	1542	1543	1544	1545	1546	1547	1548	1549
Lab No.	640	641	642	643	644	645	646	647	648	649
X	1430	1450	1443	1435	1426	1419	1411	1402	1394	1386
Y	1444	1444	1453	1453	1453	1453	1453	1453	1453	1453
Fe	35.736	34.628	35.052	35.829	35.414	35.101	35.573	35.039	35.118	35.392
As	42.773	42.473	43.089	42.810	42.429	42.657	42.835	42.005	43.449	43.633
S	22.189	22.623	22.409	22.224	22.202	21.650	22.510	22.895	22.665	22.544
Sb	0.002	0.012	0.000	0.037	0.036	0.012	0.013	0.027	0.053	0.026
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
Au	0.034	0.081	0.050	0.081	0.015	0.002	0.000	0.047	0.002	0.199
Ag	0.030	0.049	0.039	0.038	0.030	0.052	0.022	0.029	0.037	0.048
Total	100.764	99.866	100.639	101.019	100.126	99.474	100.953	100.042	101.324	101.845
As%Aspy	29.995	29.939	30.233	29.961	29.908	30.387	29.917	29.464	30.261	30.317
Fe%Aspy	33.617	32.744	32.992	33.637	33.486	33.542	33.328	32.970	32.810	32.988
S%Aspy	36.363	37.266	36.743	36.347	36.572	36.040	36.739	37.528	36.888	36.605
AsForm	0.900	0.898	0.907	0.899	0.897	0.912	0.898	0.884	0.908	0.910
FeForm	1.009	0.982	0.990	1.009	1.005	1.006	1.000	0.989	0.984	0.990
SForm	1.091	1.118	1.102	1.090	1.097	1.081	1.102	1.126	1.107	1.098

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 51

VAR. / ID.	1550	1551	1552	1553	1555	1556	1557	1558	1559	1560
Lab No.	650	651	652	653	655	656	657	658	659	660
X	1378	1370	1361	1352	1355	1363	1371	1378	1387	1394
Y	1453	1453	1453	1453	1462	1462	1462	1462	1462	1462
Fe	35.195	35.145	35.141	34.276	34.818	33.792	34.305	35.370	34.893	34.978
As	42.081	43.661	42.741	43.493	41.518	43.839	44.068	43.324	43.900	43.603
S	22.430	22.475	22.494	22.175	22.933	21.860	22.097	22.713	22.051	22.053
Sb	0.022	0.000	0.000	0.003	0.022	0.056	0.000	0.008	0.006	0.032
Ni	0.021	0.004	0.018	0.000	0.000	0.000	0.010	0.000	0.000	0.000
Au	0.044	0.081	0.018	0.052	0.044	0.052	0.105	0.076	0.000	0.121
Ag	0.013	0.025	0.024	0.061	0.041	0.038	0.024	0.047	0.024	0.027
Total	99.806	101.391	100.436	100.060	99.376	99.637	100.609	101.538	100.874	100.814
As%Aspy	29.681	30.451	29.995	30.768	29.264	31.239	31.079	30.104	30.860	30.675
Fe%Aspy	33.301	32.881	33.082	32.527	32.921	32.302	32.454	32.969	32.903	33.010
S%Aspy	36.971	36.631	36.890	36.659	37.774	36.402	36.418	36.881	36.223	36.256
AsForm	0.891	0.914	0.900	0.923	0.878	0.937	0.933	0.903	0.926	0.920
FeForm	0.999	0.987	0.993	0.976	0.988	0.969	0.974	0.989	0.987	0.990
SForm	1.109	1.099	1.107	1.100	1.133	1.092	1.092	1.106	1.087	1.088

TABLE 4.10

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Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 52

VAR. / ID.	1561	1562	1563	1564	1565	1566	1567	1568	1569	1570
Lab No.	661	662	663	664	665	666	667	668	669	670
X	1403	1411	1419	1427	1433	1441	1441	1433	1425	1409
Y	1462	1462	1462	1462	1463	1463	1471	1471	1471	1471
Fe	34.671	34.817	34.447	35.397	34.836	34.307	34.281	35.110	34.759	34.813
As	43.514	43.372	43.359	43.491	43.305	43.541	43.375	43.611	43.352	43.583
S	23.121	22.575	22.579	22.595	22.684	22.565	22.599	22.198	22.176	22.431
Sb	0.044	0.019	0.038	0.026	0.024	0.000	0.000	0.038	0.014	0.070
Ni	0.000	0.000	0.000	0.029	0.000	0.000	0.000	0.000	0.000	0.005
Au	0.000	0.094	0.060	0.115	0.047	0.100	0.018	0.039	0.021	0.034
Ag	0.018	0.032	0.041	0.033	0.028	0.016	0.029	0.028	0.039	0.044
Total	101.368	100.909	100.524	101.686	100.924	100.529	100.302	101.024	100.361	100.980
As%Aspy	30.198	30.351	30.447	30.224	30.263	30.589	30.503	30.574	30.563	30.522
Fe%Aspy	32.277	32.683	32.449	32.999	32.657	32.331	32.339	33.019	32.872	32.704
S%Aspy	37.497	36.917	37.052	36.694	37.044	37.045	37.139	36.367	36.534	36.709
AsForm	0.906	0.911	0.914	0.907	0.908	0.918	0.915	0.917	0.917	0.916
FeForm	0.968	0.981	0.974	0.990	0.980	0.970	0.970	0.991	0.986	0.981
SForm	1.125	1.107	1.112	1.101	1.111	1.111	1.114	1.091	1.096	1.101

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 53

VAR. / ID.	1571	1572	1573	1574	1575	1576	1577	1578	1579	1580
Lab No.	671	672	673	674	675	676	677	678	679	680
X	1401	1393	1385	1378	1370	1362	1385	1399	1407	1415
Y	1471	1471	1471	1471	1471	1471	1480	1480	1480	1480
Fe	34.952	34.653	35.294	34.731	34.589	34.446	34.486	34.591	35.166	35.364
As	43.500	43.540	42.004	43.075	43.840	41.903	42.634	42.625	41.267	42.402
S	22.254	22.093	21.699	22.140	21.581	21.737	21.313	22.182	22.430	22.213
Sb	0.001	0.021	0.003	0.024	0.015	0.046	0.010	0.000	0.010	0.015
Ni	0.004	0.016	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000
Au	0.044	0.000	0.000	0.042	0.129	0.113	0.013	0.118	0.089	0.000
Ag	0.024	0.034	0.028	0.036	0.040	0.025	0.035	0.023	0.041	0.012
Total	100.779	100.357	99.028	100.048	100.202	98.270	98.491	99.539	99.003	100.006
As%Aspy	30.541	30.725	29.986	30.451	31.143	30.147	30.730	30.247	29.283	29.910
Fe%Aspy	32.919	32.803	33.799	32.935	32.962	33.244	33.345	32.927	33.474	33.463
S%Aspy	36.512	36.432	36.200	36.575	35.826	36.545	35.900	36.783	37.194	36.616
AsForm	0.916	0.922	0.900	0.914	0.934	0.905	0.922	0.908	0.879	0.897
FeForm	0.988	0.984	1.014	0.988	0.989	0.997	1.000	0.988	1.004	1.004
SForm	1.095	1.093	1.086	1.097	1.075	1.096	1.077	1.104	1.116	1.099

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 54

VAR. / ID.	1581	1582	1583	1584	1585	1586	1587	1588	1591	1592
Lab No.	681	682	683	684	685	686	687	688	691	692
X	1423	1431	1436	1413	1405	1409	3117	3125	3087	3080
Y	1480	1480	1480	1490	1490	1493	1224	1224	1110	1118
Fe	35.295	35.704	34.986	34.625	34.510	34.579	34.922	34.851	34.698	35.124
As	42.831	42.804	41.964	43.119	43.508	42.463	43.296	44.539	43.332	42.085
S	22.748	22.440	22.196	21.496	22.014	21.728	22.263	21.060	21.667	22.528
Sb	0.015	0.024	0.013	0.000	0.024	0.041	0.011	0.046	0.015	0.022
Ni	0.000	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.044	0.042	0.036	0.058	0.029	0.065	0.029	0.053	0.021	0.021
Ag	0.023	0.012	0.029	0.039	0.010	0.022	0.032	0.007	0.037	0.050
Total	100.956	101.026	99.224	99.355	100.095	98.898	100.553	100.556	99.770	99.830
As%Aspy	29.873	29.896	29.802	30.827	30.796	30.398	30.446	31.687	30.830	29.657
Fe%Aspy	33.022	33.452	33.331	33.207	32.768	33.207	32.942	33.261	33.116	33.204
S%Aspy	37.076	36.625	36.837	35.914	36.413	36.349	36.584	35.014	36.024	37.099
AsForm	0.896	0.897	0.894	0.925	0.924	0.912	0.914	0.951	0.925	0.890
FeForm	0.991	1.004	1.000	0.996	0.983	0.996	0.988	0.998	0.994	0.996
SForm	1.112	1.099	1.105	1.077	1.092	1.090	1.097	1.050	1.081	1.113

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 55

VAR. / ID.	1593	1595	1597	1598	1599	1600	1601	1602	1603	1604
Lab No.	693	695	697	698	699	700	701	702	703	704
X	3098	3112	3118	3110	3102	3094	3075	3067	3080	3088
Y	1118	1118	1126	1126	1126	1126	1126	1134	1134	1134
Fe	35.182	33.938	34.758	35.281	35.358	34.935	34.516	34.782	34.772	34.998
As	42.212	42.728	43.109	43.427	43.152	43.223	44.346	41.861	43.365	43.900
S	22.301	23.694	21.586	21.767	22.248	22.235	21.313	22.579	21.894	22.093
Sb	0.056	0.053	0.022	0.012	0.057	0.054	0.019	0.029	0.003	0.057
Ni	0.000	0.009	0.006	0.000	0.000	0.000	0.030	0.000	0.001	0.000
Au	0.125	0.123	0.076	0.060	0.044	0.147	0.031	0.070	0.060	0.023
Ag	0.031	0.038	0.008	0.035	0.029	0.027	0.056	0.041	0.035	0.000
Total	99.907	100.583	99.565	100.582	100.888	100.621	100.311	99.362	100.130	101.071
As%Aspy	29.806	29.726	30.741	30.652	30.251	30.406	31.551	29.614	30.707	30.803
Fe%Aspy	33.324	31.672	33.249	33.406	33.251	32.967	32.942	33.008	33.029	32.941
S%Aspy	36.798	38.521	35.971	35.903	36.447	36.552	35.435	37.327	36.229	36.225
AsForm	0.894	0.892	0.922	0.920	0.908	0.912	0.947	0.888	0.921	0.924
FeForm	1.000	0.950	0.998	1.002	0.998	0.989	0.988	0.990	0.991	0.988
SForm	1.104	1.156	1.079	1.077	1.093	1.097	1.063	1.120	1.087	1.087

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 56

VAR. / ID.	1605	1606	1607	1608	1609	1612	1613	1614	1615	1616
Lab No.	705	706	707	708	709	712	713	714	715	716
X	3096	3104	3112	3120	3128	3132	3124	3116	3108	3100
Y	1134	1134	1134	1134	1134	1142	1142	1142	1142	1142
Fe	35.329	35.059	35.257	35.515	34.309	34.264	34.623	35.037	35.131	35.063
As	42.756	42.466	43.439	43.481	43.808	43.739	43.310	43.378	42.860	42.829
S	22.346	22.179	22.321	22.100	21.447	20.779	21.801	22.310	22.309	22.473
Sb	0.036	0.041	0.041	0.000	0.000	0.000	0.000	0.047	0.021	0.088
Ni	0.008	0.000	0.002	0.000	0.003	0.000	0.013	0.000	0.020	0.020
Au	0.086	0.073	0.139	0.000	0.047	0.000	0.052	0.000	0.034	0.000
Ag	0.025	0.017	0.038	0.027	0.021	0.037	0.031	0.040	0.018	0.024
Total	100.586	99.835	101.237	101.123	99.635	98.819	99.830	100.812	100.393	100.497
As%Aspy	30.015	30.035	30.376	30.452	31.294	31.629	30.769	30.426	30.144	30.060
Fe%Aspy	33.269	33.263	33.073	33.366	32.877	33.238	32.996	32.966	33.145	33.013
S%Aspy	36.658	36.657	36.476	36.169	35.803	35.114	36.194	36.568	36.666	36.860
AsForm	0.900	0.901	0.911	0.914	0.939	0.949	0.923	0.913	0.904	0.902
FeForm	0.998	0.998	0.992	1.001	0.986	0.997	0.990	0.989	0.994	0.990
SForm	1.100	1.100	1.094	1.085	1.074	1.053	1.086	1.097	1.100	1.106

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP10) Part 57

VAR. / ID.	1617	1618	1619	1620	1621
Lab No.	717	718	719	720	721
X	3092	3084	3076	3068	3060
Y	1142	1142	1142	1142	1142
Fe	35.099	35.190	35.437	34.571	34.636
As	44.700	45.217	43.403	43.770	43.869
S	21.719	21.108	22.286	22.263	21.348
Sb	0.012	0.000	0.020	0.028	0.024
Ni	0.000	0.000	0.004	0.000	0.011
Au	0.029	0.000	0.136	0.000	0.037
Ag	0.062	0.001	0.044	0.033	0.025
Total	101.621	101.516	101.330	100.665	99.950
As%Aspy	31.347	31.899	30.326	30.778	31.273
Fe%Aspy	33.018	33.302	33.215	32.610	33.121
S%Aspy	35.592	34.798	36.389	36.583	35.563
AsForm	0.941	0.957	0.910	0.923	0.938
FeForm	0.991	0.999	0.997	0.978	0.994
SForm	1.068	1.044	1.092	1.097	1.067

TABLE 4.10

Microprobe Analyses: Cairngarroch Arsenopyrite (ASPl1) Part 1

VAR. / ID.	1068	1069	1071	1072	1075	1077	1079	1080	1082	1083
Lab No.	168	169	171	172	175	177	179	180	182	183
X	1294	1240	1215	1205	1182	1210	1266	1234	1278	1286
Y	9141	9141	9141	9141	9146	9146	9146	9146	9148	9148
Fe	34.783	35.517	35.020	33.750	35.101	35.374	34.349	35.185	35.021	34.610
As	42.564	42.894	43.122	43.621	43.748	42.630	43.882	43.571	43.654	43.560
S	20.885	22.898	22.449	22.062	22.490	22.607	22.117	18.646	21.160	22.048
Sb	0.012	0.058	0.000	0.009	0.019	0.000	0.020	0.000	0.015	0.031
Ni	0.000	0.000	0.019	0.007	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.060	0.115	0.071	0.066	0.000	0.052	0.000	0.000	0.068	0.000
Ag	0.035	0.027	0.021	0.033	0.034	0.012	0.032	0.033	0.021	0.046
Total	98.339	101.509	100.702	99.548	101.392	100.675	100.400	97.402	99.939	100.295
As%Aspy	30.825	29.757	30.234	31.044	30.502	29.824	30.973	32.433	31.152	30.771
Fe%Aspy	33.791	33.053	32.938	32.220	32.830	33.197	32.523	35.133	33.525	32.797
S%Aspy	35.345	37.122	36.782	36.691	36.644	36.959	36.480	32.434	35.287	36.396
AsForm	0.925	0.893	0.907	0.931	0.915	0.895	0.929	0.973	0.935	0.923
FeForm	1.014	0.992	0.988	0.967	0.985	0.996	0.976	1.054	1.006	0.984
SForm	1.060	1.114	1.104	1.101	1.099	1.109	1.094	0.973	1.059	1.092

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 2

VAR. / ID.	1084	1085	1086	1087	1088	1089	1090	1091	1092	1094
Lab No.	184	185	186	187	188	189	190	191	192	194
X	1294	1302	1307	1307	1299	1291	1283	1275	1245	1232
Y	9148	9148	9148	9156	9156	9156	9156	9156	9156	9156
Fe	35.198	35.232	34.446	34.775	34.679	34.829	35.238	34.985	35.012	34.856
As	44.432	44.561	44.002	44.201	43.483	44.691	44.488	44.482	43.371	42.338
S	21.623	21.635	20.740	21.223	21.466	21.755	21.818	22.265	22.257	20.455
Sb	0.008	0.016	0.000	0.000	0.000	0.013	0.021	0.017	0.000	0.008
Ni	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
Au	0.092	0.000	0.100	0.058	0.026	0.087	0.060	0.000	0.010	0.000
Ag	0.020	0.033	0.016	0.038	0.026	0.016	0.030	0.039	0.040	0.019
Total	101.373	101.477	99.304	100.295	99.681	101.391	101.655	101.788	100.690	97.676
As%Aspy	31.239	31.290	31.719	31.461	31.016	31.406	31.154	31.002	30.461	30.923
Fe%Aspy	33.197	33.186	33.309	33.204	33.182	32.832	33.102	32.709	32.987	34.151
S%Aspy	35.527	35.501	34.937	35.301	35.781	35.725	35.704	36.263	36.530	34.913
AsForm	0.937	0.939	0.952	0.944	0.931	0.942	0.935	0.930	0.914	0.928
FeForm	0.996	0.996	0.999	0.996	0.996	0.985	0.993	0.981	0.990	1.025
SForm	1.066	1.065	1.048	1.059	1.073	1.072	1.071	1.088	1.096	1.047

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 3

VAR. / ID.	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104
Lab No.	195	196	197	198	199	200	201	202	203	204
X	1224	1216	1175	1167	1159	1149	1160	1168	1178	1187
Y	9156	9156	9156	9156	9156	9166	9166	9166	9166	9166
Fe	35.635	35.649	35.505	34.328	34.582	34.426	35.273	35.040	35.589	35.368
As	42.709	43.029	43.160	43.869	44.419	43.835	44.101	44.789	44.160	44.231
S	22.257	22.509	22.549	22.953	21.654	22.428	21.904	21.419	21.163	21.722
Sb	0.043	0.078	0.054	0.065	0.000	0.000	0.029	0.067	0.044	0.035
Ni	0.000	0.000	0.019	0.000	0.000	0.014	0.000	0.000	0.023	0.000
Au	0.097	0.070	0.000	0.037	0.021	0.118	0.102	0.000	0.023	0.068
Ag	0.050	0.034	0.048	0.039	0.022	0.041	0.034	0.007	0.021	0.008
Total	100.791	101.369	101.335	101.291	100.698	100.862	101.443	101.322	101.023	101.432
As%Aspy	29.946	29.975	30.061	30.541	31.406	30.757	30.908	31.565	31.223	31.042
Fe%Aspy	33.517	33.314	33.174	32.059	32.800	32.403	33.162	33.127	33.755	33.297
S%Aspy	36.468	36.643	36.702	37.343	35.778	36.775	35.874	35.276	34.966	35.625
AsForm	0.899	0.899	0.902	0.916	0.942	0.923	0.927	0.947	0.937	0.931
FeForm	1.006	0.999	0.995	0.962	0.984	0.972	0.995	0.994	1.013	0.999
SForm	1.094	1.099	1.101	1.120	1.073	1.103	1.076	1.058	1.049	1.069

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 4

VAR. / ID.	1105	1107	1108	1109	1110	1111	1112	1113	1114	1118
Lab No.	205	207	208	209	210	211	212	213	214	218
X	1195	1213	1221	1230	1238	1245	1253	1261	1268	1294
Y	9166	9166	9166	9166	9166	9166	9166	9166	9166	9176
Fe	35.380	35.299	35.218	35.374	35.409	35.190	34.899	35.099	35.080	35.456
As	44.314	44.507	43.690	44.006	44.090	44.137	42.162	43.374	43.290	42.277
S	21.777	21.990	22.640	22.215	22.196	21.816	22.893	22.349	21.948	21.054
Sb	0.066	0.077	0.075	0.028	0.054	0.084	0.000	0.029	0.064	0.000
Ni	0.000	0.000	0.000	0.000	0.020	0.000	0.008	0.000	0.000	0.000
Au	0.047	0.047	0.060	0.063	0.084	0.116	0.123	0.000	0.000	0.121
Ag	0.026	0.034	0.026	0.038	0.036	0.053	0.037	0.015	0.030	0.023
Total	101.610	101.954	101.709	101.724	101.889	101.396	100.122	100.866	100.412	98.931
As%Aspy	31.045	31.051	30.356	30.679	30.709	30.983	29.575	30.393	30.551	30.393
Fe%Aspy	33.249	33.036	32.824	33.082	33.083	33.137	32.840	32.992	33.210	34.193
S%Aspy	35.652	35.851	36.759	36.192	36.127	35.787	37.527	36.596	36.196	35.370
AsForm	0.931	0.932	0.911	0.920	0.921	0.930	0.887	0.912	0.917	0.912
FeForm	0.998	0.991	0.985	0.993	0.993	0.994	0.985	0.990	0.996	1.026
SForm	1.070	1.076	1.103	1.086	1.084	1.074	1.126	1.098	1.086	1.061

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 5

VAR. / ID.	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128
Lab No.	219	220	221	222	223	224	225	226	227	228
X	1286	1278	1270	1262	1254	1229	1213	1205	1197	1189
Y	9176	9176	9176	9176	9176	9176	9176	9176	9176	9176
Fe	35.772	34.798	35.800	35.422	34.938	35.384	35.908	35.054	35.400	35.493
As	43.078	44.024	43.775	43.145	44.185	42.926	41.800	43.027	43.472	41.278
S	22.423	22.383	22.725	22.711	21.790	22.837	20.361	22.108	22.298	22.000
Sb	0.015	0.045	0.084	0.058	0.047	0.079	0.037	0.013	0.050	0.035
Ni	0.000	0.010	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.004
Au	0.000	0.081	0.015	0.021	0.045	0.047	0.000	0.021	0.107	0.042
Ag	0.030	0.012	0.028	0.033	0.015	0.029	0.010	0.037	0.033	0.027
Total	101.318	101.353	102.427	101.390	101.022	101.302	98.116	100.260	101.360	98.879
As%Aspy	30.021	30.767	30.194	30.003	31.109	29.842	30.382	30.353	30.366	29.408
Fe%Aspy	33.441	32.623	33.124	33.043	32.998	32.998	35.012	33.172	33.171	33.921
S%Aspy	36.517	36.555	36.629	36.907	35.851	37.100	34.584	36.445	36.398	36.627
AsForm	0.901	0.923	0.906	0.900	0.933	0.895	0.912	0.911	0.911	0.882
FeForm	1.003	0.979	0.994	0.991	0.990	0.990	1.051	0.995	0.995	1.018
SForm	1.095	1.097	1.099	1.107	1.076	1.113	1.038	1.093	1.092	1.099

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 6

VAR. / ID.	1129	1130	1131	1132	1134	1135	1136	1137	1138	1139
Lab No.	229	230	231	232	234	235	236	237	238	239
X	1181	1173	1165	1141	1145	1153	1161	1169	1177	1185
Y	9176	9176	9176	9176	9184	9184	9184	9184	9184	9184
Fe	35.392	34.922	35.817	35.128	35.276	34.811	35.150	35.373	35.610	35.289
As	42.935	42.658	41.673	43.417	42.355	42.061	42.451	42.959	41.472	42.382
S	21.899	22.549	22.477	21.442	21.792	22.423	22.118	22.083	22.052	22.383
Sb	0.059	0.049	0.050	0.030	0.019	0.036	0.064	0.055	0.017	0.035
Ni	0.000	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.065	0.065	0.042	0.000	0.107	0.000	0.000	0.042	0.000	0.042
Ag	0.038	0.052	0.031	0.025	0.021	0.020	0.043	0.035	0.040	0.045
Total	100.388	100.295	100.090	100.063	99.570	99.351	99.826	100.547	99.191	100.176
As%Aspy	30.306	29.980	29.282	30.856	30.110	29.789	30.031	30.234	29.452	29.826
Fe%Aspy	33.511	32.923	33.761	33.489	33.640	33.073	33.356	33.395	33.924	33.315
S%Aspy	36.122	37.033	36.908	35.610	36.202	37.112	36.564	36.319	36.597	36.811
AsForm	0.909	0.900	0.879	0.926	0.903	0.894	0.901	0.907	0.884	0.895
FeForm	1.005	0.988	1.013	1.005	1.009	0.992	1.001	1.002	1.018	0.999
SForm	1.084	1.111	1.107	1.068	1.086	1.113	1.097	1.090	1.098	1.104

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 7

VAR. / ID.	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149
Lab No.	240	241	242	243	244	245	246	247	248	249
X	1193	1201	1209	1217	1225	1233	1241	1249	1257	1265
Y	9184	9184	9184	9184	9184	9184	9184	9184	9184	9184
Fe	35.662	35.450	35.386	35.155	35.155	34.768	34.534	35.305	35.193	34.931
As	41.920	43.217	44.027	43.658	43.148	42.511	42.904	43.523	43.597	43.818
S	22.174	22.062	22.339	22.382	20.422	23.356	22.828	22.010	22.226	22.397
Sb	0.067	0.050	0.063	0.056	0.056	0.037	0.091	0.039	0.008	0.016
Ni	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016
Au	0.073	0.005	0.079	0.026	0.026	0.159	0.047	0.000	0.044	0.155
Ag	0.039	0.026	0.045	0.027	0.027	0.034	0.038	0.019	0.043	0.015
Total	99.948	100.810	101.939	101.304	98.834	100.865	100.442	100.896	101.111	101.348
As%Aspy	29.586	30.354	30.617	30.491	31.246	29.555	30.071	30.574	30.531	30.617
Fe%Aspy	33.763	33.400	33.010	32.936	34.150	32.425	32.469	33.269	33.061	32.742
S%Aspy	36.571	36.211	36.303	36.529	34.559	37.946	37.390	36.131	36.373	36.571
AsForm	0.888	0.911	0.919	0.915	0.938	0.887	0.902	0.917	0.916	0.919
FeForm	1.013	1.002	0.990	0.988	1.025	0.973	0.974	0.998	0.992	0.982
SForm	1.097	1.086	1.089	1.096	1.037	1.138	1.122	1.084	1.091	1.097

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 8

VAR. / ID.	1150	1151	1152	1153	1154	1156	1157	1158	1159	1160
Lab No.	250	251	252	253	255	256	257	258	259	260
X	1273	1281	1289	1297	1295	1287	1279	1271	1263	1254
Y	9184	9184	9184	9184	9193	9193	9193	9193	9193	9193
Fe	34.999	35.438	35.042	35.120	35.352	35.381	35.209	35.291	35.447	35.287
As	42.573	42.123	43.757	42.795	43.552	42.615	42.588	43.728	43.889	42.055
S	22.172	22.111	21.376	22.037	22.072	21.651	22.146	22.355	22.547	22.453
Sb	0.031	0.054	0.100	0.017	0.003	0.028	0.054	0.043	0.022	0.047
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000
Au	0.010	0.000	0.870	0.086	0.002	0.000	0.084	0.052	0.005	0.000
Ag	0.013	0.000	0.036	0.061	0.030	0.027	0.038	0.034	0.037	0.039
Total	99.798	99.726	101.181	100.116	101.011	99.702	100.119	101.503	101.956	99.881
As%Aspy	30.115	29.797	31.004	30.246	30.546	30.286	30.063	30.498	30.440	29.634
Fe%Aspy	33.211	33.628	33.307	33.297	33.261	33.731	33.340	33.018	32.980	33.355
S%Aspy	36.651	36.551	35.394	36.397	36.176	35.958	36.532	36.435	36.544	36.972
AsForm	0.904	0.894	0.930	0.908	0.916	0.909	0.902	0.915	0.913	0.889
FeForm	0.996	1.009	0.999	0.999	0.998	1.012	1.000	0.991	0.989	1.001
SForm	1.100	1.097	1.062	1.092	1.085	1.079	1.096	1.093	1.096	1.109

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 9

VAR. / ID.	1161	1162	1163	1165	1166	1167	1168	1169	1170	1171
Lab No.	261	262	263	265	266	267	268	269	270	271
X	1246	1238	1230	1214	1206	1198	1190	1182	1174	1166
Y	9193	9193	9193	9193	9193	9193	9193	9193	9193	9193
Fe	35.477	35.203	35.340	35.494	35.010	34.994	35.520	35.749	34.957	35.483
As	42.435	43.766	43.373	41.088	42.256	42.561	44.143	44.026	43.403	43.041
S	22.101	22.085	21.769	22.267	21.917	21.949	22.050	22.417	22.321	21.947
Sb	0.024	0.036	0.021	0.058	0.053	0.052	0.057	0.036	0.077	0.060
Ni	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.000	0.000
Au	0.015	0.005	0.052	0.005	0.094	0.026	0.023	0.102	0.094	0.000
Ag	0.046	0.031	0.000	0.031	0.030	0.033	0.028	0.030	0.043	0.012
Total	100.116	101.126	100.555	98.943	99.360	99.615	101.821	102.378	100.895	100.543
As%Aspy	29.937	30.682	30.612	29.183	30.070	30.215	30.787	30.474	30.443	30.316
Fe%Aspy	33.574	33.105	33.460	33.817	33.420	33.326	33.232	33.194	32.891	33.527
S%Aspy	36.436	36.181	35.905	36.958	36.447	36.413	35.937	36.260	36.586	36.125
AsForm	0.898	0.920	0.919	0.876	0.902	0.906	0.924	0.914	0.913	0.910
FeForm	1.007	0.993	1.004	1.015	1.003	1.000	0.997	0.996	0.987	1.006
SForm	1.093	1.085	1.077	1.109	1.093	1.092	1.078	1.088	1.098	1.084

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 10

VAR. / ID.	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181
Lab No.	272	273	274	275	276	277	278	278	280	281
X	1158	1150	1142	1134	1145	1153	1162	1171	1180	1188
Y	9193	9193	9193	9193	9203	9203	9203	9203	9203	9203
Fe	35.360	34.854	35.186	34.688	35.370	34.454	34.826	35.208	34.927	35.142
As	42.115	41.681	41.844	41.536	42.313	44.719	43.896	43.729	42.192	44.283
S	22.405	22.519	21.823	22.286	22.147	21.206	22.077	21.727	21.531	22.169
Sb	0.029	0.038	0.043	0.014	0.022	0.015	0.038	0.012	0.000	0.024
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.070	0.005	0.010	0.002	0.021	0.071	0.018	0.039	0.043	0.047
Ag	0.019	0.021	0.017	0.026	0.040	0.045	0.011	0.021	0.021	0.016
Total	99.998	99.118	98.923	98.552	99.913	100.510	100.866	100.736	98.714	101.681
As%Aspy	29.666	29.540	29.871	29.632	29.890	31.815	30.860	30.845	30.269	30.908
Fe%Aspy	33.412	33.136	33.694	33.196	33.516	32.882	32.843	33.315	33.613	32.903
S%Aspy	36.881	37.296	36.405	37.153	36.559	35.256	36.270	35.814	36.096	36.159
AsForm	0.890	0.886	0.896	0.889	0.897	0.955	0.926	0.925	0.908	0.927
FeForm	1.003	0.994	1.011	0.996	1.006	0.987	0.985	0.999	1.008	0.987
SForm	1.106	1.119	1.092	1.115	1.097	1.058	1.088	1.074	1.083	1.085

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 11

VAR. / ID.	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191
Lab No.	282	283	284	285	286	287	288	289	290	291
X	1219	1227	1234	1242	1250	1258	1266	1274	1282	1290
Y	9203	9203	9203	9203	9203	9203	9203	9203	9203	9203
Fe	35.112	34.790	34.457	33.912	35.122	34.800	35.159	34.341	34.833	35.807
As	44.064	43.685	44.350	43.737	44.042	43.672	43.840	44.035	45.021	43.796
S	22.067	21.845	22.043	22.235	21.989	22.135	21.894	21.904	21.558	22.239
Sb	0.060	0.065	0.045	0.029	0.028	0.004	0.033	0.076	0.000	0.012
Ni	0.000	0.000	0.011	0.006	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.044	0.000	0.039	0.079	0.008	0.205	0.000	0.031	0.005	0.000
Ag	0.047	0.052	0.045	0.006	0.026	0.017	0.026	0.040	0.044	0.035
Total	101.394	100.437	100.990	100.004	101.215	100.833	100.952	100.427	101.461	101.889
As%Aspy	30.853	30.877	31.195	30.965	30.889	30.717	30.829	31.148	31.670	30.450
Fe%Aspy	32.979	32.986	32.512	32.207	33.044	32.835	33.166	32.585	32.869	33.396
S%Aspy	36.107	36.082	36.232	36.786	36.040	36.383	35.978	36.206	35.438	36.132
AsForm	0.926	0.926	0.936	0.929	0.927	0.922	0.925	0.934	0.950	0.914
FeForm	0.989	0.990	0.975	0.966	0.991	0.985	0.995	0.978	0.986	1.002
SForm	1.083	1.082	1.087	1.104	1.081	1.092	1.079	1.086	1.063	1.084

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 12

VAR. / ID.	1192	1195	1196	1197	1198	1199	1200	1201	1202	1203
Lab No.	292	295	296	297	298	299	300	301	302	303
X	1296	1277	1269	1261	1253	1245	1237	1230	1212	1204
Y	9203	9212	9212	9212	9212	9212	9212	9212	9212	9212
Fe	34.873	35.365	34.979	35.581	35.005	35.514	35.397	35.286	34.882	35.139
As	42.251	43.696	43.529	41.864	42.327	43.759	43.872	43.485	42.394	43.120
S	21.275	21.857	22.500	22.804	22.545	22.284	22.173	22.153	22.198	22.595
Sb	0.003	0.034	0.024	0.018	0.049	0.041	0.038	0.060	0.024	0.010
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.029	0.000	0.000
Au	0.000	0.029	0.136	0.091	0.042	0.000	0.044	0.068	0.023	0.063
Ag	0.024	0.022	0.039	0.022	0.049	0.026	0.027	0.035	0.034	0.045
Total	98.426	101.003	101.207	100.380	100.017	101.624	101.551	101.116	99.555	100.972
As%Aspy	30.448	30.715	30.413	29.287	29.797	30.490	30.631	30.470	30.044	30.128
Fe%Aspy	33.711	33.347	32.784	33.391	33.057	33.195	33.152	33.168	33.161	32.935
S%Aspy	35.828	35.904	36.737	37.280	37.089	36.285	36.176	36.275	36.762	36.893
AsForm	0.914	0.922	0.913	0.879	0.894	0.915	0.919	0.914	0.901	0.904
FeForm	1.011	1.000	0.984	1.002	0.992	0.996	0.995	0.995	0.995	0.988
SForm	1.075	1.077	1.102	1.118	1.113	1.089	1.085	1.088	1.103	1.107

TABLE 4.11

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Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 13

VAR. / ID.	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214
Lab No.	305	306	307	308	309	310	311	312	313	314
X	1188	1180	1171	1164	1156	1148	1140	1135	1135	1149
Y	9212	9212	9212	9212	9212	9212	9212	9212	9222	9222
Fe	35.284	35.558	34.431	34.917	35.015	35.211	35.728	34.987	34.923	35.889
As	44.626	42.464	43.424	44.164	44.840	43.248	42.916	42.457	43.711	43.461
S	20.972	20.940	22.225	21.763	21.555	22.390	22.202	22.861	22.465	22.473
Sb	0.042	0.000	0.042	0.020	0.034	0.071	0.053	0.040	0.000	0.054
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
Au	0.050	0.000	0.081	0.000	0.021	0.013	0.000	0.052	0.023	0.055
Ag	0.051	0.033	0.071	0.044	0.025	0.041	0.038	0.025	0.024	0.036
Total	101.025	98.995	100.274	100.908	101.490	100.974	100.937	100.422	101.146	101.976
As%Aspy	31.639	30.523	30.655	31.122	31.527	30.268	30.056	29.716	30.550	30.137
Fe%Aspy	33.557	34.286	32.606	33.008	33.025	33.058	33.566	32.849	32.742	33.384
S%Aspy	34.746	35.174	36.665	35.839	35.416	36.619	36.336	37.391	36.691	36.417
AsForm	0.949	0.916	0.920	0.934	0.946	0.908	0.902	0.892	0.917	0.904
FeForm	1.007	1.029	0.978	0.990	0.991	0.992	1.007	0.986	0.982	1.002
SForm	1.042	1.055	1.100	1.075	1.063	1.099	1.090	1.122	1.101	1.092

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 14

VAR. / ID.	1215	1216	1217	1218	1219	1220	1221	1222	1225	1226
Lab No.	315	316	317	318	319	320	321	322	325	326
X	1157	1164	1172	1180	1188	1196	1206	1214	1270	1278
Y	9222	9222	9222	9222	9222	9222	9222	9222	9223	9223
Fe	35.696	35.444	35.100	35.324	35.366	35.538	35.880	35.618	35.033	34.938
As	43.386	42.243	43.864	43.102	43.827	43.813	44.150	43.398	43.365	44.419
S	22.466	22.581	21.587	21.829	22.110	22.230	22.462	22.866	22.239	21.681
Sb	0.076	0.073	0.015	0.037	0.055	0.037	0.065	0.038	0.014	0.022
Ni	0.023	0.000	0.000	0.000	0.000	0.018	0.000	0.028	0.005	0.000
Au	0.094	0.198	0.031	0.000	0.071	0.005	0.068	0.081	0.034	0.182
Ag	0.021	0.034	0.031	0.031	0.050	0.019	0.035	0.032	0.042	0.029
Total	101.762	100.573	100.628	100.323	101.479	101.660	102.660	102.061	100.732	101.271
As%Aspy	30.151	29.602	31.013	30.451	30.641	30.533	30.477	29.987	30.456	31.269
Fe%Aspy	33.277	33.319	33.290	33.478	33.168	33.222	33.225	33.014	33.005	32.993
S%Aspy	36.485	36.978	35.667	36.040	36.123	36.202	36.235	36.922	36.499	35.666
AsForm	0.905	0.888	0.930	0.914	0.919	0.916	0.914	0.900	0.914	0.938
FeForm	0.998	1.000	0.999	1.004	0.995	0.997	0.997	0.990	0.990	0.990
SForm	1.094	1.109	1.070	1.081	1.084	1.086	1.087	1.108	1.095	1.070

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 15

VAR. / ID.	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236
Lab No.	327	328	329	330	331	332	333	334	335	336
X	1286	1291	1278	1270	1262	1254	1245	1237	1229	1221
Y	9223	9223	9233	9233	9233	9233	9233	9233	9233	9233
Fe	35.317	34.820	35.140	35.265	35.665	34.732	34.885	35.455	35.100	35.122
As	44.324	43.711	44.130	44.213	44.172	42.567	44.436	44.033	43.880	44.075
S	21.611	22.834	22.306	21.855	22.208	21.734	21.913	21.924	22.181	22.219
Sb	0.003	0.000	0.016	0.047	0.000	0.033	0.032	0.076	0.034	0.072
Ni	0.034	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.013	0.008	0.000	0.021	0.050	0.089	0.031	0.000	0.000	0.063
Ag	0.036	0.046	0.018	0.014	0.058	0.025	0.038	0.022	0.061	0.039
Total	101.338	101.419	101.610	101.416	102.153	99.180	101.335	101.510	101.256	101.590
As%Aspy	31.153	30.394	30.770	30.996	30.681	30.401	31.184	30.816	30.715	30.777
Fe%Aspy	33.298	32.479	32.868	33.165	33.231	33.275	32.840	33.285	32.958	32.899
S%Aspy	35.495	37.103	36.346	35.805	36.047	36.273	35.936	35.855	36.283	36.257
AsForm	0.935	0.912	0.923	0.930	0.920	0.912	0.936	0.925	0.922	0.923
FeForm	0.999	0.975	0.986	0.995	0.997	0.998	0.985	0.999	0.989	0.987
SForm	1.065	1.113	1.090	1.074	1.081	1.088	1.078	1.076	1.089	1.088

Microprobe Analyses: Cairnngarroch Arsenopyrite (ASP11) Part 17

VAR. / ID.	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257
Lab No.	348	349	350	351	352	353	354	355	356	357
X	1130	1144	1152	1160	1168	1176	1184	1192	1200	1208
Y	9244	9244	9244	9244	9244	9244	9244	9244	9244	9244
Fe	35.051	35.158	35.278	35.464	35.703	35.205	35.324	35.771	34.308	35.430
As	43.273	44.315	44.778	42.508	41.875	43.799	43.658	41.258	42.403	43.630
S	22.856	21.443	21.729	22.012	22.014	22.142	22.443	22.224	22.667	22.349
Sb	0.009	0.017	0.024	0.026	0.026	0.019	0.059	0.054	0.075	0.042
Ni	0.000	0.007	0.013	0.000	0.000	0.000	0.036	0.019	0.000	0.000
Au	0.154	0.087	0.000	0.078	0.000	0.000	0.068	0.065	0.023	0.000
Ag	0.033	0.037	0.035	0.042	0.022	0.007	0.026	0.055	0.026	0.040
Total	101.376	101.064	101.857	100.130	99.640	101.172	101.614	99.446	99.502	101.491
As%Aspy	30.094	31.281	31.327	30.021	29.647	30.675	30.399	29.199	29.973	30.417
Fe%Aspy	32.700	33.292	33.109	33.598	33.909	33.075	32.994	33.960	32.532	33.135
S%Aspy	37.145	35.372	35.525	36.328	36.422	36.238	36.519	36.755	37.443	36.411
AsForm	0.903	0.938	0.940	0.901	0.890	0.920	0.912	0.876	0.899	0.913
FeForm	0.981	0.999	0.993	1.008	1.017	0.992	0.990	1.019	0.976	0.994
SForm	1.114	1.061	1.066	1.090	1.093	1.087	1.096	1.103	1.123	1.092

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 18

VAR. / ID.	1258	1259	1260	1261	1262	1263	1264	1265	1267	1268
Lab No.	358	359	360	361	362	363	364	365	367	368
X	1216	1224	1232	1240	1248	1256	1264	1274	1275	1267
Y	9244	9244	9244	9244	9244	9244	9244	9244	9254	9254
Fe	34.715	35.070	35.007	35.676	34.822	35.030	35.258	35.054	34.869	35.023
As	42.179	43.009	43.795	43.532	42.754	43.133	43.971	43.027	43.545	42.638
S	22.014	21.445	21.748	22.259	22.211	22.271	22.081	21.414	21.698	22.089
Sb	0.000	0.033	0.027	0.000	0.020	0.019	0.002	0.035	0.015	0.061
Ni	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.052	0.113	0.000	0.010	0.068	0.023	0.102	0.131	0.029	0.008
Ag	0.009	0.010	0.026	0.045	0.019	0.048	0.036	0.027	0.047	0.018
Total	98.982	99.680	100.603	101.522	99.894	100.524	101.450	99.688	100.203	99.837
As%Aspy	30.078	30.669	30.926	30.348	30.232	30.328	30.763	30.694	30.866	30.177
Fe%Aspy	33.208	33.546	33.161	33.364	33.030	33.041	33.090	33.544	33.155	33.251
S%Aspy	36.684	35.735	35.888	36.263	36.702	36.594	36.101	35.698	35.941	36.534
AsForm	0.902	0.920	0.928	0.910	0.907	0.910	0.923	0.921	0.926	0.905
FeForm	0.996	1.007	0.995	1.001	0.991	0.991	0.993	1.006	0.995	0.998
SForm	1.100	1.072	1.077	1.088	1.101	1.098	1.083	1.071	1.078	1.096

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 19

VAR. / ID.	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278
Lab No.	369	370	371	372	373	374	375	376	377	378
X	1259	1250	1242	1234	1227	1218	1210	1202	1194	1186
Y	9254	9254	9254	9254	9254	9254	9250	9254	9254	9254
Fe	34.625	35.184	34.908	35.174	35.823	34.901	35.322	35.383	35.502	35.141
As	42.723	43.992	44.440	43.147	43.624	44.657	43.976	43.469	43.983	43.408
S	21.846	21.793	21.478	22.512	21.812	21.679	21.807	22.414	22.156	22.255
Sb	0.016	0.047	0.000	0.000	0.000	0.000	0.037	0.068	0.058	0.049
Ni	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.003	0.000	0.000
Au	0.060	0.047	0.029	0.099	0.015	0.021	0.000	0.034	0.008	0.000
Ag	0.032	0.030	0.036	0.038	0.049	0.024	0.019	0.041	0.057	0.046
Total	99.302	101.093	100.891	100.970	101.323	101.291	101.161	101.412	101.764	100.899
As%Aspy	30.456	30.940	31.407	30.172	30.573	31.410	30.892	30.313	30.659	30.437
Fe%Aspy	33.111	33.195	33.095	32.995	33.678	32.931	33.285	33.100	33.197	33.054
S%Aspy	36.393	35.818	35.472	36.788	35.722	35.634	35.798	36.526	36.090	36.466
AsForm	0.914	0.928	0.942	0.905	0.917	0.942	0.927	0.910	0.920	0.913
FeForm	0.993	0.996	0.993	0.990	1.010	0.988	0.999	0.993	0.996	0.992
SForm	1.092	1.074	1.064	1.104	1.072	1.069	1.074	1.096	1.083	1.094

TABLE 4.11

Microprobe Analyses: Cairngaroch Arsenopyrite (ASP11) Part 20

VAR. / ID.	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288
Lab No.	379	380	381	382	383	384	385	386	387	388
X	1177	1168	1160	1152	1143	1134	1133	1145	1153	1161
Y	9254	9254	9254	9254	9254	9254	9264	9264	9264	9264
Fe	34.999	35.128	35.148	35.499	34.174	34.893	34.918	34.692	34.725	34.824
As	42.896	44.119	44.652	42.466	43.321	43.342	42.418	43.499	44.422	43.183
S	21.959	22.037	21.823	21.735	21.876	22.365	21.633	21.700	21.653	21.763
Sb	0.034	0.016	0.049	0.053	0.030	0.015	0.015	0.020	0.006	0.018
Ni	0.006	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.004	0.000
Au	0.000	0.087	0.063	0.002	0.031	0.000	0.081	0.044	0.053	0.029
Ag	0.031	0.028	0.016	0.065	0.033	0.030	0.035	0.046	0.027	0.029
Total	99.925	101.415	101.751	99.820	99.465	100.647	99.100	100.001	100.890	99.846
As%Aspy	30.377	30.895	31.255	30.127	30.869	30.427	30.325	30.892	31.360	30.670
Fe%Aspy	33.248	32.999	33.003	33.784	32.666	32.860	33.487	33.050	32.885	33.179
S%Aspy	36.340	36.062	35.696	36.034	36.427	36.690	36.141	36.014	35.722	36.121
AsForm	0.911	0.927	0.938	0.904	0.926	0.913	0.910	0.927	0.941	0.920
FeForm	0.998	0.990	0.990	1.014	0.980	0.986	1.005	0.992	0.987	0.996
SForm	1.090	1.082	1.071	1.081	1.093	1.101	1.084	1.080	1.072	1.084

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 21

VAR. / ID.	1289	1290	1291	1293	1294	1295	1296	1297	1298	1299
Lab No.	389	390	391	393	394	395	396	397	398	399
X	1169	1177	1185	1199	1207	1215	1223	1230	1238	1245
Y	9264	9264	9264	9264	9264	9264	9264	9264	9264	9264
Fe	35.117	34.972	35.431	34.937	35.034	35.227	34.854	35.212	35.466	35.030
As	42.649	43.101	44.136	43.659	44.834	44.081	44.080	43.975	43.880	43.398
S	21.905	21.888	21.944	21.889	21.560	22.225	21.456	22.004	21.838	22.190
Sb	0.012	0.006	0.006	0.068	0.026	0.028	0.005	0.021	0.034	0.058
Ni	0.000	0.000	0.007	0.000	0.004	0.000	0.000	0.000	0.000	0.000
Au	0.063	0.050	0.068	0.066	0.068	0.071	0.103	0.089	0.050	0.023
Ag	0.038	0.033	0.039	0.041	0.042	0.042	0.024	0.036	0.036	0.039
Total	99.784	100.050	101.631	100.660	101.568	101.674	100.522	101.337	101.304	100.738
As%Aspy	30.247	30.523	30.862	30.795	31.509	30.751	31.255	30.816	30.781	30.494
Fe%Aspy	33.409	33.222	33.235	33.057	33.029	32.966	33.152	33.100	33.374	33.019
S%Aspy	36.303	36.222	35.858	36.080	35.409	36.232	35.552	36.033	35.799	36.437
AsForm	0.908	0.916	0.926	0.924	0.945	0.923	0.938	0.925	0.924	0.915
FeForm	1.002	0.997	0.997	0.992	0.991	0.989	0.995	0.993	1.001	0.991
SForm	1.089	1.087	1.076	1.082	1.062	1.087	1.067	1.081	1.074	1.093

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 22

VAR. / ID.	1300	1301	1302	1303	1306	1307	1308	1309	1310	1311
Lab No.	400	401	402	403	406	407	408	409	410	411
X	1253	1261	1268	1276	1272	1264	1256	1248	1240	1232
Y	9264	9264	9264	9264	9273	9273	9273	9273	9273	9273
Fe	35.286	35.157	34.666	34.530	35.044	35.155	34.487	35.286	34.202	35.074
As	43.476	44.430	44.066	43.504	42.991	43.161	43.926	43.646	43.886	43.573
S	21.558	21.748	21.746	20.529	21.525	22.136	22.041	22.030	22.184	21.638
Sb	0.008	0.035	0.054	0.030	0.002	0.026	0.009	0.039	0.006	0.050
Ni	0.000	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.000	0.000	0.145	0.010	0.000	0.000	0.045	0.037	0.005	0.013
Ag	0.020	0.024	0.022	0.000	0.039	0.024	0.019	0.046	0.025	0.033
Total	100.348	101.434	100.699	98.603	99.601	100.502	100.527	101.084	100.308	100.381
As%Aspy	30.789	31.178	31.144	31.566	30.636	30.378	30.992	30.622	30.986	30.849
Fe%Aspy	33.521	33.095	32.867	33.609	33.499	33.191	32.641	33.210	32.394	33.311
S%Aspy	35.677	35.664	35.916	34.809	35.845	36.408	36.341	36.119	36.603	35.799
AsForm	0.924	0.935	0.934	0.947	0.919	0.911	0.930	0.919	0.930	0.926
FeForm	1.006	0.993	0.986	1.008	1.005	0.996	0.979	0.996	0.972	0.999
SForm	1.070	1.070	1.077	1.044	1.075	1.092	1.090	1.084	1.098	1.074

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 23

VAR. / ID.	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321
Lab No.	412	413	414	415	416	417	418	419	420	421
X	1224	1215	1207	1199	1191	1183	1175	1166	1158	1150
Y	9273	9273	9273	9273	9273	9273	9273	9273	9273	9273
Fe	35.258	35.287	35.215	35.202	34.632	34.817	35.073	34.785	35.307	34.914
As	44.556	44.649	44.093	43.414	44.520	44.510	43.949	44.503	44.823	43.831
S	21.916	21.793	21.520	22.058	22.065	21.481	21.823	22.106	21.653	21.468
Sb	0.046	0.025	0.031	0.017	0.038	0.038	0.065	0.001	0.025	0.041
Ni	0.008	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000
Au	0.108	0.060	0.045	0.000	0.134	0.084	0.137	0.000	0.000	0.084
Ag	0.034	0.027	0.041	0.029	0.051	0.045	0.045	0.041	0.049	0.049
Total	101.926	101.841	100.945	100.720	101.440	100.983	101.092	101.436	101.857	100.387
As%Aspy	31.121	31.230	31.120	30.528	31.209	31.454	30.924	31.153	31.381	31.102
Fe%Aspy	33.035	33.109	33.341	33.205	32.567	33.005	33.105	32.665	33.159	33.234
S%Aspy	35.772	35.621	35.493	36.246	36.146	35.473	35.884	36.162	35.426	35.599
AsForm	0.934	0.937	0.934	0.916	0.936	0.944	0.928	0.935	0.942	0.933
FeForm	0.991	0.993	1.000	0.996	0.977	0.990	0.993	0.980	0.995	0.997
SForm	1.073	1.069	1.065	1.087	1.084	1.064	1.077	1.085	1.063	1.068

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 24

VAR. / ID.	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331
Lab No.	422	423	424	425	426	427	428	429	430	431
X	1142	1134	1128	1126	1142	1150	1158	1166	1174	1182
Y	9273	9273	9273	9283	9283	9283	9283	9283	9283	9283
Fe	34.630	35.004	34.833	34.830	34.937	34.863	35.149	34.570	35.163	34.197
As	44.092	44.484	43.105	42.489	43.755	44.761	44.336	43.929	43.886	44.506
S	21.786	21.576	23.266	23.366	21.443	21.674	21.267	21.391	21.453	21.435
Sb	0.017	0.000	0.018	0.045	0.000	0.028	0.033	0.017	0.027	0.022
Ni	0.000	0.020	0.000	0.000	0.000	0.001	0.014	0.000	0.000	0.000
Au	0.108	0.018	0.026	0.133	0.000	0.097	0.000	0.063	0.071	0.108
Ag	0.041	0.035	0.016	0.042	0.029	0.011	0.040	0.044	0.033	0.028
Total	100.674	101.137	101.264	100.905	100.164	101.435	100.839	100.014	100.633	100.296
As%Aspy	31.152	31.345	29.886	29.522	31.087	31.469	31.388	31.298	31.069	31.667
Fe%Aspy	32.821	33.087	32.397	32.464	33.297	32.879	33.381	33.040	33.393	32.640
S%Aspy	35.970	35.528	37.696	37.939	35.602	35.608	35.184	35.615	35.491	35.640
AsForm	0.935	0.940	0.897	0.886	0.933	0.944	0.942	0.939	0.932	0.950
FeForm	0.985	0.993	0.972	0.974	0.999	0.987	1.002	0.991	1.002	0.979
SForm	1.079	1.066	1.131	1.138	1.068	1.068	1.056	1.069	1.065	1.069

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 25

VAR. / ID.	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341
Lab No.	432	433	434	435	436	437	438	439	440	441
X	1190	1198	1207	1218	1232	1172	1162	1152	1143	1135
Y	9283	9283	9283	9283	9283	9293	9293	9293	9293	9293
Fe	34.844	35.196	34.909	35.130	35.075	34.976	35.953	35.473	34.450	35.008
As	44.163	43.743	44.045	43.594	42.488	43.127	43.438	43.932	43.854	42.839
S	21.671	22.180	22.060	22.090	22.463	22.155	22.079	22.171	21.572	21.487
Sb	0.000	0.080	0.006	0.000	0.000	0.008	0.056	0.033	0.026	0.024
Ni	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.095	0.000	0.050	0.042	0.031	0.105	0.102	0.000	0.000	0.031
Ag	0.043	0.034	0.044	0.033	0.023	0.051	0.032	0.019	0.037	0.060
Total	100.816	101.247	101.114	100.889	100.080	100.422	101.660	101.628	99.939	99.449
As%Aspy	31.186	30.615	30.913	30.618	29.908	30.393	30.300	30.644	31.208	30.582
Fe%Aspy	33.007	33.044	32.867	33.098	33.121	33.065	33.642	33.193	32.887	33.525
S%Aspy	35.761	36.277	36.182	36.256	36.951	36.486	35.991	36.140	35.875	35.845
AsForm	0.936	0.919	0.928	0.919	0.897	0.912	0.909	0.919	0.936	0.918
FeForm	0.990	0.991	0.986	0.993	0.994	0.992	1.009	0.996	0.987	1.006
SForm	1.073	1.088	1.086	1.088	1.109	1.095	1.080	1.084	1.076	1.075

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP11) Part 26

VAR. / ID.	1342	1343	1344	1345
Lab No.	442	443	444	445
X	1127	1132	1139	1122
Y	9293	9301	9301	9303
Fe	34.109	33.901	34.111	34.179
As	43.041	43.736	42.775	41.239
S	21.988	22.166	21.538	22.849
Sb	0.005	0.013	0.027	0.021
Ni	0.000	0.000	0.007	0.000
Au	0.000	0.087	0.039	0.062
Ag	0.044	0.028	0.063	0.048
Total	99.187	99.931	98.560	98.398
As%Aspy	30.697	31.003	30.785	29.340
Fe%Aspy	32.633	32.236	32.932	32.621
S%Aspy	36.646	36.718	36.223	37.989
AsForm	0.921	0.930	0.924	0.880
FeForm	0.979	0.967	0.988	0.979
SForm	1.099	1.102	1.087	1.140

TABLE 4.11

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP12) Part 1

VAR. / ID.	1349	1350	1351	1352	1353	1354	1355	1356	1359	1360
Lab No.	449	450	451	452	453	454	455	456	459	460
X	690	695	700	700	695	690	685	680	678	683
Y	368	368	368	378	374	374	374	374	381	381
Fe	34.278	33.515	34.230	34.719	34.582	35.750	34.925	35.026	34.188	35.026
As	42.700	43.785	45.008	43.892	43.523	42.874	43.392	43.415	42.805	43.659
S	20.980	20.613	19.533	21.715	21.616	22.245	22.688	22.310	21.834	22.035
Sb	0.026	0.017	0.003	0.000	0.018	0.023	0.000	0.003	0.003	0.003
Ni	0.000	0.000	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.045	0.042	0.010	0.047	0.000	0.039	0.113	0.000	0.000	0.094
Ag	0.034	0.051	0.025	0.012	0.066	0.017	0.029	0.020	0.030	0.025
Total	98.063	98.023	98.909	100.385	99.805	100.948	101.147	100.774	98.860	100.842
As%Aspy	30.994	31.966	32.919	31.077	30.981	30.012	30.275	30.456	30.638	30.704
Fe%Aspy	33.377	32.822	33.585	32.976	33.022	33.570	32.688	32.960	32.826	33.044
S%Aspy	35.587	35.167	33.386	35.929	35.957	36.389	36.992	36.573	36.520	36.214
AsForm	0.930	0.959	0.988	0.932	0.929	0.900	0.908	0.914	0.919	0.921
FeForm	1.001	0.985	1.008	0.989	0.991	1.007	0.981	0.989	0.985	0.991
SForm	1.068	1.055	1.002	1.078	1.079	1.092	1.110	1.097	1.096	1.086

TABLE 4.12

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP12) Part 2

VAR. / ID.	1361	1362	1363	1364	1365	1366	1367	1368	1369	1372
Lab No.	461	462	463	464	465	466	467	468	469	472
X	688	693	698	703	707	711	697	692	687	675
Y	381	381	381	381	381	387	387	387	387	392
Fe	34.842	35.261	34.857	35.045	34.731	34.850	34.777	34.801	34.832	35.577
As	43.534	43.417	43.313	44.193	44.174	44.624	44.407	43.396	44.017	43.909
S	21.917	22.129	22.100	21.436	21.681	21.434	21.340	22.286	22.537	22.102
Sb	0.000	0.012	0.000	0.055	0.001	0.040	0.016	0.000	0.004	0.000
Ni	0.000	0.000	0.020	0.010	0.000	0.000	0.011	0.015	0.000	0.000
Au	0.000	0.115	0.000	0.066	0.023	0.000	0.066	0.063	0.129	0.100
Ag	0.027	0.058	0.040	0.016	0.031	0.000	0.051	0.022	0.029	0.023
Total	100.320	100.992	100.330	100.821	100.641	100.948	100.668	100.583	101.548	101.711
As%Aspy	30.764	30.463	30.552	31.258	31.227	31.539	31.492	30.514	30.678	30.633
Fe%Aspy	33.029	33.188	32.982	33.252	32.935	33.042	33.083	32.826	32.566	33.295
S%Aspy	36.194	36.284	36.429	35.431	35.816	35.402	35.365	36.619	36.706	36.034
AsForm	0.923	0.914	0.917	0.938	0.937	0.946	0.945	0.915	0.920	0.919
FeForm	0.991	0.996	0.990	0.998	0.988	0.991	0.993	0.985	0.977	0.999
SForm	1.086	1.089	1.093	1.063	1.074	1.062	1.061	1.099	1.101	1.081

TABLE 4.12

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP12) Part 3

VAR. / ID.	1373	1374	1375	1376	1377	1378	1379	1380	1393	1394
Lab No.	473	474	475	476	477	478	479	480	493	494
X	680	685	690	695	700	705	710	715	667	672
Y	392	392	392	392	392	392	392	392	403	403
Fe	35.205	34.941	34.262	34.683	34.467	34.923	34.218	34.953	34.812	35.036
As	44.424	42.433	42.982	43.898	43.880	42.906	44.342	44.067	43.841	43.869
S	21.778	21.318	21.565	20.471	20.737	21.426	21.655	21.880	22.381	21.946
Sb	0.033	0.044	0.012	0.009	0.000	0.000	0.000	0.001	0.040	0.019
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.026	0.000	0.000
Au	0.008	0.050	0.023	0.092	0.008	0.097	0.111	0.002	0.042	0.039
Ag	0.046	0.022	0.019	0.018	0.018	0.041	0.015	0.030	0.021	0.038
Total	101.494	98.808	98.863	99.171	99.110	99.393	100.352	100.959	101.137	100.947
As%Aspy	31.153	30.487	30.841	31.738	31.662	30.672	31.467	31.002	30.680	30.849
Fe%Aspy	33.118	33.676	32.978	33.638	33.361	33.489	32.574	32.987	32.680	33.050
S%Aspy	35.689	35.793	36.160	34.586	34.966	35.793	35.912	35.074	36.601	36.064
AsForm	0.935	0.915	0.925	0.952	0.950	0.920	0.944	0.930	0.920	0.926
FeForm	0.994	1.010	0.989	1.009	1.001	1.005	0.977	0.990	0.980	0.992
SForm	1.071	1.074	1.085	1.038	1.049	1.074	1.077	1.079	1.098	1.082

TABLE 4.12

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Microprobe Analyses: Cairngarroch Arsenopyrite (ASP12) Part 4

VAR. / ID.	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404
Lab No.	495	496	497	498	1399	500	501	502	503	504
X	677	683	689	694	699	704	709	714	720	706
Y	403	403	403	403	403	403	403	403	403	411
Fe	35.319	34.979	35.199	35.119	35.574	35.121	35.315	34.709	34.662	34.983
As	44.282	44.676	43.952	43.966	44.170	43.596	41.946	42.975	44.193	41.795
S	21.712	22.089	21.928	21.992	21.871	21.462	22.063	22.664	22.080	21.792
Sb	0.026	0.000	0.013	0.046	0.022	0.016	0.000	0.000	0.000	0.022
Ni	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.045	0.066	0.108	0.129	0.047	0.000	0.063	0.057	0.058	0.002
Ag	0.039	0.021	0.043	0.047	0.036	0.034	0.039	0.044	0.046	0.046
Total	101.423	101.845	101.243	101.299	101.720	100.229	99.426	100.449	101.039	98.640
As%Aspy	31.084	31.182	30.845	30.836	30.876	30.942	29.764	30.147	31.047	29.919
Fe%Aspy	33.258	32.750	33.137	33.042	33.358	33.438	33.615	32.662	32.666	33.593
S%Aspy	35.616	36.028	35.962	36.045	35.727	35.596	36.585	37.154	36.249	36.455
AsForm	0.933	0.936	0.925	0.925	0.926	0.928	0.893	0.905	0.932	0.898
FeForm	0.998	0.983	0.994	0.991	1.001	1.003	1.009	0.980	0.980	1.008
SForm	1.069	1.081	1.079	1.081	1.072	1.068	1.098	1.115	1.087	1.094

TABLE 4.12

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP12) Part 5

VAR. / ID.	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414
Lab No.	505	506	507	508	509	510	511	512	513	514
X	701	696	691	686	681	676	671	666	671	683
Y	411	411	411	411	411	411	411	411	411	417
Fe	34.341	34.800	34.766	35.126	34.306	35.007	34.757	33.466	33.821	34.716
As	43.244	44.955	41.706	42.976	44.127	43.614	42.395	43.158	43.168	41.692
S	22.173	21.242	22.020	21.645	21.062	22.352	21.919	23.242	23.532	21.659
Sb	0.002	0.006	0.000	0.036	0.015	0.006	0.000	0.020	0.012	0.028
Ni	0.000	0.032	0.004	0.000	0.000	0.000	0.000	0.012	0.000	0.000
Au	0.018	0.071	0.073	0.034	0.121	0.113	0.036	0.102	0.102	0.073
Ag	0.014	0.035	0.034	0.055	0.048	0.038	0.049	0.069	0.058	0.024
Total	99.792	101.141	98.603	99.872	99.679	101.130	99.156	100.069	100.693	98.192
As%Aspy	30.638	31.799	29.820	30.533	31.643	30.525	30.220	30.291	30.058	30.008
Fe%Aspy	32.638	33.021	33.346	33.478	33.000	32.867	33.235	31.508	31.591	33.519
S%Aspy	36.711	35.113	36.793	35.937	35.294	36.557	36.512	38.120	38.291	36.429
AsForm	0.919	0.954	0.895	0.916	0.949	0.916	0.907	0.909	0.902	0.900
FeForm	0.979	0.991	1.000	1.004	0.990	0.986	0.997	0.945	0.948	1.006
SForm	1.101	1.053	1.104	1.078	1.059	1.097	1.095	1.144	1.149	1.093

TABLE 4.12

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Microprobe Analyses: Cairngarroch Arsenopyrite (ASP12) Part 6

VAR. / ID.	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424
Lab No.	515	516	517	518	519	520	521	522	523	524
X	688	693	698	703	708	712	698	693	688	683
Y	417	417	417	417	417	417	424	424	424	424
Fe	34.362	34.215	34.643	34.949	33.900	34.660	34.985	34.616	35.050	34.564
As	42.633	43.614	41.955	41.691	44.769	42.982	43.120	44.117	44.877	42.387
S	21.813	22.064	21.846	21.762	21.501	21.855	21.945	22.125	21.783	22.226
Sb	0.029	0.000	0.000	0.001	0.002	0.000	0.001	0.025	0.000	0.000
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.000
Au	0.128	0.089	0.044	0.086	0.098	0.042	0.047	0.037	0.071	0.036
Ag	0.027	0.032	0.036	0.042	0.031	0.020	0.026	0.025	0.013	0.024
Total	98.992	100.014	98.524	98.531	100.301	99.559	100.124	100.960	101.794	99.237
As%Aspy	30.499	30.904	30.071	29.888	31.853	30.575	30.502	30.998	31.419	30.121
Fe%Aspy	32.975	32.522	33.308	33.610	32.355	33.074	33.197	32.627	32.918	32.949
S%Aspy	36.465	36.535	36.591	36.458	35.749	36.330	36.276	36.328	35.638	36.909
AsForm	0.915	0.927	0.902	0.897	0.956	0.917	0.915	0.930	0.943	0.904
FeForm	0.989	0.976	0.999	1.008	0.971	0.992	0.996	0.979	0.988	0.989
SForm	1.094	1.096	1.098	1.094	1.072	1.090	1.088	1.090	1.069	1.107

TABLE 4.12

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP12) Part 7

VAR. / ID.	1425	1426	1427	1428
Lab No.	525	526	527	528
X	678	692	697	701
Y	424	434	434	434
Fe	32.723	33.833	34.846	35.255
As	41.800	43.323	42.808	43.014
S	24.874	23.835	21.955	21.976
Sb	0.077	0.027	0.006	0.000
Ni	0.000	0.000	0.000	0.003
Au	0.088	0.152	0.092	0.097
Ag	0.052	0.042	0.037	0.029
Total	99.614	101.212	99.744	100.374
As%Aspy	29.040	29.979	30.377	30.351
Fe%Aspy	30.496	31.406	33.170	33.370
S%Aspy	40.383	38.543	36.407	36.236
AsForm	0.871	0.900	0.911	0.911
FeForm	0.915	0.942	0.995	1.001
SForm	1.212	1.156	1.092	1.087

TABLE 4.12

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 1

VAR. / ID.	1433	1435	1436	1437	1440	1441	1442	1443	1444	1446
Lab No.	533	535	536	537	540	541	542	543	544	546
X	1371	1378	1369	1364	1367	1375	1382	1390	1396	1413
Y	1366	1371	1371	1371	1379	1379	1379	1379	1379	1388
Fe	34.281	34.520	34.374	34.231	34.542	35.003	34.790	35.210	34.978	35.004
As	43.572	42.921	44.139	42.451	42.325	43.004	43.948	43.489	42.724	43.815
S	21.564	21.221	21.482	21.521	21.462	22.083	21.956	22.194	21.734	22.000
Sb	0.000	0.035	0.056	0.000	0.037	0.038	0.005	0.013	0.009	0.001
Ni	0.025	0.000	0.000	0.024	0.000	0.006	0.000	0.000	0.000	0.000
Au	0.045	0.108	0.105	0.018	0.000	0.015	0.000	0.000	0.008	0.055
Ag	0.016	0.025	0.023	0.010	0.048	0.013	0.032	0.024	0.025	0.032
Total	99.503	98.830	100.179	98.255	98.414	100.162	100.731	100.930	99.478	100.907
As%Aspy	31.121	30.901	31.406	30.605	30.478	30.368	30.960	30.495	30.417	30.807
Fe%Aspy	32.845	33.339	32.810	33.105	33.366	33.158	32.877	33.120	33.405	33.015
S%Aspy	35.992	35.703	35.720	36.258	36.115	36.442	36.145	36.368	36.159	36.147
AsForm	0.934	0.927	0.942	0.918	0.914	0.911	0.929	0.915	0.913	0.924
FeForm	0.985	1.000	0.984	0.993	1.001	0.995	0.986	0.994	1.002	0.991
SForm	1.080	1.071	1.072	1.088	1.084	1.093	1.084	1.091	1.085	1.084

TABLE 4.13

Microprobe Analyses: Cairnngarroch Arsenopyrite (ASP13) Part 2

VAR. / ID.	1447	1448	1449	1450	1451	1452	1453	1456	1457	1458
Lab No.	547	548	549	550	551	552	555	556	557	558
X	1405	1397	1389	1381	1373	1364	1365	1373	1381	1389
Y	1388	1388	1388	1388	1388	1388	1396	1396	1396	1396
Fe	35.280	35.376	35.386	35.152	35.318	34.648	35.054	34.857	35.534	35.535
As	42.385	42.272	43.702	42.053	43.571	44.182	43.468	44.077	43.001	43.161
S	22.592	22.890	22.573	22.296	22.072	21.644	22.576	22.093	22.679	22.491
Sb	0.019	0.020	0.025	0.065	0.040	0.000	0.000	0.025	0.035	0.042
Ni	0.000	0.000	0.000	0.000	0.014	0.001	0.007	0.000	0.000	0.005
Au	0.060	0.089	0.015	0.000	0.026	0.008	0.123	0.000	0.021	0.002
Ag	0.031	0.019	0.016	0.041	0.000	0.025	0.049	0.011	0.042	0.035
Total	100.367	100.666	101.717	99.607	101.041	100.508	101.277	101.063	101.312	101.271
As%Aspy	29.731	29.504	30.358	29.745	30.559	31.277	30.326	30.934	29.919	30.089
Fe%Aspy	33.197	33.121	32.975	33.353	33.229	32.903	32.806	32.816	33.166	33.231
S%Aspy	37.033	37.334	36.644	36.853	36.176	35.805	36.806	36.234	36.875	36.640
AsForm	0.892	0.885	0.911	0.892	0.917	0.938	0.910	0.928	0.898	0.903
FeForm	0.996	0.994	0.989	1.001	0.997	0.987	0.984	0.985	0.995	0.997
SForm	1.111	1.120	1.099	1.106	1.085	1.074	1.104	1.087	1.106	1.099

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 3

VAR. / ID.	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468
Lab No.	559	560	561	562	563	564	565	566	567	568
X	1397	1411	1418	1426	1433	1477	1438	1430	1421	1412
Y	1396	1396	1396	1396	1396	1403	1403	1403	1403	1403
Fe	35.145	35.174	35.559	34.976	34.664	35.150	34.092	35.588	35.093	35.055
As	44.028	43.037	42.524	43.634	43.722	41.654	43.881	43.279	42.286	43.246
S	22.314	23.094	22.518	22.345	21.801	22.314	22.410	22.835	22.487	22.563
Sb	0.026	0.049	0.000	0.000	0.007	0.000	0.000	0.035	0.000	0.045
Ni	0.000	0.000	0.000	0.000	0.007	0.012	0.000	0.000	0.000	0.000
Au	0.021	0.026	0.049	0.105	0.047	0.018	0.047	0.070	0.146	0.000
Ag	0.033	0.024	0.038	0.041	0.037	0.052	0.043	0.030	0.060	0.031
Total	101.567	101.404	100.688	101.101	100.285	99.200	100.473	101.837	100.072	100.940
As%Aspy	30.710	29.836	29.760	30.548	30.959	29.540	30.895	29.961	29.777	30.232
Fe%Aspy	32.885	32.711	33.382	32.847	32.926	33.439	32.199	33.049	33.150	32.874
S%Aspy	36.372	37.414	36.826	36.557	36.074	36.980	36.872	36.942	37.004	36.860
AsForm	0.921	0.895	0.893	0.916	0.929	0.886	0.927	0.899	0.893	0.907
FeForm	0.987	0.981	1.002	0.985	0.988	1.003	0.966	0.992	0.995	0.986
SForm	1.091	1.122	1.105	1.097	1.082	1.109	1.106	1.108	1.110	1.106

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 4

VAR. / ID.	1469	1470	1471	1472	1473	1474	1475	1478	1479	1480
Lab No.	569	570	571	572	573	574	575	578	579	580
X	1394	1386	1378	1370	1363	1363	1371	1378	1386	1394
Y	1403	1403	1403	1403	1403	1411	1411	1411	1411	1411
Fe	34.673	35.515	35.500	34.544	34.463	34.464	34.801	34.564	34.952	35.655
As	44.200	43.553	41.874	43.572	43.447	43.461	42.765	42.648	42.952	42.488
S	22.216	22.304	22.347	21.790	21.979	21.938	21.712	22.046	22.796	22.452
Sb	0.035	0.030	0.054	0.005	0.000	0.058	0.000	0.072	0.007	0.028
Ni	0.012	0.000	0.000	0.000	0.004	0.004	0.000	0.022	0.001	0.007
Au	0.044	0.047	0.055	0.058	0.081	0.000	0.015	0.042	0.086	0.015
Ag	0.029	0.025	0.027	0.051	0.030	0.037	0.032	0.016	0.036	0.019
Total	101.209	101.474	99.857	100.020	100.004	99.962	99.325	99.410	100.830	100.664
As%Aspy	30.974	30.378	29.532	30.926	30.792	30.818	30.500	30.326	30.000	29.747
Fe%Aspy	32.594	33.230	33.586	32.890	32.765	32.783	33.294	32.970	32.748	33.487
S%Aspy	36.381	36.355	36.830	36.141	36.402	36.353	36.186	36.634	37.208	36.734
AsForm	0.929	0.911	0.886	0.928	0.924	0.925	0.915	0.910	0.900	0.892
FeForm	0.978	0.997	1.008	0.987	0.983	0.984	0.999	0.989	0.983	1.005
SForm	1.091	1.091	1.105	1.084	1.092	1.091	1.086	1.099	1.116	1.102

TABLE 4.13

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Microprobe Analyses: Cairnngarroch Arsenopyrite (ASP13) Part 5

VAR. / ID.	1481	1482	1483	1484	1486	1487	1488	1489	1490	1491
Lab No.	581	582	583	584	586	587	588	589	590	591
X	1402	1410	1418	1434	1442	1449	1452	1448	1440	1432
Y	1411	1411	1411	1411	1411	1411	1411	1419	1419	1419
Fe	35.466	35.207	35.811	35.229	35.048	35.120	35.124	35.554	35.854	34.746
As	42.425	43.306	43.625	42.627	43.585	42.085	42.364	43.086	43.312	43.258
S	22.563	22.480	22.189	22.601	22.433	22.134	22.112	22.613	22.432	22.360
Sb	0.015	0.031	0.021	0.000	0.000	0.045	0.001	0.000	0.042	0.066
Ni	0.000	0.000	0.000	0.000	0.000	0.022	0.004	0.009	0.000	0.000
Au	0.102	0.050	0.000	0.000	0.055	0.036	0.050	0.026	0.000	0.060
Ag	0.015	0.038	0.019	0.039	0.032	0.030	0.029	0.048	0.015	0.022
Total	100.586	101.112	101.665	100.496	101.153	99.472	99.684	101.336	101.655	100.512
As%Aspy	29.712	30.256	30.392	29.866	30.465	29.845	30.003	29.988	30.106	30.421
Fe%Aspy	33.320	32.996	33.466	33.111	32.862	33.410	33.369	33.195	33.431	32.778
S%Aspy	36.927	36.702	36.124	37.004	36.642	36.681	36.596	36.779	36.437	36.746
AsForm	0.891	0.908	0.912	0.896	0.914	0.895	0.900	0.900	0.903	0.913
FeForm	1.000	0.990	1.004	0.993	0.986	1.002	1.001	0.996	1.003	0.983
SForm	1.108	1.101	1.084	1.110	1.099	1.100	1.098	1.103	1.093	1.102

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 6

VAR. / ID.	1492	1493	1494	1495	1496	1497	1498	1499	1500	1501
Lab No.	592	593	594	595	596	597	598	599	600	601
X	1424	1416	1408	1399	1391	1383	1375	1368	1361	1353
Y	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419
Fe	35.620	34.955	35.081	35.197	35.550	35.501	35.770	34.976	34.425	34.003
As	43.813	43.624	43.541	43.673	43.869	43.650	43.053	43.395	43.660	41.941
S	22.498	22.338	22.582	22.560	22.526	22.502	22.541	22.478	21.800	22.981
Sb	0.014	0.045	0.042	0.001	0.063	0.054	0.028	0.036	0.006	0.020
Ni	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.100	0.000	0.000	0.084	0.000	0.063	0.139	0.021	0.000	0.044
Ag	0.025	0.055	0.013	0.034	0.052	0.016	0.023	0.015	0.036	0.030
Total	102.070	101.031	101.259	101.549	102.060	101.786	101.554	100.921	99.927	99.019
As%Aspy	30.376	30.549	30.362	30.399	30.407	30.328	29.940	30.371	31.006	29.681
Fe%Aspy	33.128	32.837	32.815	32.865	33.054	33.089	33.369	32.837	32.795	32.279
S%Aspy	36.451	36.556	36.798	36.697	36.487	36.536	36.632	36.763	36.179	38.005
AsForm	0.911	0.917	0.911	0.912	0.912	0.910	0.898	0.911	0.930	0.891
FeForm	0.994	0.985	0.985	0.986	0.992	0.993	1.001	0.985	0.984	0.969
SForm	1.094	1.097	1.104	1.101	1.095	1.096	1.099	1.103	1.085	1.140

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 7

VAR. / ID.	1502	1503	1504	1505	1506	1507	1508	1509	1510	1511
Lab No.	602	603	604	605	606	607	608	609	610	611
X	1355	1373	1381	1389	1396	1403	1408	1415	1421	1429
Y	1427	1427	1427	1427	1427	1427	1427	1427	1427	1427
Fe	34.972	35.444	35.685	35.411	35.201	35.365	36.150	35.498	34.797	34.797
As	42.482	43.136	42.978	43.151	44.062	43.479	42.946	43.611	42.655	42.655
S	21.643	23.518	22.724	22.296	22.467	22.642	22.638	22.626	22.686	22.686
Sb	0.031	0.020	0.035	0.056	0.029	0.053	0.044	0.018	0.000	0.000
Ni	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000
Au	0.057	0.000	0.118	0.015	0.044	0.000	0.052	0.000	0.013	0.013
Ag	0.025	0.026	0.051	0.038	0.019	0.012	0.033	0.035	0.029	0.029
Total	99.210	102.144	101.591	100.967	101.841	101.551	101.863	101.793	100.180	100.180
As%Aspy	30.338	29.612	29.835	30.213	30.629	30.221	29.739	30.259	29.960	29.960
Fe%Aspy	33.502	32.639	33.231	33.259	32.825	32.974	33.580	33.035	32.786	32.786
S%Aspy	36.118	37.728	36.864	36.481	36.496	36.777	36.633	36.681	37.236	37.236
AsForm	0.910	0.888	0.895	0.906	0.919	0.907	0.892	0.908	0.899	0.899
FeForm	1.005	0.979	0.997	0.998	0.985	0.989	1.008	0.991	0.984	0.984
SForm	1.084	1.132	1.106	1.094	1.095	1.103	1.099	1.100	1.117	1.117

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 8

VAR. / ID.	1512	1513	1514	1515	1516	1517	1518	1519	1520	1521
Lab No.	612	613	614	615	616	617	618	619	620	621
X	1437	1444	1450	1446	1438	1429	1421	1413	1405	1397
Y	1427	1427	1427	1436	1436	1436	1436	1436	1436	1436
Fe	35.437	35.098	34.753	35.189	35.594	34.721	34.448	35.383	35.638	35.407
As	43.808	43.503	43.160	43.235	43.215	43.948	43.181	43.007	43.209	42.307
S	22.807	22.353	22.363	22.636	22.197	22.253	22.704	22.756	22.833	22.497
Sb	0.000	0.000	0.006	0.000	0.054	0.049	0.068	0.055	0.039	0.061
Ni	0.000	0.000	0.009	0.000	0.009	0.021	0.000	0.000	0.000	0.000
Au	0.089	0.094	0.029	0.078	0.065	0.084	0.071	0.107	0.000	0.120
Ag	0.033	0.029	0.027	0.023	0.032	0.019	0.038	0.006	0.039	0.037
Total	102.174	101.077	100.347	101.161	101.166	101.095	100.510	101.314	101.758	100.429
As%Aspy	30.275	30.448	30.376	30.154	30.236	30.813	30.293	29.923	29.918	29.692
Fe%Aspy	32.852	32.953	32.811	32.922	33.407	32.656	32.418	33.024	33.102	33.334
S%Aspy	36.833	36.560	36.781	36.893	36.293	36.460	37.221	36.999	36.945	36.897
AsForm	0.908	0.914	0.911	0.905	0.907	0.924	0.909	0.898	0.898	0.891
FeForm	0.986	0.989	0.984	0.988	1.002	0.980	0.973	0.991	0.993	1.000
SForm	1.105	1.097	1.103	1.107	1.089	1.094	1.117	1.110	1.108	1.107

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 9

VAR. / ID.	1522	1523	1524	1525	1526	1527	1528	1529	1530	1531
Lab No.	622	623	624	625	626	627	628	629	630	631
X	1390	1382	1374	1365	1357	1350	1350	1358	1366	1366
Y	1436	1436	1436	1436	1436	1436	1444	1444	1444	1444
Fe	35.491	34.952	35.251	34.789	35.507	34.257	34.345	35.525	35.525	35.362
As	43.181	43.631	42.249	43.203	43.286	41.733	41.779	42.965	42.965	43.315
S	22.504	22.588	22.487	22.300	22.235	23.283	23.075	22.341	22.341	22.530
Sb	0.045	0.040	0.038	0.065	0.059	0.048	0.055	0.015	0.015	0.052
Ni	0.000	0.017	0.000	0.000	0.003	0.003	0.021	0.012	0.012	0.000
Au	0.044	0.023	0.065	0.031	0.086	0.070	0.000	0.065	0.065	0.057
Ag	0.006	0.031	0.026	0.030	0.012	0.052	0.025	0.032	0.032	0.030
Total	101.271	101.282	100.116	100.418	101.188	99.446	99.300	100.955	100.955	101.346
As%Aspy	30.106	30.431	29.721	30.413	30.279	29.350	29.452	30.067	30.067	30.190
Fe%Aspy	33.194	32.701	33.265	32.852	33.318	32.318	32.479	33.349	33.349	33.062
S%Aspy	36.666	36.815	36.967	36.684	36.346	38.264	38.014	36.535	36.535	36.696
AsForm	0.903	0.913	0.892	0.913	0.909	0.881	0.884	0.902	0.902	0.906
FeForm	0.996	0.981	0.998	0.986	1.000	0.970	0.975	1.001	1.001	0.992
SForm	1.100	1.105	1.109	1.100	1.090	1.148	1.140	1.096	1.096	1.101

TABLE 4.13

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Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 10

VAR. / ID.	1532	1533	1534	1535	1536	1537	1538	1539	1540	1541
Lab No.	632	633	634	635	636	637	638	639	640	641
X	1382	1388	1395	1403	1411	1418	1426	1435	1430	1450
Y	1444	1444	1444	1444	1444	1444	1444	1444	1444	1444
Fe	35.212	35.911	35.883	34.815	35.725	35.513	35.430	35.465	35.736	34.628
As	43.766	42.990	42.324	43.286	43.166	42.593	42.626	43.426	42.773	42.473
S	22.395	22.736	22.466	22.605	22.694	22.233	22.487	22.478	22.189	22.623
Sb	0.023	0.063	0.015	0.072	0.085	0.037	0.026	0.073	0.002	0.012
Ni	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.000	0.047	0.000	0.026	0.094	0.086	0.000	0.073	0.034	0.081
Ag	0.054	0.029	0.022	0.000	0.022	0.025	0.043	0.048	0.030	0.049
Total	101.450	101.776	100.710	100.813	101.786	100.487	100.612	101.563	100.764	99.866
As%Aspy	30.523	29.778	29.601	30.295	29.930	29.940	29.861	30.234	29.995	29.939
Fe%Aspy	32.942	33.368	33.665	32.687	33.228	33.487	33.295	33.122	33.617	32.744
S%Aspy	36.499	36.802	36.717	36.972	36.771	36.521	36.812	36.571	36.363	37.266
AsForm	0.916	0.893	0.888	0.909	0.898	0.898	0.896	0.907	0.900	0.898
FeForm	0.988	1.001	1.010	0.981	0.997	1.005	0.999	0.994	1.009	0.982
SForm	1.095	1.104	1.102	1.109	1.103	1.096	1.104	1.097	1.091	1.118

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 11

VAR. / ID.	1542	1543	1544	1545	1546	1547	1548	1549	1550	1551
Lab No.	642	643	644	645	646	647	648	649	650	651
X	1443	1435	1426	1419	1411	1402	1394	1386	1378	1370
Y	1453	1453	1453	1453	1453	1453	1453	1453	1453	1453
Fe	35.052	35.829	35.414	35.101	35.573	35.039	35.118	35.392	35.195	35.145
As	43.089	42.810	42.429	42.657	42.835	42.005	43.449	43.633	42.081	43.661
S	22.409	22.224	22.202	21.650	22.510	22.895	22.665	22.544	22.430	22.475
Sb	0.000	0.037	0.036	0.012	0.013	0.027	0.053	0.026	0.022	0.000
Ni	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.021	0.004
Au	0.050	0.081	0.015	0.002	0.000	0.047	0.002	0.199	0.044	0.081
Ag	0.039	0.038	0.030	0.052	0.022	0.029	0.037	0.048	0.013	0.025
Total	100.639	101.019	100.126	99.474	100.953	100.042	101.324	101.845	99.806	101.391
As%Aspy	30.233	29.961	29.908	30.387	29.917	29.464	30.261	30.317	29.681	30.451
Fe%Aspy	32.992	33.637	33.486	33.542	33.328	32.970	32.810	32.988	33.301	32.881
S%Aspy	36.743	36.347	36.572	36.040	36.739	37.528	36.888	36.605	36.971	36.631
AsForm	0.907	0.899	0.897	0.912	0.898	0.884	0.908	0.910	0.891	0.914
FeForm	0.990	1.009	1.005	1.006	1.000	0.989	0.984	0.990	0.999	0.987
SForm	1.102	1.090	1.097	1.081	1.102	1.126	1.107	1.098	1.109	1.099

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 12

VAR. / ID.	1552	1553	1555	1556	1557	1558	1559	1560	1561	1562
Lab No.	652	653	655	656	657	658	659	660	661	662
X	1361	1352	1355	1363	1371	1378	1387	1394	1403	1411
Y	1453	1453	1462	1462	1462	1462	1462	1462	1462	1462
Fe	35.141	34.276	34.818	33.792	34.305	35.370	34.893	34.978	34.671	34.817
As	42.741	43.493	41.518	43.839	44.068	43.324	43.900	43.603	43.514	43.372
S	22.494	22.175	22.933	21.860	22.097	22.713	22.051	22.053	23.121	22.575
Sb	0.000	0.003	0.022	0.056	0.000	0.008	0.006	0.032	0.044	0.019
Ni	0.018	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000
Au	0.018	0.052	0.044	0.052	0.105	0.076	0.000	0.121	0.000	0.094
Ag	0.024	0.061	0.041	0.038	0.024	0.047	0.024	0.027	0.018	0.032
Total	100.436	100.060	99.376	99.637	100.609	101.538	100.874	100.814	101.368	100.909
As%Aspy	29.995	30.768	29.264	31.239	31.079	30.104	30.860	30.675	30.198	30.351
Fe%Aspy	33.082	32.527	32.921	32.302	32.454	32.969	32.903	33.010	32.277	32.683
S%Aspy	36.890	36.659	37.774	36.402	36.418	36.881	36.223	36.256	37.497	36.917
AsForm	0.900	0.923	0.878	0.937	0.933	0.903	0.926	0.920	0.906	0.911
FeForm	0.993	0.976	0.988	0.969	0.974	0.989	0.987	0.990	0.968	0.981
SForm	1.107	1.100	1.133	1.092	1.092	1.106	1.087	1.088	1.125	1.107

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 13

VAR. / ID.	1563	1564	1565	1566	1567	1568	1569	1570	1571	1572
Lab No.	663	664	665	666	667	668	669	670	671	672
X	1419	1427	1433	1441	1441	1433	1425	1409	1401	1393
Y	1462	1462	1463	1463	1471	1471	1471	1471	1471	1471
Fe	34.447	35.397	34.836	34.307	34.281	35.110	34.759	34.813	34.952	34.653
As	43.359	43.491	43.305	43.541	43.375	43.611	43.352	43.583	43.500	43.540
S	22.579	22.595	22.684	22.565	22.599	22.198	22.176	22.431	22.254	22.093
Sb	0.038	0.026	0.024	0.000	0.000	0.038	0.014	0.070	0.001	0.021
Ni	0.000	0.029	0.000	0.000	0.000	0.000	0.000	0.005	0.004	0.016
Au	0.060	0.115	0.047	0.100	0.018	0.039	0.021	0.034	0.044	0.000
Ag	0.041	0.033	0.028	0.016	0.029	0.028	0.039	0.044	0.024	0.034
Total	100.524	101.686	100.924	100.529	100.302	101.024	100.361	100.980	100.779	100.357
As%Aspy	30.447	30.224	30.263	30.589	30.503	30.574	30.563	30.522	30.541	30.725
Fe%Aspy	32.449	32.999	32.657	32.331	32.339	33.019	32.872	32.704	32.919	32.803
S%Aspy	37.052	36.694	37.044	37.045	37.139	36.367	36.534	36.709	36.512	36.432
AsForm	0.914	0.907	0.908	0.918	0.915	0.917	0.917	0.916	0.916	0.922
FeForm	0.974	0.990	0.980	0.970	0.970	0.991	0.986	0.981	0.988	0.984
SForm	1.112	1.101	1.111	1.111	1.114	1.091	1.096	1.101	1.095	1.093

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 14

VAR. / ID.	1573	1574	1575	1576	1577	1578	1579	1580	1581	1582
Lab No.	673	674	675	676	677	678	679	680	681	682
X	1385	1378	1370	1362	1385	1399	1407	1415	1423	1431
Y	1471	1471	1471	1471	1480	1480	1480	1480	1480	1480
Fe	35.294	34.731	34.589	34.446	34.486	34.591	35.166	35.364	35.295	35.704
As	42.004	43.075	43.840	41.903	42.634	42.625	41.267	42.402	42.831	42.804
S	21.699	22.140	21.581	21.737	21.313	22.182	22.430	22.213	22.748	22.440
Sb	0.003	0.024	0.015	0.046	0.010	0.000	0.010	0.015	0.015	0.024
Ni	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.000	0.042	0.129	0.113	0.013	0.118	0.089	0.000	0.044	0.042
Ag	0.028	0.036	0.040	0.025	0.035	0.023	0.041	0.012	0.023	0.012
Total	99.028	100.048	100.202	98.270	98.491	99.539	99.003	100.006	100.956	101.026
As%Aspy	29.986	30.451	31.143	30.147	30.730	30.247	29.283	29.910	29.873	29.896
Fe%Aspy	33.799	32.935	32.962	33.244	33.345	32.927	33.474	33.463	33.022	33.452
S%Aspy	36.200	36.575	35.826	36.545	35.900	36.783	37.194	36.616	37.076	36.625
AsForm	0.900	0.914	0.934	0.905	0.922	0.908	0.879	0.897	0.896	0.897
FeForm	1.014	0.988	0.989	0.997	1.000	0.988	1.004	1.004	0.991	1.004
SForm	1.086	1.097	1.075	1.096	1.077	1.104	1.116	1.099	1.112	1.099

TABLE 4.13

Microprobe Analyses: Cairngarroch Arsenopyrite (ASP13) Part 15

VAR. / ID.	1583	1584	1585	1586
Lab No.	683	684	685	686
X	1436	1413	1405	1409
Y	1480	1490	1490	1493
Fe	34.986	34.625	34.510	34.579
As	41.964	43.119	43.508	42.463
S	22.196	21.496	22.014	21.728
Sb	0.013	0.000	0.024	0.041
Ni	0.000	0.018	0.000	0.000
Au	0.036	0.058	0.029	0.065
Ag	0.029	0.039	0.010	0.022
Total	99.224	99.355	100.095	98.898
As%Aspy	29.802	30.827	30.796	30.398
Fe%Aspy	33.331	33.207	32.768	33.207
S%Aspy	36.837	35.914	36.413	36.349
AsForm	0.894	0.925	0.924	0.912
FeForm	1.000	0.996	0.983	0.996
SForm	1.105	1.077	1.092	1.090

TABLE 4.13

Microprobe Analyses: Clontibret Arsenopyrite (ASP15) Part 1

VAR. / ID.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Lab No.	2	3	4	5	7	8	9	10	11	12
X	47854	47854	47849	47844	47834	47841	47846	47854	47860	47860
Y	8224	8229	8229	8229	8234	8234	8234	8234	8234	8240
Fe	31.079	34.248	34.280	33.216	32.800	34.829	34.504	34.769	34.358	34.332
As	40.950	43.908	44.498	44.255	43.271	44.716	44.823	44.836	44.488	44.465
S	20.765	21.377	21.330	20.970	20.023	21.118	21.465	21.253	21.045	20.804
Sb	4.839	0.124	0.132	1.380	0.961	0.199	0.104	0.068	0.079	0.067
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.046	0.000	0.000	0.016	0.029	0.005	0.030	0.000	0.017	0.000
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.026	0.000	0.002	0.033	0.000	0.000	0.000	0.016	0.000	0.000
Au	0.034	0.048	0.012	0.160	0.038	0.057	0.076	0.000	0.022	0.000
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	97.741	99.704	100.257	100.030	97.122	100.924	101.003	100.942	100.008	99.668
As%Aspy	30.503	31.386	31.690	31.888	32.123	31.728	31.699	31.754	31.814	31.949
Fe%Aspy	31.057	32.839	32.749	32.104	32.664	33.150	32.734	33.030	32.960	33.090
S%Aspy	36.146	35.708	35.498	35.310	34.736	35.016	35.474	35.174	35.169	34.931
AsForm	0.915	0.942	0.951	0.957	0.964	0.952	0.951	0.953	0.954	0.959
FeForm	0.932	0.985	0.983	0.963	0.980	0.994	0.982	0.991	0.989	0.993
SForm	1.084	1.071	1.065	1.059	1.042	1.051	1.064	1.055	1.055	1.048

TABLE 4.14

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Microprobe Analyses: Clontibret Arsenopyrite (ASP15) Part 2

VAR. / ID.	2011	2012	2015	2016	2017	2018	2019	2020	2021	2022
Lab No.	13	14	17	18	19	20	21	22	23	24
X	47853	47848	47833	47828	47823	47818	47855	47850	47845	47840
Y	8240	8240	8240	8240	8240	8240	8245	8245	8245	8245
Fe	33.860	34.425	34.141	34.789	34.403	33.993	34.332	33.704	34.779	34.061
As	44.066	44.446	44.701	44.191	44.967	44.647	44.400	44.734	43.854	44.066
S	21.121	21.383	20.953	21.518	21.286	21.238	21.544	21.504	22.034	22.077
Sb	0.021	0.070	0.024	0.051	0.021	0.067	0.063	0.070	0.169	0.212
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.000	0.001	0.000	0.000	0.000	0.035	0.038	0.015	0.015	0.032
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.000	0.008	0.000	0.002	0.000	0.004	0.000	0.017
Au	0.000	0.000	0.000	0.083	0.038	0.115	0.004	0.000	0.000	0.000
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	99.068	100.326	99.819	100.640	100.715	100.098	100.382	100.031	100.850	100.464
As%Aspy	31.734	31.603	32.049	31.293	31.917	31.889	31.514	31.892	30.857	31.133
Fe%Aspy	32.712	32.836	32.835	33.047	32.757	32.568	32.688	32.234	32.826	32.283
S%Aspy	35.544	35.530	35.105	35.609	35.306	35.449	35.735	35.826	36.230	36.449
AsForm	0.952	0.948	0.961	0.939	0.957	0.957	0.945	0.957	0.926	0.934
FeForm	0.981	0.985	0.985	0.991	0.983	0.977	0.981	0.967	0.985	0.969
SForm	1.066	1.066	1.053	1.068	1.059	1.064	1.072	1.075	1.087	1.094

TABLE 4.14

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Microprobe Analyses: Clontibret Arsenopyrite (ASP15) Part 3

VAR. / ID.	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Lab No.	25	26	27	28	29	30	31	32	33	34
X	47825	47820	47815	47810	47805	47856	47851	47846	47841	47836
Y	8245	8245	8245	8245	8245	8250	8250	8250	8250	8250
Fe	34.823	34.883	34.211	34.713	34.139	34.981	34.663	35.034	35.033	35.105
As	43.713	45.035	44.578	44.690	45.404	44.755	44.112	44.213	44.015	43.187
S	21.495	21.260	21.773	21.670	21.027	21.496	21.538	21.915	22.336	22.674
Sb	0.080	0.077	0.036	0.049	0.053	0.071	0.070	0.062	0.257	0.326
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.021	0.012	0.007	0.019	0.013	0.000	0.000	0.014	0.000	0.004
Cu	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000
Zn	0.052	0.049	0.026	0.034	0.023	0.000	0.030	0.040	0.029	0.014
Au	0.097	0.092	0.129	0.167	0.128	0.105	0.062	0.131	0.050	0.043
Ag	0.000	0.000	0.002	0.002	0.000	0.002	0.000	0.014	0.000	0.000
Total	100.297	101.409	100.761	101.344	100.787	101.410	100.475	101.439	101.720	101.353
As%Aspy	31.036	31.790	31.511	31.461	32.324	31.519	31.276	31.005	30.690	30.094
Fe%Aspy	33.166	33.032	32.443	32.779	32.605	33.045	32.966	32.958	32.769	32.817
S%Aspy	35.664	35.070	35.967	35.649	34.982	35.377	35.686	35.914	36.394	36.923
AsForm	0.931	0.954	0.945	0.944	0.970	0.946	0.938	0.930	0.921	0.903
FeForm	0.995	0.991	0.973	0.983	0.978	0.991	0.989	0.989	0.983	0.984
SForm	1.070	1.052	1.079	1.069	1.049	1.061	1.071	1.077	1.092	1.108

TABLE 4.14

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Microprobe Analyses: Clontibret Arsenopyrite (ASP15) Part 4

VAR. / ID.	2033	2034
Lab No.	35	36
X	47831	47826
Y	8250	8250
Fe	35.256	34.832
As	43.060	43.560
S	22.651	22.201
Sb	0.283	0.332
Co	0.000	0.000
Ni	0.002	0.011
Cu	0.000	0.000
Zn	0.020	0.018
Au	0.000	0.056
Ag	0.000	0.000
Total	101.272	101.011
As%Aspy	30.009	30.584
Fe%Aspy	32.962	32.808
S%Aspy	36.889	36.426
AsForm	0.900	0.918
FeForm	0.989	0.984
SForm	1.107	1.093

TABLE 4.14

Microprobe Analyses: Clontibret Arsenopyrite (ASP16) Part 1

VAR. / ID.	1	2	3	4	5	6	7	8	9	10
Lab No.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
X	655	1660	1655	1650	1648	1656	1661	1666	1669	1662
Y	4969	4974	4974	4974	4979	4979	4979	4979	4984	4984
Fe	33.788	34.097	33.871	34.371	34.156	34.283	33.780	34.152	33.216	33.670
As	45.063	45.439	45.058	44.612	44.149	44.397	45.505	45.105	45.633	44.710
S	20.732	21.055	21.548	21.680	21.981	21.691	21.416	21.559	21.363	21.316
Sb	0.121	0.049	0.039	0.213	0.274	0.238	0.070	0.057	0.001	0.045
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.027	0.032	0.021	0.025	0.013	0.047	0.042	0.041	0.018	0.019
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
Au	0.009	0.193	0.180	0.000	0.048	0.072	0.151	0.253	0.303	0.232
Ag	0.000	0.000	0.004	0.000	0.000	0.000	0.006	0.000	0.019	0.021
Total	99.740	100.865	100.721	100.903	100.621	100.728	100.971	101.197	100.554	100.016
As%Aspy	32.431	32.335	31.962	31.518	31.192	31.419	32.268	31.872	32.534	31.970
Fe%Aspy	32.621	32.549	32.232	32.573	32.373	32.543	32.131	32.373	31.765	32.299
S%Aspy	34.867	35.014	35.719	35.793	36.291	35.872	35.488	35.600	35.592	35.619
AsForm	0.973	0.970	0.959	0.946	0.936	0.943	0.968	0.956	0.976	0.959
FeForm	0.979	0.976	0.967	0.977	0.971	0.976	0.964	0.971	0.953	0.969
SForm	1.046	1.050	1.072	1.074	1.089	1.076	1.065	1.068	1.068	1.069

TABLE 4.15

Microprobe Analyses: Clontibret Arsenopyrite (ASP16) Part 2

VAR. / ID.	11	12	13	14	15	16	17	18	19	20
Lab No.	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
X	1657	1652	1647	1644	1646	1651	1656	1661	1666	1671
Y	4984	4984	4984	4984	4989	4989	4989	4989	4989	4989
Fe	34.076	34.622	34.355	34.533	34.144	33.846	34.541	34.377	34.381	34.236
As	45.501	44.349	44.967	43.853	45.708	44.567	45.369	44.689	45.025	44.373
S	21.284	21.485	21.476	21.505	21.290	20.996	21.283	21.497	21.035	21.169
Sb	0.025	0.152	0.208	0.252	0.135	0.089	0.221	0.271	0.013	0.023
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.013	0.011	0.026	0.003	0.021	0.026	0.017	0.013	0.039	0.018
Cu	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.012	0.005	0.000	0.000	0.016	0.010	0.000	0.000	0.000	0.014
Au	0.256	0.027	0.028	0.025	0.002	0.024	0.050	0.053	0.217	0.115
Ag	0.000	0.006	0.000	0.000	0.017	0.000	0.000	0.008	0.000	0.000
Total	101.189	100.656	101.061	100.172	101.333	99.560	101.482	100.900	100.710	99.946
As%Aspy	32.244	31.425	31.799	31.190	32.324	32.030	32.036	31.639	32.060	31.726
Fe%Aspy	32.391	32.909	32.589	32.947	32.393	32.630	32.720	32.647	32.840	32.836
S%Aspy	35.246	35.576	35.490	35.743	35.183	35.263	35.119	35.566	35.001	35.369
AsForm	0.967	0.943	0.954	0.936	0.970	0.961	0.961	0.949	0.962	0.952
FeForm	0.972	0.987	0.978	0.988	0.972	0.979	0.982	0.979	0.985	0.985
SForm	1.057	1.067	1.065	1.072	1.056	1.058	1.054	1.067	1.050	1.061

TABLE 4.15

Microprobe Analyses: Clontibret Arsenopyrite (ASPl6) Part 3

VAR. / ID.	21	22	23	24	25	26	27	28	29	30
Lab No.	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
X	1676	1668	1663	1658	1653	1648	1643	1635	1642	1647
Y	4996	4996	4996	4996	4996	4996	4996	5001	5001	5001
Fe	33.898	33.843	34.151	34.502	34.389	34.126	34.808	34.344	34.563	34.494
As	45.041	43.507	45.075	44.266	44.217	43.997	44.720	43.868	44.086	43.482
S	21.398	21.245	21.363	21.761	21.887	21.992	21.973	22.396	22.276	22.657
Sb	0.035	0.028	0.015	0.151	0.252	0.265	0.274	0.251	0.271	0.217
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.060	0.043	0.027	0.010	0.021	0.004	0.029	0.020	0.007	0.010
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.273	0.254	0.214	0.076	0.000	0.000	0.034	0.070	0.011	0.000
Ag	0.000	0.009	0.002	0.000	0.005	0.000	0.000	0.003	0.000	0.005
Total	100.705	98.930	24.000	100.766	100.772	100.384	101.810	100.970	101.214	100.856
As%Aspy	32.008	31.361	31.982	31.275	31.210	31.130	31.278	30.784	30.896	30.439
Fe%Aspy	32.313	32.727	32.506	32.702	32.559	32.389	32.656	32.328	32.496	32.391
S%Aspy	35.536	35.786	35.422	35.928	36.101	36.362	35.914	36.727	36.482	37.065
AsForm	0.960	0.941	0.960	0.938	0.936	0.934	0.938	0.924	0.927	0.913
FeForm	0.969	0.982	0.975	0.981	0.977	0.972	0.980	0.970	0.975	0.972
SForm	1.066	1.074	1.063	1.078	1.083	1.091	1.077	1.102	1.094	1.112

TABLE 4.15

Microprobe Analyses: Clontibret Arsenopyrite (ASP16) Part 4

VAR. / ID.	31	32	33	34	35	36	37	38	39	40
Lab No.	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
X	1652	1657	1662	1667	1672	1677	1683	1677	1672	1667
Y	5001	5001	5001	5001	5001	5001	5006	5006	5006	5006
Fe	34.453	34.149	34.504	33.781	34.215	34.181	34.058	33.396	33.385	34.499
As	43.829	43.598	43.996	44.166	45.077	44.383	44.670	43.948	44.008	44.138
S	22.227	22.138	22.244	22.073	21.508	21.654	21.594	21.481	21.473	21.486
Sb	0.248	0.224	0.217	0.204	0.005	0.013	0.025	0.027	0.033	0.028
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.029	0.015	0.015	0.029	0.020	0.023	0.026	0.027	0.027	0.020
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.022	0.057	0.000	0.027	0.181	0.238	0.129	0.151	0.209	0.169
Ag	0.000	0.006	0.020	0.005	0.000	0.000	0.012	0.000	0.011	0.004
Total	100.807	100.186	100.996	100.286	101.006	100.492	100.515	99.003	99.147	100.341
As%Aspy	30.825	30.850	30.890	31.270	31.895	31.485	31.698	31.612	31.634	31.362
Fe%Aspy	32.505	32.413	32.497	32.086	32.474	32.527	32.419	32.227	32.194	32.883
S%Aspy	36.530	36.607	36.496	36.520	35.563	35.897	35.808	36.108	36.070	35.677
AsForm	0.925	0.925	0.927	0.938	0.957	0.945	0.951	0.948	0.949	0.941
FeForm	0.975	0.972	0.975	0.963	0.974	0.976	0.973	0.967	0.966	0.987
SForm	1.096	1.098	1.095	1.096	1.067	1.077	1.074	1.083	1.082	1.070

TABLE 4.15

Microprobe Analyses: Clontibret Arsenopyrite (ASP16) Part 5

VAR. / ID.	41	42	43	44	45	46	47	48	49	50
Lab No.	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
X	1662	1657	1652	1647	1642	1637	1633	1630	1639	1644
Y	5006	5006	5006	5006	5006	5006	5006	5012	5012	5012
Fe	34.045	34.764	34.547	35.006	34.585	34.769	34.488	34.786	34.025	34.553
As	44.378	43.613	44.357	43.580	43.196	43.287	44.108	43.374	43.394	43.507
S	21.915	22.164	22.330	22.336	22.916	22.185	22.321	22.155	22.189	22.425
Sb	0.088	0.230	0.231	0.207	0.244	0.286	0.256	0.254	0.257	0.353
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.033	0.030	0.029	0.010	0.041	0.018	0.037	0.036	0.030	0.000
Cu	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.002	0.000
Au	0.122	0.057	0.024	0.060	0.006	0.035	0.010	0.030	0.000	0.064
Ag	0.006	0.002	0.001	0.000	0.005	0.000	0.008	0.000	0.000	0.000
Total	100.587	100.868	101.520	101.199	100.993	100.581	101.229	100.636	99.899	100.902
As%Aspy	31.383	30.658	31.003	30.497	30.134	30.488	30.899	30.541	30.757	30.530
Fe%Aspy	32.297	32.784	32.393	32.862	32.362	32.848	32.409	32.854	32.350	32.527
S%Aspy	36.216	36.409	36.472	36.527	37.358	36.514	36.541	36.455	36.752	36.773
AsForm	0.942	0.920	0.930	0.915	0.904	0.915	0.927	0.916	0.923	0.916
FeForm	0.969	0.984	0.972	0.986	0.971	0.985	0.972	0.986	0.970	0.976
SForm	1.087	1.092	1.094	1.096	1.121	1.095	1.096	1.094	1.103	1.103

TABLE 4.15

Microprobe Analyses: Clontibret Arsenopyrite (ASP16) Part 6

VAR. / ID.	51	52	53	54	55	56	57	58	62	63
Lab No.	2051	2052	2053	2054	2055	2056	2057	2057	2059	2060
X	1649	1654	1659	1664	1669	1674	1679	1684	1675	1670
Y	5012	5012	5012	5012	5012	5012	5012	5012	5018	5018
Fe	34.436	34.743	34.037	34.194	34.636	34.168	34.406	33.819	33.821	33.912
As	43.879	43.527	44.155	43.384	44.058	44.072	44.848	43.914	44.768	44.799
S	22.533	22.375	22.210	22.139	22.389	22.064	21.465	21.478	21.160	21.541
Sb	0.342	0.312	0.261	0.294	0.285	0.210	0.033	0.008	0.032	0.045
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.016	0.036	0.013	0.029	0.026	0.005	0.014	0.042	0.007	0.002
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000
Zn	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.041	0.000	0.043	0.000	0.041	0.048	0.238	0.204	0.318	0.150
Ag	0.002	0.004	0.016	0.000	0.000	0.000	0.000	0.016	0.000	0.017
Total	101.249	100.998	100.741	100.039	101.434	100.566	101.003	99.481	100.121	100.465
As%Aspy	30.689	30.510	31.112	30.724	30.795	31.119	31.742	31.453	32.033	31.834
Fe%Aspy	32.309	32.670	32.170	32.482	32.478	32.365	32.664	32.492	32.465	32.326
S%Aspy	36.828	36.651	36.570	36.639	36.570	36.407	35.502	35.949	35.382	35.770
AsForm	0.921	0.915	0.933	0.922	0.924	0.934	0.952	0.944	0.961	0.955
FeForm	0.969	0.980	0.965	0.975	0.974	0.971	0.980	0.975	0.974	0.970
SForm	1.105	1.099	1.097	1.099	1.097	1.092	1.065	1.079	1.061	1.073

TABLE 4.15

-2300-

Microprobe Analyses: Clontibret Arsenopyrite (ASPl6) Part 7

VAR. / ID.	64	65	66	67	68	69	70	71	72	73
Lab No.	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070
X	1665	1660	1655	1650	1645	1640	1635	1630	1630	1639
Y	5018	5018	5018	5018	5018	5018	5018	5018	5026	5026
Fe	34.290	33.993	34.644	34.933	34.363	34.575	34.469	34.453	34.455	33.903
As	42.943	43.701	43.030	43.644	43.040	43.685	42.975	43.503	43.536	43.480
S	22.498	22.208	22.348	22.487	22.578	22.057	22.428	22.009	22.260	22.474
Sb	0.441	0.459	0.535	0.493	0.463	0.487	0.439	0.442	0.466	0.394
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.025	0.018	0.013	0.048	0.040	0.024	0.055	0.032	0.038	0.030
Cu	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.009	0.000
Au	0.040	0.018	0.014	0.000	0.000	0.000	0.000	0.028	0.061	0.043
Ag	0.022	0.005	0.000	0.017	0.016	0.005	0.000	0.000	0.000	0.001
Total	100.258	100.403	100.586	101.623	100.500	100.833	100.366	100.478	100.826	100.326
As%Aspy	30.273	30.882	30.286	30.428	30.257	30.776	30.271	30.747	30.629	30.669
Fe%Aspy	32.429	32.221	32.709	32.672	32.407	32.676	32.571	32.666	32.516	32.077
S%Aspy	37.063	36.674	36.757	36.637	37.092	36.313	36.918	36.350	36.596	37.044
AsForm	0.908	0.927	0.909	0.913	0.908	0.923	0.908	0.922	0.919	0.920
FeForm	0.973	0.967	0.981	0.980	0.972	0.980	0.977	0.980	0.975	0.962
SForm	1.112	1.100	1.103	1.099	1.113	1.089	1.107	1.090	1.098	1.111

TABLE 4.15

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Microprobe Analyses: Clontibret Arsenopyrite (ASP16) Part 8

VAR. / ID.	74	75	76	77	78	79	80	81	86	87
Lab No.	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080
X	1644	1649	1654	1659	1664	1669	1674	1679	1667	1662
Y	5026	5026	5026	5026	5026	5026	5026	5026	5034	5034
Fe	34.457	34.697	34.730	34.654	34.578	34.545	34.048	34.124	33.538	34.763
As	43.518	43.848	43.534	43.871	43.462	43.850	43.712	44.419	44.410	44.050
S	22.281	22.500	22.652	22.684	22.224	22.094	22.331	21.443	21.129	22.363
Sb	0.320	0.199	0.206	0.194	0.210	0.242	0.234	0.035	0.040	0.232
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.005	0.038	0.018	0.015	0.032	0.037	0.000	0.004	0.031	0.033
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000
Zn	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.004
Au	0.043	0.012	0.032	0.023	0.000	0.041	0.004	0.147	0.113	0.027
Ag	0.004	0.015	0.011	0.004	0.000	0.000	0.015	0.002	0.010	0.000
Total	100.627	101.309	101.184	101.444	100.506	100.810	100.344	100.193	99.270	101.472
As%Aspy	30.639	30.628	30.393	30.568	30.618	30.874	30.843	31.635	31.975	30.774
Fe%Aspy	32.546	32.514	32.524	32.392	32.676	32.625	32.225	32.602	32.392	32.577
S%Aspy	36.659	36.728	36.957	36.936	36.587	36.352	36.821	35.688	35.550	36.509
AsForm	0.919	0.919	0.912	0.917	0.919	0.926	0.925	0.949	0.959	0.923
FeForm	0.976	0.975	0.976	0.972	0.980	0.979	0.967	0.978	0.972	0.977
SForm	1.100	1.102	1.109	1.108	1.098	1.091	1.105	1.071	1.066	1.095

TABLE 4.15

Microprobe Analyses: Clontibret Arsenopyrite (ASP16) Part 9

VAR. / ID.	88	89	90	91	92	93	94	95	96	97
Lab No.	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090
X	1657	1652	1647	1642	1637	1633	1640	1645	1650	1655
Y	5034	5034	5034	5034	5034	5034	5040	5040	5040	5040
Fe	34.738	34.742	34.566	34.108	34.526	34.075	33.661	33.859	34.502	34.021
As	43.687	44.081	43.798	43.984	43.637	44.245	43.612	43.517	43.289	43.548
S	22.114	22.063	22.085	22.171	22.122	22.103	22.168	22.175	22.287	22.394
Sb	0.250	0.244	0.217	0.205	0.246	0.230	0.224	0.240	0.274	0.214
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.018	0.026	0.022	0.043	0.016	0.058	0.000	0.046	0.017	0.024
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.021	0.029	0.000	0.000	0.037	0.013	0.069	0.035	0.001	0.025
Ag	0.000	0.000	0.000	0.021	0.000	0.000	0.007	0.000	0.000	0.012
Total	100.827	101.186	100.689	100.533	100.585	100.725	99.741	99.873	100.371	100.238
As%Aspy	30.733	30.947	30.857	31.031	30.766	31.197	30.988	30.869	30.518	30.734
Fe%Aspy	32.783	32.721	32.668	32.279	32.655	32.229	32.084	32.216	32.631	32.206
S%Aspy	36.354	36.196	36.361	36.552	36.448	36.419	36.808	36.759	36.717	36.933
AsForm	0.922	0.928	0.926	0.931	0.923	0.936	0.930	0.926	0.916	0.922
FeForm	0.984	0.982	0.980	0.968	0.980	0.967	0.962	0.966	0.979	0.966
SForm	1.091	1.086	1.091	1.097	1.094	1.093	1.104	1.103	1.102	1.108

TABLE 4.15

Microprobe Analyses: Clontibret Arsenopyrite (ASP16) Part 10

VAR. / ID.	98	99	105	106	107	108	109	110	111	115
Lab No.	2091	2092	2094	2095	2096	2097	2098	2099	2100	2101
X	1660	1665	1653	1648	1643	1648	1653	1658	1663	1652
Y	5040	5040	5047	5047	5047	5053	5053	5053	5053	5060
Fe	34.542	34.201	33.970	33.560	34.112	33.469	33.337	33.522	34.064	33.658
As	43.516	43.778	44.379	43.176	43.755	42.363	43.058	42.558	43.281	42.871
S	22.160	22.244	21.448	21.480	21.727	22.123	21.750	22.170	21.897	21.562
Sb	0.217	0.266	0.100	0.095	0.136	0.256	0.296	0.279	0.229	0.252
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.032	0.041	0.004	0.015	0.036	0.039	0.013	0.030	0.024	0.043
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.005	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.013	0.010	0.012	0.000	0.015	0.004	0.015	0.007	0.036	0.069
Ag	0.000	0.000	0.000	0.006	0.000	0.008	0.007	0.002	0.005	0.000
Total	100.481	100.545	99.914	98.341	99.781	98.262	98.475	98.569	99.535	98.455
As%Aspy	30.684	30.859	31.668	31.178	31.159	30.439	31.018	30.497	30.841	30.922
Fe%Aspy	32.674	32.341	32.515	32.509	32.588	32.241	32.210	32.223	32.561	32.564
S%Aspy	36.515	36.641	35.766	35.766	35.766	37.146	36.615	37.126	36.463	36.344
SForm	0.935	0.970	0.975	0.935	0.935	0.913	0.931	0.915	0.925	0.928
	1.095	1.099	1.073	1.087	1.085	1.114	1.099	1.114	1.094	1.090

TABLE 4.15

Microprobe Analyses: Clontibret Arsenopyrite (ASP16) Part 11

AR. / ID.	116
Lab No.	2102
X	1648
Y	5060
Fe	33.812
As	43.146
S	21.224
Sb	0.182
Co	0.000
Ni	0.013
Cu	0.002
Zn	0.000
Au	0.058
Ag	0.020
Total	98.458
As%Aspy	31.205
Fe%Aspy	32.804
S%Aspy	35.871
AsForm	0.936
FeForm	0.984
SForm	1.076

TABLE 4.15

Microprobe Analyses: Clontibret Arsenopyrite (ASP17) Part 1

VAR. / ID.	122	123	128	129	130	131	132	133	134	135
Lab No.	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114
X	1789	1799	1799	1791	1783	1775	1758	1769	1777	1785
Y	7783	7783	7791	7791	7791	7791	7799	7799	7799	7799
Fe	33.626	33.213	33.514	31.672	33.832	34.205	33.646	34.079	34.206	34.208
As	44.806	45.062	44.841	45.522	43.795	45.487	45.401	45.000	42.621	44.256
S	21.062	21.103	20.920	20.557	21.563	21.238	21.074	22.095	23.285	22.116
Sb	0.059	0.071	0.110	0.099	0.221	0.070	0.071	0.084	0.303	0.240
Co	0.000	0.000	0.000	0.470	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.088	0.082	0.015	2.114	0.125	0.017	0.040	0.080	0.177	0.040
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.009	0.060
Zn	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.035	0.000	0.011
Au	0.078	0.129	0.066	0.041	0.013	0.015	0.049	0.010	0.000	0.000
Ag	0.009	0.000	0.000	0.001	0.006	0.001	0.002	0.022	0.004	0.004
Total	99.728	99.659	99.466	100.476	99.555	101.033	100.283	101.430	100.606	100.881
As%Aspy	32.160	32.389	32.306	32.791	31.310	32.244	32.454	31.559	29.732	31.142
Fe%Aspy	32.378	32.024	32.392	30.605	32.448	32.524	32.261	32.061	32.012	32.291
S%Aspy	35.328	35.445	35.222	34.604	36.025	35.181	35.203	36.211	37.959	36.367
AsForm	0.965	0.972	0.969	0.984	0.939	0.967	0.974	0.947	0.892	0.934
FeForm	0.971	0.961	0.972	0.918	0.973	0.976	0.968	0.962	0.960	0.969
SForm	1.060	1.063	1.057	1.038	1.081	1.056	1.056	1.086	1.139	1.091

TABLE 4.16

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Microprobe Analyses: Clontibret Arsenopyrite (ASP17) Part 2

VAR. / ID.	136	137	138	142	143	144	145	146	147	148
Lab No.	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124
X	1793	1801	1809	1801	1793	1785	1777	1769	1761	1753
Y	7799	7799	7799	7807	7807	7807	7807	7807	7807	7807
Fe	34.486	33.858	34.071	33.343	33.950	34.639	34.423	34.396	34.584	34.220
As	44.671	46.130	45.166	45.386	45.218	43.977	43.216	43.772	43.770	44.584
S	21.673	21.354	21.394	21.112	21.515	22.063	22.907	22.405	22.804	21.685
Sb	0.141	0.054	0.108	0.108	0.055	0.095	0.472	0.177	0.355	0.084
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.050	0.048	0.015	0.020	0.023	0.010	0.040	0.031	0.058	0.059
Cu	0.009	0.000	0.000	0.000	0.008	0.000	0.000	0.002	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.020	0.000	0.000	0.000	0.000
Au	0.012	0.013	0.138	0.072	0.015	0.048	0.006	0.001	0.002	0.022
Ag	0.008	0.004	0.000	0.000	0.005	0.004	0.026	0.001	0.000	0.000
Total	101.049	101.462	100.892	100.040	100.790	100.856	101.089	100.786	101.573	100.653
As%Aspy	31.513	32.589	32.033	32.519	32.042	30.944	30.162	30.733	30.450	31.553
Fe%Aspy	32.637	32.085	32.412	32.047	32.273	32.695	32.225	32.398	32.273	32.487
S%Aspy	35.729	35.254	35.457	35.349	35.627	36.279	37.360	36.762	37.073	35.864
AsForm	0.945	0.978	0.961	0.976	0.961	0.928	0.905	0.922	0.914	0.947
FeForm	0.979	0.963	0.972	0.961	0.968	0.981	0.967	0.972	0.968	0.975
SForm	1.072	1.058	1.064	1.061	1.069	1.088	1.121	1.103	1.112	1.076

TABLE 4.16

Microprobe Analyses: Clontibret Arsenopyrite (ASP17) Part 3

VAR. / ID.	149	150	151	152	153	154	155	156	157	158
Lab No.	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134
X	1745	1738	1745	1753	1761	1773	1781	1789	1797	1805
Y	7807	7810	7816	7816	7816	7816	7816	7816	7816	7816
Fe	33.983	33.825	33.326	33.643	33.975	34.552	34.363	33.574	34.932	33.599
As	46.148	45.529	45.199	44.743	44.712	41.810	43.995	44.205	44.307	44.159
S	21.019	21.124	21.313	21.400	21.159	23.121	22.612	21.769	22.225	21.281
Sb	0.055	0.070	0.050	0.067	0.045	0.482	0.128	0.168	0.038	0.054
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.031	0.037	0.039	0.066	0.082	0.024	0.122	0.173	0.043	0.008
Cu	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.011	0.001	0.000	0.000	0.000	0.000
Au	0.111	0.190	0.101	0.077	0.022	0.000	0.052	0.000	0.018	0.022
Ag	0.013	0.005	0.003	0.009	0.003	0.000	0.000	0.002	0.000	0.002
Total	101.358	100.779	100.031	100.006	100.012	99.936	101.272	99.891	101.564	99.125
As%Aspy	32.734	32.421	32.324	31.949	31.962	29.336	30.725	31.477	30.942	31.766
Fe%Aspy	32.337	32.309	31.971	32.227	32.578	32.523	32.194	32.068	32.727	32.422
S%Aspy	34.841	35.152	35.619	35.709	35.346	37.910	36.903	36.224	36.271	35.774
AsForm	0.982	0.973	0.970	0.959	0.959	0.880	0.922	0.944	0.928	0.953
FeForm	0.970	0.969	0.959	0.967	0.977	0.976	0.966	0.962	0.982	0.973
SForm	1.045	1.055	1.069	1.071	1.060	1.137	1.107	1.087	1.088	1.073

TABLE 4.16

Microprobe Analyses: Clontibret Arsenopyrite (ASP17) Part 4

VAR. / ID.	159	171	172	173	174	175	176	177	179	180
Lab No.	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144
X	1813	1742	1749	1757	1765	1773	1781	1789	1805	1813
Y	7816	7824	7832	7832	7832	7832	7832	7832	7832	7832
Fe	33.556	34.316	33.748	33.750	33.854	33.854	34.447	33.323	34.369	33.864
As	45.403	45.349	45.086	45.327	44.829	44.968	44.283	45.434	44.903	44.514
S	20.980	21.039	20.723	21.227	21.270	21.545	21.602	21.127	21.594	21.035
Sb	0.108	0.042	0.026	0.039	0.055	0.152	0.064	0.067	0.052	0.088
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.018	0.045	0.102	0.077	0.202	0.327	0.061	0.079	0.015	0.058
Cu	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.069	0.067	0.129	0.063	0.032	0.016	0.057	0.032	0.053	0.023
Ag	0.000	0.000	0.023	0.008	0.006	0.004	0.019	0.000	0.002	0.007
Total	100.141	100.857	99.837	100.492	100.248	100.866	100.532	100.061	100.989	99.589
As%Aspy	32.531	32.242	32.436	32.294	31.962	31.835	31.378	32.531	31.724	31.970
Fe%Aspy	32.251	32.726	32.572	32.256	32.381	32.153	32.744	32.009	32.574	32.624
S%Aspy	35.128	34.955	34.840	35.342	35.438	35.644	35.770	35.350	35.651	35.304
AsForm	0.976	0.967	0.973	0.969	0.959	0.955	0.941	0.976	0.952	0.959
FeForm	0.967	0.982	0.977	0.968	0.971	0.965	0.982	0.960	0.977	0.979
SForm	1.054	1.049	1.045	1.060	1.063	1.069	1.073	1.061	1.070	1.059

TABLE 4.16

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Microprobe Analyses: Clontibret Arsenopyrite (ASP17) Part 5

VAR. / ID.	184	185	186	187	188	189	190	191	192	193
Lab No.	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154
X	1808	1800	1792	1784	1776	1768	1760	1752	1744	1753
Y	7840	7840	7840	7840	7840	7840	7840	7840	7840	7848
Fe	34.075	33.778	33.899	34.207	34.637	34.124	34.374	33.830	34.187	34.042
As	44.084	45.747	45.289	45.755	45.342	45.803	44.130	45.265	44.497	45.318
S	21.352	21.177	21.133	21.312	21.573	21.382	21.780	21.231	21.527	21.543
Sb	0.129	0.076	0.054	0.044	0.031	0.049	0.115	0.051	0.035	0.019
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.019	0.043	0.072	0.058	0.068	0.042	0.135	0.070	0.021	0.045
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.023	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.001	0.009
Au	0.106	0.080	0.109	0.049	0.045	0.011	0.065	0.029	0.087	0.143
Ag	0.011	0.013	0.000	0.018	0.000	0.000	0.000	0.016	0.011	0.000
Total	99.800	100.913	100.546	101.443	101.702	101.412	100.597	100.493	100.367	101.118
As%Aspy	31.518	32.517	32.276	32.318	31.852	32.339	31.208	32.240	31.614	32.036
Fe%Aspy	32.680	32.207	32.410	32.412	32.641	32.320	32.610	32.321	32.581	32.281
S%Aspy	35.674	35.176	35.195	35.177	35.415	35.279	35.993	35.337	35.741	35.589
AsForm	0.946	0.975	0.968	0.970	0.956	0.970	0.936	0.967	0.948	0.961
FeForm	0.980	0.966	0.972	0.972	0.979	0.970	0.978	0.970	0.977	0.968
SForm	1.070	1.055	1.056	1.055	1.063	1.058	1.080	1.060	1.072	1.068

TABLE 4.16

Microprobe Analyses: Clontibret Arsenopyrite (ASP17) Part 6

VAR. / ID.	194	195	196	197	198	199	200	201	205	206
Lab No.	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164
X	1761	1769	1777	1785	1793	1802	1810	1818	1780	1772
Y	7848	7848	7848	7848	7848	7848	7848	7848	7856	7856
Fe	33.760	34.146	33.606	33.929	34.115	34.373	33.697	33.652	34.321	33.992
As	45.098	45.592	45.070	45.855	44.883	45.262	44.620	44.951	45.347	44.714
S	21.272	21.491	21.422	21.302	21.417	21.058	21.136	20.833	21.199	20.911
Sb	0.040	0.036	0.046	0.023	0.040	0.057	0.084	0.151	0.056	0.030
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.031	0.059	0.026	0.056	0.022	0.021	0.008	0.041	0.039	0.040
Cu	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.019	0.001	0.005	0.026	0.000
Au	0.103	0.021	0.017	0.047	0.044	0.090	0.156	0.096	0.013	0.013
Ag	0.016	0.011	0.000	0.011	0.004	0.028	0.014	0.000	0.000	0.000
Total	100.321	101.356	100.187	101.224	100.525	100.907	99.717	99.729	101.000	99.701
As%Aspy	32.164	32.168	32.129	32.461	31.885	32.164	32.022	32.348	32.151	32.110
Fe%Aspy	32.300	32.319	32.136	32.220	32.509	32.769	32.437	32.483	32.641	32.744
S%Aspy	35.453	35.434	35.687	35.240	35.555	34.969	35.446	35.034	35.123	35.092
AsForm	0.965	0.965	0.964	0.974	0.957	0.965	0.961	0.970	0.965	0.963
FeForm	0.969	0.970	0.964	0.967	0.975	0.983	0.973	0.975	0.979	0.982
SForm	1.064	1.063	1.071	1.057	1.067	1.049	1.063	1.051	1.054	1.053

TABLE 4.16

Microprobe Analyses: Clontibret Arsenopyrite (ASP17) Part 7

VAR. / ID.	207	208	209	210	211	212	213	217	220
Lab No.	2165	2166	2167	2168	2169	2170	2171	2172	2173
X	1764	1756	1749	1749	1758	1766	1774	1753	1877
Y	7856	7856	7856	7863	7863	7863	7863	7871	7879
Fe	33.823	33.803	34.212	33.645	34.060	34.109	33.919	33.724	34.771
As	46.001	45.073	46.087	44.582	45.112	44.940	45.399	44.954	43.495
S	21.356	21.382	21.181	21.075	21.418	21.448	21.060	21.019	22.034
Sb	0.055	0.040	0.061	0.044	0.035	0.039	0.037	0.044	0.308
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.042	0.050	0.000	0.039	0.040	0.016	0.052	0.044	0.000
Cu	0.008	0.012	0.006	0.000	0.000	0.000	0.000	0.004	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.013	0.035	0.125	0.071	0.092	0.068	0.019	0.081	0.028
Ag	0.022	0.000	0.004	0.014	0.000	0.000	0.000	0.020	0.000
Total	101.320	100.396	101.675	99.473	100.757	100.619	100.487	99.890	100.636
As%Aspy	32.534	32.081	32.553	32.056	32.004	31.898	32.380	32.238	30.667
Fe%Aspy	32.088	32.272	32.418	32.451	32.411	32.476	32.451	32.441	32.888
S%Aspy	35.295	35.564	34.962	35.412	35.508	35.576	35.101	35.225	36.304
AsForm	0.976	0.962	0.977	0.962	0.960	0.957	0.971	0.967	0.920
FeForm	0.963	0.968	0.973	0.974	0.972	0.974	0.974	0.973	0.987
SForm	1.059	1.067	1.049	1.062	1.065	1.067	1.053	1.057	1.089

TABLE 4.16

Microprobe Analyses: Clontibret Arsenopyrite (ASP18) Part 1

VAR. / ID.	223	225	226	227	230	231	232	233	234	235
Lab No.	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184
X	5258	5238	5228	5208	5188	5178	5167	5167	5177	5187
Y	868	868	868	868	868	868	868	878	878	878
Fe	33.564	34.172	34.172	33.816	33.658	34.666	34.199	34.306	34.222	33.986
As	45.000	44.083	44.283	44.847	44.011	43.177	44.136	43.803	43.601	43.497
S	21.035	21.405	21.353	21.224	22.175	21.611	22.155	22.394	22.471	21.434
Sb	0.080	0.136	0.175	0.079	0.153	0.121	0.253	0.284	0.352	0.085
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.027	0.026	0.015	0.038	0.034	0.035	0.026	0.017	0.029	0.041
Cu	0.000	0.000	0.036	0.000	0.000	0.009	0.005	0.000	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.045	0.000	0.000	0.033	0.013	0.052	0.000	0.017	0.014	0.019
Ag	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.015	0.003
Total	99.750	99.821	100.034	100.037	100.071	99.674	100.774	100.820	100.704	99.066
As%Aspy	32.308	31.473	31.587	32.052	31.187	30.767	31.087	30.769	30.643	31.228
Fe%Aspy	32.327	32.730	32.700	32.422	31.992	33.137	32.310	32.329	32.262	32.730
S%Aspy	35.292	35.713	35.593	35.448	36.721	35.987	36.466	36.760	36.906	35.960
AsForm	0.969	0.944	0.948	0.962	0.936	0.923	0.933	0.923	0.919	0.937
FeForm	0.970	0.982	0.981	0.973	0.960	0.994	0.969	0.970	0.968	0.982
SForm	1.059	1.071	1.068	1.063	1.102	1.080	1.094	1.103	1.107	1.079

TABLE 4.17

Microprobe Analyses: Clontibret Arsenopyrite (ASP18) Part 2

VAR. / ID.	236	237	238	239	240	247	248	250	251	252
Lab No.	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194
X	5197	5207	5217	5227	5247	5256	5246	5226	5216	5206
Y	878	878	878	878	878	888	888	888	888	888
Fe	34.291	34.327	34.196	34.474	33.532	33.684	34.652	34.210	34.382	34.191
As	44.176	44.213	44.076	44.916	44.717	44.690	44.172	43.856	43.779	42.763
S	21.900	21.688	21.560	21.559	21.486	21.348	21.577	22.149	22.171	22.411
Sb	0.238	0.087	0.180	0.191	0.199	0.039	0.175	0.240	0.318	0.465
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.017	0.032	0.030	0.021	0.039	0.053	0.111	0.048	0.054	0.024
Cu	0.000	0.000	0.000	0.029	0.000	0.001	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.017	0.000	0.000	0.001	0.000	0.000	0.000	0.000
Au	0.027	0.000	0.040	0.058	0.000	0.081	0.011	0.029	0.000	0.000
Ag	0.005	0.012	0.017	0.006	0.007	0.008	0.006	0.000	0.000	0.008
Total	100.654	100.359	100.116	101.255	99.979	99.905	100.703	100.532	100.703	99.863
As%Aspy	31.212	31.347	31.365	31.687	31.921	31.946	31.254	30.945	30.836	30.259
Fe%Aspy	32.501	32.646	32.644	32.627	32.110	32.299	32.887	32.379	32.485	32.455
S%Aspy	36.159	35.934	35.853	35.542	35.842	35.661	35.676	36.521	36.493	37.058
AsForm	0.936	0.940	0.941	0.951	0.958	0.958	0.938	0.928	0.925	0.908
FeForm	0.975	0.979	0.979	0.979	0.963	0.969	0.987	0.971	0.975	0.974
SForm	1.085	1.078	1.076	1.066	1.075	1.070	1.070	1.096	1.095	1.112

TABLE 4.17

Microprobe Analyses: Clontibret Arsenopyrite (ASP18) Part 3

VAR. / ID.	253	254	255	256	257	258	259	260	261	263
Lab No.	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204
X	5196	5186	5176	5166	5166	5176	5186	5196	5206	5226
Y	888	888	888	888	898	898	898	898	898	898
Fe	35.016	34.122	34.088	34.265	34.472	34.407	34.494	34.386	34.485	33.951
As	43.408	44.302	43.499	43.122	43.859	43.056	44.490	44.133	44.428	44.859
S	22.501	22.073	22.082	22.536	22.264	22.581	21.946	21.778	21.907	21.405
Sb	0.484	0.192	0.211	0.375	0.285	0.389	0.122	0.154	0.258	0.164
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.018	0.065	0.056	0.024	0.021	0.010	0.016	0.035	0.016	0.032
Cu	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.048	0.090	0.046	0.005	0.000	0.044	0.070	0.033	0.000	0.058
Ag	0.010	0.004	0.000	0.022	0.000	0.002	0.000	0.000	0.000	0.000
Total	101.486	100.849	99.982	100.406	100.901	100.490	101.138	100.520	101.095	100.469
As%Aspy	30.289	31.221	30.841	30.360	30.815	30.267	31.294	31.232	31.273	31.908
Fe%Aspy	32.778	32.260	32.418	32.361	32.488	32.448	32.547	32.644	32.565	32.395
S%Aspy	36.691	36.351	36.586	37.078	36.555	37.095	36.074	36.016	36.036	35.580
AsForm	0.909	0.937	0.925	0.911	0.924	0.908	0.939	0.937	0.938	0.957
FeForm	0.983	0.968	0.973	0.971	0.975	0.973	0.976	0.979	0.977	0.972
SForm	1.101	1.090	1.098	1.112	1.097	1.113	1.082	1.081	1.081	1.067

TABLE 4.17

Microprobe Analyses: Clontibret Arsenopyrite (ASP18) Part 4

VAR. / ID.	264	265	267	270	271	272	273	274	275	277
Lab No.	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214
X	5236	5246	5266	5266	5256	5246	5236	5226	5216	5196
Y	898	898	898	910	910	910	910	910	910	910
Fe	34.520	33.975	33.989	33.476	33.550	34.224	34.357	34.401	33.613	33.914
As	43.304	45.431	44.648	43.996	44.357	43.091	43.866	42.401	43.657	44.670
S	22.522	21.619	21.393	21.045	21.664	22.265	21.993	23.099	21.661	21.175
Sb	0.183	0.080	0.016	0.047	0.051	0.110	0.184	0.049	0.232	0.063
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.100	0.035	0.038	0.034	0.000	0.021	0.024	0.004	0.010	0.037
Cu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Au	0.036	0.087	0.109	0.154	0.164	0.084	0.040	0.052	0.004	0.065
Ag	0.000	0.018	0.012	0.000	0.023	0.007	0.000	0.000	0.004	0.009
Total	100.666	101.246	100.210	98.752	99.823	99.801	100.463	100.006	99.180	99.934
As%Aspy	30.389	32.069	31.812	31.832	31.662	30.526	30.998	29.737	31.290	31.962
Fe%Aspy	32.498	32.170	32.488	32.491	32.124	32.523	32.570	32.367	32.315	32.549
S%Aspy	36.935	35.662	35.620	35.582	36.136	36.858	36.319	37.857	36.280	35.405
AsForm	0.912	0.962	0.954	0.955	0.950	0.916	0.930	0.892	0.939	0.959
FeForm	0.975	0.965	0.975	0.975	0.964	0.976	0.977	0.971	0.970	0.976
SForm	1.108	1.070	1.069	1.067	1.084	1.106	1.090	1.136	1.088	1.062

TABLE 4.17

Microprobe Analyses: Clontibret Arsenopyrite (ASP18) Part 5

VAR. / ID.	278	279	281	282	283	284	285	286	287	288
Lab No.	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224
X	5186	5175	5165	5175	5185	5195	5205	5215	5225	5235
Y	910	910	921	921	921	921	921	921	921	921
Fe	34.337	34.214	34.085	34.178	34.545	34.440	34.403	34.118	33.790	34.526
As	41.994	43.645	44.270	43.732	42.678	44.643	44.876	44.462	45.771	43.854
S	22.530	22.442	22.054	22.212	22.522	21.977	21.704	21.602	21.202	21.913
Sb	0.225	0.056	0.292	0.242	0.123	0.098	0.082	0.196	0.088	0.227
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.024	0.035	0.030	0.034	0.061	0.021	0.040	0.042	0.000	0.008
Cu	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
Zn	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.000
Au	0.074	0.081	0.007	0.010	0.044	0.053	0.051	0.000	0.090	0.019
Ag	0.000	0.000	0.000	0.014	0.020	0.000	0.000	0.007	0.002	0.000
Total	99.195	100.473	100.739	100.419	99.992	101.232	101.155	100.428	100.970	100.548
As%Aspy	29.802	30.715	31.231	30.862	30.091	31.370	31.632	31.558	32.518	30.985
Fe%Aspy	32.688	32.299	32.256	32.357	32.671	32.466	32.531	32.485	32.202	32.724
S%Aspy	37.363	36.908	36.357	36.630	37.108	36.088	35.751	35.830	35.200	36.180
AsForm	0.894	0.922	0.937	0.926	0.903	0.941	0.949	0.947	0.975	0.929
FeForm	0.981	0.969	0.968	0.971	0.980	0.974	0.976	0.975	0.966	0.982
SForm	1.121	1.107	1.091	1.099	1.113	1.083	1.073	1.075	1.056	1.085

TABLE 4.17

Microprobe Analyses: Glendinning Gold-rich Arsenopyrite Part 1

VAR. / ID.	4	129	153	180	231	253	256	259	279	294
X	5073	5054	4997	5021	4905	4905	4920	4935	4923	4997
Y	9430	9478	9494	9502	9526	9534	9534	9534	9542	9542
Fe	34.323	32.926	32.114	33.699	32.531	31.013	33.801	32.817	31.716	34.361
As	43.859	42.502	40.514	42.152	44.636	45.017	43.221	43.572	44.525	41.127
S	22.092	23.283	23.692	23.350	21.527	22.329	22.451	22.207	21.732	23.945
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.000	0.100	0.042	0.189	0.131	0.113	0.005	0.014	0.317	0.069
Sb	0.043	0.118	0.203	0.124	0.049	0.092	0.114	0.057	0.070	0.129
Hg	0.849	0.219	0.281	0.390	0.382	0.256	0.273	0.313	0.211	0.263
Au	1.038	1.514	2.066	2.004	0.586	2.295	1.992	6.272	2.368	2.964
Total	102.204	100.661	98.913	101.908	99.843	101.118	101.846	105.252	100.939	102.857

TABLE 4.18

Microprobe Analyses: Glendinning Gold-rich Arsenopyrite Part 2

VAR. / ID.	301	351	372	387	392	420
X	4926	854	906	898	923	849
Y	9550	6673	6683	6693	6693	6712
Fe	32.304	29.414	34.261	32.256	33.080	34.416
As	46.080	41.509	42.817	42.692	41.655	41.263
S	20.777	23.109	22.915	22.837	22.569	22.775
Co	0.000	0.242	0.000	0.000	0.000	0.034
Ni	0.061	1.543	0.000	0.360	0.137	0.585
Sb	0.053	0.143	0.112	0.111	0.075	0.124
Hg	0.362	0.352	0.330	0.374	0.276	0.357
Au	0.611	9.277	4.838	2.371	11.378	9.474
Total	100.248	105.589	105.272	101.001	109.171	109.028

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 1

VAR. / ID.	501	502	503	504	505	506	507	508	509	510
Lab No.	1	2	3	4	5	6	7	8	9	10
X	7507	7489	7487	7459	7443	7420	7412	7392	7367	7341
Y	4802	4778	4765	4737	4708	4685	4677	4677	4685	4685
Fe	46.644	46.294	46.391	46.167	46.427	46.397	46.733	46.697	46.254	46.969
S	52.356	52.706	52.609	52.833	52.573	52.603	52.267	52.303	52.746	52.031
Sb	0.040	0.034	0.052	0.014	0.021	0.028	0.039	0.054	0.024	0.027
Hg	0.776	0.735	0.692	0.673	0.769	0.692	0.703	0.649	0.585	0.731
Au	0.059	0.060	0.057	0.071	0.056	0.052	0.049	0.061	0.033	0.061
Ag	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000
Cd	0.063	0.085	0.061	0.103	0.102	0.032	0.066	0.100	0.069	0.091
Total	99.938	99.914	99.862	99.861	99.948	99.813	99.857	99.864	99.711	99.910

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 2

VAR. / ID.	511	512	513	514	515	516	517	518	519	520
Lab No.	11	12	13	14	15	16	17	18	19	20
X	7333	7309	7278	7254	7228	7228	7341	7343	7460	7422
Y	4690	4696	4705	4723	4838	4838	4968	4966	4918	4696
Fe	46.221	47.205	46.688	46.785	46.010	46.659	46.477	47.059	46.544	46.873
S	52.779	51.795	52.312	52.215	52.990	52.341	52.523	51.941	52.456	52.127
Sb	0.031	0.046	0.021	0.023	0.047	0.061	0.036	0.038	0.051	0.018
Hg	0.725	0.749	0.653	0.700	0.650	0.691	0.650	0.748	0.647	0.639
Au	0.053	0.000	0.019	0.000	0.027	0.030	0.009	0.000	0.046	0.001
Ag	0.000	0.000	0.010	0.000	0.000	0.003	0.003	0.000	0.000	0.000
Cd	0.083	0.029	0.038	0.062	0.056	0.075	0.027	0.064	0.033	0.094
Total	99.892	99.824	99.741	99.785	99.780	99.860	99.725	99.850	99.777	99.752

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 3

VAR. / ID.	521	522	523	524	525	526	527	528	529	530
Lab No.	21	22	23	24	25	26	27	28	29	30
X	7392	7407	7374	7359	7344	7329	7432	7417	7402	7382
Y	4696	4696	4696	4696	4696	4696	4716	4716	4716	4716
Fe	37.757	39.336	45.428	39.120	39.145	39.445	39.831	39.382	42.451	40.528
S	61.243	59.664	53.572	59.880	59.855	59.555	59.169	59.618	56.549	58.472
Sb	0.046	0.028	0.006	0.040	0.064	0.019	0.047	0.045	0.011	0.071
Hg	0.696	0.596	0.579	0.589	0.672	0.611	0.639	0.762	0.611	0.567
Au	0.029	0.022	0.000	0.057	0.039	0.042	0.044	0.052	0.022	0.041
Ag	0.007	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000
Cd	0.043	0.072	0.153	0.061	0.053	0.123	0.134	0.099	0.129	0.158
Total	99.821	99.718	99.738	99.747	99.833	99.795	99.864	99.958	99.773	99.837

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 4

VAR. / ID.	531	532	533	534	535	536	537	538	539	540
Lab No.	31	32	33	34	35	36	37	38	39	40
X	7367	7352	7341	7320	7305	7285	7447	7432	7412	7392
Y	4716	4716	4716	4716	4716	4716	4736	4736	4736	4736
Fe	39.094	38.674	38.897	38.398	39.166	39.960	39.264	38.540	39.288	48.047
S	59.906	60.326	60.103	60.602	59.834	59.040	59.736	60.460	59.712	50.953
Sb	0.035	0.008	0.042	0.019	0.044	0.057	0.032	0.044	0.036	0.030
Hg	0.576	0.686	0.728	0.694	0.613	0.640	0.579	0.779	0.591	0.525
Au	0.027	0.020	0.055	0.034	0.014	0.042	0.023	0.048	0.008	0.032
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cd	0.137	0.080	0.163	0.066	0.076	0.048	0.037	0.116	0.054	0.340
Total	99.775	99.794	99.988	99.813	99.747	99.787	99.671	99.987	99.689	99.927

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 5

VAR. / ID.	541	542	543	544	545	546	547	548	549	550
Lab No.	41	42	43	44	45	46	47	48	49	50
X	7373	7355	7305	7286	7267	7248	7463	7443	7424	7405
Y	4736	4736	4736	4736	4736	4736	4756	4756	4756	4756
Fe	41.141	37.914	37.735	38.717	40.070	39.903	41.060	38.911	40.962	41.198
S	57.859	61.086	61.265	60.283	58.930	59.097	57.940	60.089	58.038	57.802
Sb	0.022	0.035	0.021	0.010	0.058	0.049	0.016	0.040	0.044	0.053
Hg	0.620	0.725	0.628	0.645	0.645	0.713	0.606	0.650	0.579	0.501
Au	0.015	0.012	0.029	0.023	0.040	0.001	0.063	0.019	0.029	0.074
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cd	0.096	0.057	0.034	0.026	0.132	0.116	0.243	0.053	0.119	0.063
Total	99.753	99.829	99.712	99.704	99.875	99.879	99.928	99.762	99.771	99.691

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 6

VAR. / ID.	551	552	553	554	555	556	557	559	561	562
Lab No.	51	52	53	54	55	56	57	59	61	62
X	7381	7358	7332	7313	7291	7272	7253	7478	7414	7439
Y	4756	4756	4756	4756	4756	4756	4756	4776	4776	4776
Fe	40.460	41.014	40.945	40.306	38.931	38.286	39.677	38.870	40.340	39.656
S	58.540	57.986	58.055	58.694	60.069	60.714	59.323	60.130	58.660	59.344
Sb	0.021	0.053	0.039	0.048	0.060	0.055	0.048	0.045	0.061	0.060
Hg	0.559	0.523	0.669	0.709	0.725	0.701	0.765	0.723	0.667	0.635
Au	0.047	0.041	0.021	0.059	0.029	0.040	0.020	0.000	0.040	0.023
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cd	0.093	0.128	0.090	0.086	0.066	0.065	0.080	0.034	0.075	0.000
Total	99.720	99.745	99.819	99.902	99.880	99.861	99.913	99.802	99.843	99.718

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 7

VAR. / ID.	563	564	565	566	567	568	569	570	571	572
Lab No.	63	64	65	66	67	68	69	70	71	72
X	7395	7357	7337	7317	7297	7278	7250	7232	7487	7463
Y	4776	4776	4776	4776	4776	4776	4776	4776	4798	4798
Fe	41.564	41.110	40.563	41.283	40.697	40.345	38.928	40.678	43.444	38.822
S	57.436	57.890	58.437	57.717	58.303	58.655	60.072	58.322	55.556	60.178
Sb	0.063	0.018	0.080	0.026	0.034	0.040	0.033	0.052	0.016	0.022
Hg	0.787	0.557	0.618	0.611	0.635	0.672	0.633	0.503	0.635	0.603
Au	0.037	0.045	0.050	0.060	0.011	0.043	0.037	0.008	0.005	0.018
Ag	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.000
Cd	0.077	0.078	0.035	0.121	0.176	0.237	0.056	0.103	0.594	0.077
Total	99.967	99.698	99.783	99.818	99.856	99.992	99.759	99.669	100.251	99.720

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 8

VAR. / ID.	573	574	575	576	577	578	579	580	581	582
Lab No.	73	74	75	76	77	78	79	80	81	82
X	7444	7395	7408	7377	7357	7328	7309	7289	7266	7243
Y	4798	4793	4804	4800	4800	4800	4800	4800	4800	4800
Fe	40.554	41.762	40.457	40.553	40.870	42.450	39.602	40.595	39.602	39.305
S	58.446	57.238	58.543	58.447	58.130	56.550	59.398	58.405	59.398	59.695
Sb	0.056	0.075	0.024	0.028	0.041	0.051	0.049	0.037	0.034	0.038
Hg	0.613	0.569	0.579	0.650	0.628	0.554	0.586	0.589	0.704	0.672
Au	0.076	0.028	0.044	0.000	0.039	0.026	0.022	0.046	0.048	0.009
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cd	0.081	0.071	0.068	0.125	0.059	0.030	0.055	0.225	0.248	0.103
Total	99.826	99.743	99.715	99.803	99.767	99.661	99.712	99.897	100.034	99.822

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 9

VAR. / ID.	583	584	585	587	588	590	591	592	593	594
Lab No.	83	84	85	87	88	90	91	92	93	94
X	7226	7496	7476	7436	7416	7359	7338	7316	7297	7276
Y	4800	4825	4825	4825	4831	4825	4825	4825	4825	4825
Fe	39.907	38.049	39.661	40.563	38.872	40.595	43.495	39.876	39.374	37.988
S	59.093	60.951	59.339	58.437	60.128	58.405	55.505	59.124	59.626	61.012
Sb	0.046	0.048	0.028	0.038	0.012	0.054	0.077	0.059	0.050	0.016
Hg	0.698	0.647	0.647	0.716	0.630	0.554	0.630	0.628	0.657	0.674
Au	0.048	0.058	0.032	0.015	0.071	0.040	0.016	0.073	0.026	0.011
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013
Cd	0.126	0.065	0.110	0.093	0.041	0.044	0.163	0.068	0.010	0.043
Total	99.918	99.818	99.817	99.862	99.754	99.692	99.886	99.828	99.743	99.757

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 10

VAR. / ID.	595	596	597	598	600	601	602	603	604	605
Lab No.	95	96	97	98	100	101	102	103	104	105
X	7254	7462	7428	7391	7307	7276	7245	7475	7450	7429
Y	4825	4855	4855	4855	4855	4855	4855	4887	4887	4887
Fe	38.192	38.519	39.854	40.829	39.999	42.633	38.943	40.040	38.145	38.411
S	60.808	60.481	59.146	58.171	59.001	56.367	60.057	58.960	60.855	60.589
Sb	0.041	0.017	0.039	0.037	0.048	0.038	0.031	0.018	0.025	0.040
Hg	0.630	0.696	0.596	0.736	0.679	0.574	0.638	0.640	0.598	0.677
Au	0.039	0.050	0.041	0.059	0.000	0.061	0.044	0.005	0.036	0.051
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000
Cd	0.037	0.075	0.069	0.043	0.024	0.312	0.031	0.103	0.101	0.040
Total	99.747	99.838	99.745	99.875	99.751	99.985	99.748	99.766	99.760	99.808

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1) Part 11

VAR. / ID.	606	607	608	609	610	611	612	613	614	615
Lab No.	106	107	108	109	110	111	112	113	114	115
X	7399	7369	7339	7319	7297	7267	7244	7437	7416	7379
Y	4887	4887	4887	4887	4887	4887	4887	4916	4916	4916
Fe	39.864	43.706	40.413	40.226	38.637	37.147	39.682	39.174	38.623	37.964
S	59.136	55.294	58.587	58.774	60.363	61.853	59.318	59.826	60.377	61.036
Sb	0.046	0.018	0.032	0.026	0.042	0.063	0.040	0.065	0.040	0.038
Hg	0.552	0.677	0.640	0.738	0.611	0.703	0.611	0.779	0.645	0.672
Au	0.037	0.008	0.015	0.031	0.076	0.034	0.045	0.036	0.056	0.040
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cd	0.048	0.476	0.182	0.096	0.062	0.016	0.055	0.073	0.040	0.000
Total	99.683	100.179	99.869	99.891	99.791	99.816	99.751	99.953	99.781	99.750

Microprobe Analyses: Glendinning Pyrite (PYTE1)

Part 12

VAR. / ID.	616	617	618	619	620	621	622	623	624	625
Lab No.	116	117	118	119	120	121	122	123	124	125
X	7357	7340	7315	7422	7261	7422	7384	7366	7351	7328
Y	4916	4916	4916	4941	4916	4941	4941	4941	4941	4941
Fe	41.181	42.342	38.975	39.097	39.649	39.779	38.553	38.702	38.462	37.911
S	57.819	56.658	60.025	59.903	59.351	59.221	60.447	60.298	60.538	61.089
Sb	0.057	0.033	0.028	0.039	0.042	0.026	0.045	0.036	0.043	0.040
Hg	0.704	0.576	0.652	0.669	0.610	0.613	0.611	0.743	0.635	0.640
Au	0.043	0.008	0.017	0.000	0.017	0.033	0.035	0.046	0.022	0.033
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cd	0.152	0.119	0.093	0.062	0.098	0.107	0.038	0.087	0.067	0.034
Total	99.956	99.736	99.790	99.770	99.767	99.779	99.729	99.912	99.767	99.747

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1)

Part 13

VAR. / ID.	626	627	628	629	631	632	633	634	635	636
Lab No.	126	127	128	129	131	132	133	134	135	136
X	7301	7346	7336	7340	7231	7138	7138	7138	7136	7136
Y	4941	4961	4961	4961	3732	4083	4091	4098	4106	4061
Fe	42.686	41.617	38.680	39.682	40.366	41.725	40.653	40.743	40.216	40.677
S	56.314	57.383	60.320	59.318	58.634	57.275	58.347	58.257	58.784	58.323
Sb	0.035	0.068	0.033	0.020	0.021	0.045	0.050	0.028	0.027	0.031
Hg	0.599	0.630	0.576	0.730	0.638	0.633	0.691	0.611	0.748	0.669
Au	0.045	0.057	0.047	0.022	0.073	0.037	0.037	0.064	0.048	0.045
Ag	0.000	0.000	0.000	0.000	0.000	0.018	0.000	0.000	0.015	0.002
Cd	0.247	0.071	0.025	0.122	0.110	0.095	0.091	0.104	0.103	0.098
Total	99.926	99.826	99.681	99.894	99.842	99.828	99.869	99.807	99.941	99.845

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1)

Part 14

VAR. / ID.	637	638	640	641	642	643	644	645	646	647
Lab No.	137	138	140	141	142	143	144	145	146	147
X	7132	7127	7119	7131	7126	7121	7116	7116	7121	7126
Y	4056	4054	4056	4061	4061	4061	4061	4066	4066	4066
Fe	42.511	42.491	40.764	40.503	39.875	39.433	42.322	38.523	39.921	40.413
S	56.489	56.509	58.236	58.497	59.125	59.567	56.678	60.477	59.079	58.587
Sb	0.030	0.043	0.045	0.053	0.012	0.009	0.028	0.000	0.032	0.041
Hg	0.589	0.630	0.767	0.691	0.701	0.630	0.657	0.733	0.667	0.574
Au	0.058	0.018	0.014	0.039	0.042	0.020	0.017	0.065	0.047	0.071
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cd	0.103	0.081	0.236	0.121	0.114	0.098	0.218	0.089	0.150	0.132
Total	99.780	99.772	100.062	99.904	99.869	99.757	99.920	99.887	99.896	99.818

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1)

Part 15

VAR. / ID.	648	649	650	651	652	653	654	655	656	657
Lab No.	148	149	150	151	152	153	154	155	156	157
X	7131	7136	7141	7145	7145	7137	7132	7127	7122	7117
Y	4066	4066	4066	4066	4071	4071	4071	4071	4071	4071
Fe	39.754	40.869	41.038	41.087	40.973	40.428	41.297	40.644	40.464	41.707
S	59.246	58.131	57.962	57.913	58.027	58.572	57.703	58.356	58.536	57.293
Sb	0.048	0.069	0.036	0.047	0.032	0.030	0.054	0.020	0.052	0.074
Hg	0.577	0.603	0.584	0.593	0.572	0.623	0.598	0.721	0.650	0.662
Au	0.046	0.039	0.031	0.013	0.076	0.016	0.000	0.040	0.035	0.007
Ag	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cd	0.065	0.091	0.063	0.131	0.108	0.055	0.104	0.098	0.091	0.312
Total	99.758	99.802	99.714	99.784	99.788	99.724	99.756	99.879	99.828	100.055

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE1)

Part 16

VAR. / ID.	658	659	660	661	662	663	664	665	666	667
Lab No.	158	159	160	161	162	163	164	165	166	167
X	7113	7123	7128	7133	7139	7145	7143	7138	7133	7128
Y	4081	4081	4081	4081	4081	4081	4087	4087	4087	4087
Fe	40.337	41.207	39.989	41.117	41.522	41.054	42.522	41.839	42.050	39.577
S	58.663	57.793	59.011	57.883	57.478	57.946	56.478	57.161	56.950	59.423
Sb	0.072	0.006	0.041	0.039	0.049	0.033	0.049	0.027	0.036	0.044
Hg	0.615	0.637	0.596	0.642	0.664	0.655	0.579	0.682	0.579	0.694
Au	0.018	0.017	0.028	0.018	0.000	0.039	0.003	0.041	0.007	0.056
Ag	0.020	0.000	0.000	0.001	0.000	0.000	0.002	0.000	0.000	0.000
Cd	0.111	0.192	0.065	0.046	0.079	0.097	0.113	0.122	0.087	0.046
Total	99.836	99.852	99.730	99.746	99.792	99.824	99.746	99.872	99.709	99.840

Microprobe Analyses: Glendinning Pyrite (PYTE1)

Part 17

VAR. / ID.	668	669	670	671	672	673	674	675	676	677
Lab No.	168	169	170	171	172	173	174	175	176	177
X	7122	7117	7113	7126	7131	7136	7141	7146	7146	7141
Y	4087	4087	4087	4095	4095	4095	4095	4095	4100	4100
Fe	41.359	41.036	40.588	40.603	40.547	41.656	40.380	42.292	40.487	41.456
S	57.641	57.964	58.412	58.397	58.453	57.344	58.620	56.708	58.513	57.544
Sb	0.030	0.044	0.034	0.028	0.051	0.038	0.034	0.055	0.054	0.025
Hg	0.572	0.545	0.643	0.738	0.520	0.596	0.664	0.630	0.660	0.762
Au	0.039	0.056	0.088	0.037	0.029	0.033	0.019	0.020	0.035	0.027
Ag	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000
Cd	0.145	0.146	0.207	0.151	0.074	0.150	0.084	0.061	0.114	0.075
Total	99.786	99.791	99.972	99.954	99.674	99.817	99.801	99.773	99.863	99.889

Microprobe Analyses: Glendinning Pyrite (PYTE1)

Part 18

VAR. / ID.	678	679	680	681	682	683	684
Lab No.	178	179	180	181	182	183	185
X	7136	7131	7126	7121	7135	7140	7144
Y	4100	4100	4100	4100	4105	4105	4105
Fe	39.718	39.840	39.704	40.025	39.141	40.540	40.990
S	59.282	59.160	59.296	58.975	59.859	58.460	58.010
Sb	0.020	0.022	0.046	0.055	0.006	0.045	0.029
Hg	0.691	0.684	0.679	0.603	0.588	0.684	0.660
Au	0.036	0.032	0.048	0.030	0.020	0.016	0.064
Ag	0.000	0.000	0.000	0.016	0.000	0.000	0.000
Cd	0.073	0.079	0.060	0.061	0.048	0.138	0.132
Total	99.820	99.817	99.833	99.765	99.662	99.883	99.885

TABLE 4.19

Microprobe Analyses: Glendinning Pyrite (PYTE2) Part 1

VAR. / ID.	1	2	3	4	5	6	7	8	9	10
Fe	46.474	46.145	44.315	42.865	42.985	44.490	45.757	45.256	45.203	45.271
S	52.526	54.211	52.221	50.680	50.859	52.992	51.686	50.851	52.702	51.718
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.023	0.117	0.021	0.023	0.039	0.009	0.042	0.014	0.067	0.028
Cu	0.000	0.061	0.043	0.027	0.078	0.078	0.024	0.053	0.025	0.043
As	2.685	0.333	1.177	0.583	2.759	2.371	3.511	5.366	4.001	4.256
Se	0.006	0.010	0.024	0.021	0.000	0.003	0.025	0.028	0.022	0.013
Cd	0.098	0.047	0.431	1.874	0.106	0.051	0.012	0.147	0.093	0.143
Sb	0.000	0.054	0.044	0.084	0.201	0.045	0.026	0.046	0.011	0.041
Hg	0.000	1.053	0.907	1.093	0.798	0.840	0.949	0.713	0.882	0.985
Au	0.012	0.000	0.197	0.055	0.000	0.000	0.000	0.090	0.040	0.053
Total	101.824	102.031	99.381	97.304	97.827	100.880	102.032	102.564	103.045	102.550

TABLE 4.20

Microprobe Analyses: Glendinning Pyrite (PYTE2) Part 2

VAR. / ID.	11	12	13	14	15	16	17	18	19	20
Fe	44.947	44.971	43.933	44.347	45.197	45.274	45.212	44.552	45.024	45.549
S	52.916	51.106	50.538	51.168	51.647	51.986	51.891	52.000	52.660	51.902
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.008	0.029	0.100	0.054	0.282	0.057	0.000	0.091	0.064	0.000
Cu	0.072	0.050	0.062	0.000	0.003	0.011	0.000	0.000	0.004	0.026
As	2.952	3.585	5.393	4.915	4.163	3.339	3.308	2.613	3.145	3.244
Se	0.015	0.011	0.019	0.028	0.006	0.007	0.019	0.026	0.001	0.017
Cd	0.100	0.167	0.092	0.050	0.130	0.004	0.099	0.061	0.165	0.000
Sb	0.000	0.000	0.000	0.031	0.019	0.029	0.000	0.006	0.000	0.049
Hg	0.959	0.952	0.927	0.863	0.898	0.745	0.899	0.869	0.904	0.862
Au	0.013	0.000	0.078	0.093	0.000	0.044	0.000	0.049	0.038	0.004
Total	101.983	100.871	101.141	101.549	102.344	101.496	101.427	100.993	102.005	101.651

Microprobe Analyses: Glendinning Pyrite (PYTE2) Part 3

VAR. / ID.	21	22	23	24	29	30	31	32	33
Fe	44.419	45.514	45.665	46.085	46.259	45.620	45.244	45.593	43.992
S	51.719	52.443	52.315	52.218	52.233	51.210	51.233	50.448	50.356
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.088	0.028	0.072	0.072	0.011	0.000	0.000	0.030	0.005
Cu	0.170	0.019	0.010	0.021	0.000	0.030	0.108	0.000	0.074
As	2.467	3.025	2.609	2.796	2.540	4.017	4.606	4.825	4.913
Se	0.000	0.014	0.022	0.000	0.003	0.013	0.000	0.014	0.002
Cd	0.149	0.064	0.098	0.142	0.031	0.017	0.375	0.000	0.063
Sb	0.013	0.028	0.015	0.050	0.000	0.018	0.011	0.034	0.142
Hg	0.733	0.701	0.885	0.836	0.854	0.904	0.884	0.892	0.842
Au	0.000	0.000	0.026	0.000	0.030	0.000	0.051	0.032	0.051
Total	99.759	101.837	101.717	102.219	101.962	101.830	102.513	101.868	100.440

Microprobe Analyses: Glendinning Stibnite (STIB1) Part 1

VAR. / ID.	St1	St2	St3	St4	St5	St6
Sb	70.247	70.817	70.720	71.361	71.234	70.737
S	27.521	27.132	27.381	27.341	27.198	27.430
Fe	0.052	0.000	0.005	0.032	0.008	0.000
Co	0.000	0.000	0.011	0.000	0.016	0.000
Ni	0.010	0.000	0.000	0.016	0.008	0.020
Cu	0.016	0.000	0.016	0.000	0.000	0.000
Zn	0.124	0.048	0.084	0.016	0.044	0.028
As	0.313	0.000	0.108	0.026	0.015	0.000
Au	0.000	0.000	0.000	0.000	0.000	0.000
Ag	0.000	0.000	0.000	0.003	0.018	0.000
Total	98.283	97.997	98.326	98.794	98.541	98.214

TABLE 4.21

Microprobe Analyses: Glendinning Stibnite (STIB2) Part 1

VAR. / ID.	St7	St8	St9	St10	St11	St12	St13
Sb	68.380	65.564	68.161	68.445	64.726	65.861	67.046
S	26.780	25.780	27.081	27.220	25.720	26.108	26.374
Fe	0.333	1.736	0.461	0.400	2.476	1.988	0.527
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.146	0.110	0.102	0.145	0.144	0.102	0.140
Cu	0.180	0.140	0.130	0.120	0.130	0.160	0.150
Zn	0.170	0.113	0.197	0.183	0.214	0.162	0.160
As	2.597	3.886	2.562	2.559	4.723	4.111	2.990
Au	0.090	0.064	0.063	0.075	0.063	0.098	0.075
Ag	0.038	0.047	0.056	0.042	0.042	0.034	0.034
Total	98.719	97.443	98.811	99.190	98.241	98.621	97.499

TABLE 4.22

Microprobe Analyses: Clontibret Stibnite (STIB3) Part 1

VAR. / ID.	160	125	139	140	161	181	182
Sb	68.445	68.662	68.380	65.780	64.726	65.861	67.046
S	27.222	27.209	26.782	25.564	25.720	26.108	26.274
Fe	0.400	0.273	0.333	1.736	2.476	1.988	0.527
Co	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ni	0.145	0.098	0.146	0.110	0.144	0.102	0.140
Cu	0.121	0.141	0.183	0.143	0.133	0.157	0.153
Zn	0.183	0.140	0.170	0.113	0.214	0.162	0.160
As	2.559	2.281	2.597	3.886	4.723	4.111	2.690
Au	0.075	0.055	0.090	0.046	0.069	0.098	0.075
Ag	0.042	0.051	0.038	0.047	0.042	0.034	0.034
Total	99.193	98.910	98.718	97.442	98.240	98.621	97.099

TABLE 4.23

Microprobe Analyses: Glendinning Sphalerites (SPT1) Part 1

VAR. / ID.	A1	A2	A3	B1	C1	C2	D1	E1	E2	F1
Zn	65.689	66.288	66.006	65.152	65.877	65.943	65.368	66.294	65.584	65.383
S	32.639	32.744	32.667	32.836	32.766	32.805	32.785	32.700	32.596	32.117
Fe	0.110	0.097	0.109	0.074	0.543	0.397	0.194	0.176	0.243	0.307
Cu	0.590	0.115	0.045	0.052	0.143	0.148	0.034	0.000	0.000	0.404
As	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.056
Sb	0.084	0.048	0.016	0.034	0.122	0.105	0.032	0.054	0.031	0.334
Cd	0.202	0.275	0.332	0.235	0.142	0.060	0.175	0.177	0.185	0.686
Ag	0.067	0.059	0.075	0.053	0.000	0.000	0.000	0.020	0.000	0.138
Pb	0.199	0.100	0.136	0.133	0.169	0.830	0.236	0.336	0.209	0.557
Total	99.049	99.726	99.386	98.557	99.763	99.540	98.824	99.755	98.859	99.981

Microprobe Analyses: Glendinning Sphalerites (SPTe1) Part 2

VAR. / ID.	F2	G1
Zn	66.085	65.087
S	32.875	32.654
Fe	0.480	0.421
Cu	0.441	0.000
As	0.069	0.088
Sb	0.292	0.065
Cd	0.583	0.000
Ag	0.156	0.009
Pb	0.474	0.253
Total	101.455	98.576

TABLE 4.24

Microprobe Analyses: Glendinning Tetrahedrite (TET1) Part 1

VAR. / ID.	T1	T2	T3	T4	T5	T6	T7
Cu	38.821	38.228	39.506	40.223	40.635	39.920	41.454
As	15.744	15.062	15.164	13.937	14.507	14.849	15.639
S	27.389	26.746	27.199	26.638	26.892	26.976	27.226
Zn	8.190	7.963	7.662	8.186	8.268	7.995	8.454
Sb	7.032	9.329	8.149	8.971	9.500	8.356	7.848
Fe	2.436	2.207	1.473	0.131	0.253	0.411	0.472
Ag	0.213	0.144	0.239	0.190	0.208	0.621	0.104
Cd	0.030	0.117	0.334	0.203	0.000	0.000	0.295
Tl	0.000	0.235	0.103	0.190	0.161	0.248	0.185
Pb	0.329	0.248	0.640	0.211	0.290	0.362	0.040
Total	100.183	100.279	100.469	98.882	100.713	99.739	101.676

TABLE 4.25

XRF Analyses: Marchburn Formation (B1)

Part 1

VAR. / ID.	AX54	AX156	AX214	AX215	AX216	AX217	AX224	AX292	AX293	AX294
SiO2	59.43	62.58	60.92	63.28	61.33	62.76	61.76	63.60	62.25	66.66
Al2O3	14.77	13.03	14.42	13.85	15.12	14.08	12.78	13.87	14.07	11.79
TiO2	1.14	1.15	1.13	1.29	1.00	0.98	1.14	1.09	1.11	1.04
Fe2O3	3.17	3.43	2.03	2.54	2.52	1.52	3.51	1.05	1.09	1.24
FeO	4.71	4.39	5.45	4.65	3.92	4.82	4.55	5.51	5.68	4.61
MgO	3.32	4.27	4.18	4.10	4.08	3.18	4.03	3.60	3.56	2.92
CaO	5.20	1.58	2.10	1.67	2.20	2.60	2.36	1.88	2.06	2.61
Na2O	3.80	4.20	4.66	3.90	4.12	5.24	3.95	4.26	4.09	4.01
K2O	0.69	0.81	1.25	1.46	1.98	1.05	1.51	1.44	1.51	0.90
MnO	0.12	0.11	0.12	0.07	0.09	0.10	0.11	0.09	0.10	0.08
P2O5	0.27	0.21	0.24	0.17	0.20	0.22	0.32	0.22	0.33	0.16
CO2	1.68	1.99	0.95	0.13	0.47	0.17	2.01	1.11	1.26	3.25
LOI	1.64	1.49	2.28	2.90	2.36	2.58	1.47	1.51	2.50	0.69
Total	99.94	99.24	99.75	100.01	99.39	99.30	99.50	99.23	99.61	99.96

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XRF Analyses: Marchburn Formation (B1)

Part 2

VAR. / ID.	A 232	A 233	A 234	A 237	N 241	N 292	N 294	A 297	A 299	W 379
SiO2	57.97	56.97	54.86	51.78	57.54	53.32	54.52	58.90	65.35	57.67
Al2O3	14.24	15.04	14.99	14.22	11.96	14.43	14.47	11.54	13.41	12.45
TiO2	1.35	1.47	1.71	1.39	0.95	1.47	1.55	0.87	0.98	1.23
Fe2O3	2.45	1.69	2.35	1.57	1.27	3.45	3.93	0.53	2.28	1.77
FeO	6.17	6.73	7.26	7.75	6.58	5.98	5.54	3.86	3.99	6.68
MgO	6.42	5.53	6.56	8.38	4.39	6.86	7.14	2.74	3.24	7.30
CaO	1.64	2.48	1.90	3.65	5.60	2.81	3.04	8.73	1.32	4.52
Na2O	3.65	3.81	3.89	3.16	2.60	2.99	3.46	2.76	3.92	2.96
K2O	1.33	1.61	1.26	0.95	1.75	1.62	0.93	1.95	1.52	1.10
MnO	0.12	0.10	0.12	0.14	0.14	0.11	0.12	0.14	0.09	0.14
P2O5	0.18	0.20	0.20	0.17	0.37	0.20	0.17	0.19	0.19	0.16
CO2	0.49	0.35	0.40	2.24	2.70	1.71	0.10	0.95	1.08	0.45
LOI	3.43	3.60	3.80	4.17	3.54	3.92	3.82	3.49	2.20	2.70
Total	99.44	99.58	99.30	99.57	99.39	98.87	98.79	96.65	99.57	99.13

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TABLE 4.26

XRF Analyses: Marchburn Formation (B1)

Part 3

VAR. / ID.	W 380	N 413	N 426	C 472
SiO2	58.14	52.73	62.17	63.27
Al2O3	12.93	9.88	13.68	14.31
TiO2	1.15	1.07	1.17	1.06
Fe2O3	3.49	1.73	3.27	2.02
FeO	4.74	5.96	4.47	4.64
MgO	7.23	7.27	3.99	3.16
CaO	3.04	10.88	2.85	1.14
Na2O	3.22	1.96	3.98	5.39
K2O	1.38	0.47	1.09	0.74
MnO	0.12	0.12	0.11	0.34
P2O5	0.18	0.14	0.28	0.23
CO2	0.15	0.42	0.67	2.62
LOI	3.36	6.92	2.31	1.06
Total	99.13	99.55	100.04	99.98

TABLE 4.26

XRF Analyses: Afton Formation (B3)

Part 1

VAR. / ID.	AX62	AX63	AX131	AX132	AX133	AX134	AX135	AX136	AX140	AX141
SiO2	65.52	69.61	69.25	74.34	67.57	76.02	69.61	64.65	71.97	66.86
Al2O3	10.46	13.05	12.26	10.92	13.51	10.40	11.88	11.90	12.38	13.52
TiO2	0.81	1.02	0.91	0.81	0.82	0.99	0.95	0.86	0.81	1.03
Fe2O3	0.43	0.30	1.37	0.53	0.84	1.02	1.27	0.96	0.38	2.09
FeO	4.31	5.61	4.74	3.95	4.88	3.31	4.49	5.26	4.50	4.58
MgO	2.61	2.83	2.81	2.37	3.26	1.88	3.08	4.40	2.08	3.35
CaO	5.61	0.53	0.80	0.42	0.79	0.47	0.67	2.48	0.70	0.81
Na2O	2.04	2.93	2.63	2.71	2.55	0.69	2.34	2.13	3.04	2.90
K2O	1.15	1.39	1.94	1.15	2.08	1.23	1.50	2.00	1.37	1.42
MnO	0.10	0.08	0.09	0.05	0.09	0.04	0.07	0.08	0.05	0.07
P2O5	0.12	0.16	0.15	0.12	0.15	0.18	0.14	0.24	0.13	0.14
CO2	3.34	1.87	0.55	1.99	1.96	1.37	2.06	0.24	0.67	0.42
LOI	3.20	0.41	2.42	0.29	1.06	1.11	1.29	4.26	1.54	2.84
Total	99.70	99.79	99.92	99.65	99.56	98.71	99.35	99.46	99.62	100.03

XRF Analyses: Afton Formation (B3)

Part 2

VAR. / ID.	AX170	AX171	AX172	AX202	AX204	AX222	AX223	AX296	AX298	A 222
SiO2	65.78	67.29	65.82	65.80	73.86	75.14	72.21	68.28	76.99	69.58
Al2O3	11.10	10.95	11.06	11.85	11.72	9.22	10.38	13.38	9.16	11.84
TiO2	0.91	0.79	0.86	1.00	0.91	0.70	0.75	1.00	0.56	0.95
Fe2O3	0.65	0.79	1.73	2.11	0.80	0.89	1.25	1.01	0.16	0.74
FeO	4.64	4.32	4.39	4.05	4.02	3.75	4.02	5.01	3.13	5.43
MgO	3.74	3.19	4.13	3.55	1.98	3.67	3.91	2.73	1.79	2.76
CaO	3.56	3.57	2.58	2.59	0.51	0.14	1.10	0.37	1.98	1.42
Na2O	2.10	1.97	2.24	1.89	2.60	1.64	1.55	2.96	2.66	2.35
K2O	1.56	1.62	1.59	1.76	1.35	1.45	1.24	1.73	0.96	1.46
MnO	0.07	0.17	0.07	0.06	0.05	0.04	0.04	0.08	0.06	0.07
P2O5	0.16	0.12	0.16	0.18	0.15	0.10	0.11	0.15	0.09	0.17
CO2	4.15	4.15	3.47	3.20	0.55	0.10	1.80	0.85	1.84	1.26
LOI	1.27	1.11	1.44	1.37	1.58	2.44	1.71	1.63	0.86	1.76
Total	99.69	100.04	99.54	99.41	100.08	99.28	100.07	99.18	100.24	99.79

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TABLE 4.27

XRF Analyses: Afton Formation (B3)

Part 3

VAR. / ID.	E 452	K 462	A 463	N 486
SiO2	72.03	62.22	66.01	87.62
Al2O3	10.27	11.63	9.15	4.95
TiO2	0.82	0.82	0.55	0.21
Fe2O3	1.51	0.78	1.26	0.41
FeO	3.42	5.38	2.83	1.89
MgO	2.10	3.95	2.69	1.18
CaO	1.72	4.96	6.27	0.16
Na2O	2.52	1.82	0.85	0.30
K2O	1.37	2.10	1.97	1.01
MnO	0.07	0.09	0.09	0.05
P2O5	0.15	0.23	0.11	0.03
CO2	2.20	1.92	0.08	0.34
LOI	1.24	3.74	8.56	1.99
Total	99.42	99.64	100.43	100.14

TABLE 4.27

XRF Analyses: Blackcraig Formation (B5)

Part 1

VAR. / ID.	AX288	AX289	AX290	A 19	A 20	A 21	A 45	A 487
SiO2	70.41	57.75	57.69	60.79	56.36	56.14	63.65	63.98
Al2O3	12.47	14.10	13.95	13.89	15.41	15.97	12.50	13.56
TiO2	0.88	1.19	1.40	1.16	1.26	1.22	1.20	0.95
Fe2O3	0.73	1.94	1.72	2.31	2.56	2.64	2.61	1.08
FeO	4.32	5.68	6.49	5.79	7.06	6.93	5.21	5.79
MgO	2.57	6.18	6.48	3.74	5.09	4.61	3.54	3.17
CaO	0.63	3.02	3.24	3.43	2.52	2.38	4.03	2.57
Na2O	2.98	4.01	3.77	3.13	2.88	3.07	3.35	2.22
K2O	1.32	1.19	1.14	1.37	1.39	1.79	1.03	2.53
MnO	0.06	0.10	0.13	0.11	0.12	0.11	0.11	0.11
P2O5	0.14	0.15	0.17	0.12	0.14	0.14	0.12	0.29
CO2	0.68	0.31	0.62	0.39	0.42	0.30	0.12	1.19
LOI	2.51	3.48	2.32	2.30	3.50	3.63	2.14	2.39
Total	99.70	99.10	99.12	98.53	98.71	98.93	99.61	99.83

TABLE 4.28

XRF Analyses: Scar Formation (B7)

Part 1

VAR. / ID.	AX111	AX112	AX117	AX118	AX119	AX124	AX157	AX158	AX159	AX180
SiO2	60.42	55.88	55.65	58.46	57.58	61.63	60.43	64.59	57.74	57.78
Al2O3	14.45	14.82	15.55	15.28	16.32	15.10	14.91	13.43	14.39	14.76
TiO2	0.73	0.82	0.89	0.86	0.82	0.78	0.80	0.76	0.89	0.88
Fe2O3	0.42	3.26	2.07	2.27	1.08	1.88	2.03	1.79	2.42	1.52
FeO	5.39	4.09	5.30	4.81	5.57	4.15	4.07	3.82	5.05	5.50
MgO	5.05	5.34	4.77	4.83	4.89	4.49	4.97	4.44	5.33	5.18
CaO	3.30	6.04	5.04	5.36	4.19	3.11	3.39	3.03	5.30	4.69
Na2O	4.03	3.20	2.92	3.39	5.16	3.14	2.61	3.80	3.26	4.10
K2O	1.70	1.09	1.86	1.74	1.47	2.27	3.05	1.48	1.52	1.23
MnO	0.09	0.12	0.12	0.11	0.10	0.06	0.10	0.09	0.12	0.12
P2O5	0.21	0.16	0.19	0.18	0.19	0.17	0.18	0.12	0.20	0.25
CO2	1.97	2.97	0.99	1.32	0.56	0.44	0.12	0.28	0.36	0.23
LOI	1.77	2.31	2.40	1.18	1.85	2.44	3.20	2.48	3.09	2.52
Total	99.53	100.10	97.75	99.79	99.78	99.66	99.86	100.05	99.67	98.76

TABLE 4.29

XRF Analyses: Scar Formation (B7)

Part 2

VAR. / ID.	AX181	AX190	AX191	AX200	AX210	AX211	AX213	AX275	AX277	AX278
SiO2	58.81	59.41	61.51	58.83	58.88	64.10	59.41	63.76	60.67	64.38
Al2O3	14.65	14.62	12.38	14.03	15.15	13.54	15.32	12.62	14.70	14.06
TiO2	0.83	0.87	0.92	0.92	0.82	0.86	0.76	0.69	0.87	0.73
Fe2O3	1.37	1.72	1.10	1.27	0.95	1.18	1.36	1.47	1.69	1.73
FeO	5.81	4.99	5.50	5.28	4.97	4.57	5.28	3.37	4.47	3.56
MgO	4.97	5.57	6.37	5.52	5.26	4.64	5.32	4.27	4.67	4.04
CaO	4.01	3.70	3.64	3.89	4.29	2.04	1.97	3.73	2.71	2.94
Na2O	3.35	3.70	2.75	2.87	4.69	3.47	3.58	3.62	3.20	4.28
K2O	1.43	1.88	1.27	1.81	1.42	1.50	2.20	1.43	1.32	1.35
MnO	0.11	0.10	0.11	0.08	0.08	0.09	0.11	0.06	0.08	0.08
P2O5	0.19	0.19	0.17	0.21	0.20	0.13	0.17	0.13	0.18	0.12
CO2	0.67	0.23	0.70	1.65	0.39	0.77	0.42	3.19	0.99	0.36
LOI	3.57	2.96	3.32	3.17	2.03	2.36	3.14	1.41	4.42	2.50
Total	99.77	99.94	99.74	99.53	99.13	99.25	99.04	99.75	99.97	100.13

TABLE 4.29

XRF Analyses: Scar Formation (B7)

Part 3

VAR. / ID.	AX279	S 77	S 102	S 105	S 110	S 111	S 116	E 117	S 118	S 119
SiO2	58.66	63.51	67.50	64.22	63.54	63.81	76.28	60.74	62.50	63.44
Al2O3	15.35	14.19	15.90	13.84	12.78	14.69	9.52	15.26	13.98	13.31
TiO2	0.87	0.76	0.89	0.65	0.86	0.63	0.98	0.76	0.69	0.71
Fe2O3	1.86	1.51	2.20	-0.32	1.71	1.07	0.26	1.85	1.33	1.40
FeO	4.19	4.03	4.89	5.19	4.80	4.26	3.87	4.49	4.09	4.44
MgO	5.17	4.50	6.32	3.29	4.82	3.59	1.30	4.43	3.63	4.36
CaO	4.08	2.60	4.03	2.86	3.34	1.94	0.49	3.01	3.54	3.44
Na2O	4.08	3.51	3.40	3.99	3.29	4.26	2.37	3.32	4.44	3.77
K2O	1.54	2.13	2.02	1.43	1.18	1.53	1.20	2.06	0.97	1.22
MnO	0.13	0.08	0.11	0.07	0.09	0.09	0.04	0.09	0.09	0.09
P2O5	0.20	0.16	0.23	0.14	0.18	0.12	0.11	0.16	0.14	0.16
CO2	0.50	0.49	0.34	1.25	5.08	0.65	0.44	0.21	2.30	0.35
LOI	2.79	2.27	2.98	2.77	2.28	2.41	2.54	3.04	1.49	2.52
Total	99.42	99.74	110.81	99.38	103.95	99.05	99.40	99.42	99.19	99.21

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XRF Analyses: Scar Formation (B7)

Part 4

VAR. / ID.	E 136	E 139	E 140	S 121	S 122	S 124	S 127	S 128
SiO2	62.13	60.54	63.65	63.63	60.70	68.26	62.33	62.99
Al2O3	13.57	13.87	14.23	12.75	14.31	12.30	14.66	13.98
TiO2	0.81	0.88	0.75	0.87	0.90	0.57	0.83	0.68
Fe2O3	2.39	1.71	1.78	1.47	3.16	1.19	1.71	0.71
FeO	4.13	5.44	4.89	4.93	3.82	3.96	4.96	4.93
MgO	4.74	4.83	4.39	5.02	5.28	3.97	4.77	4.93
CaO	2.94	3.39	1.14	3.32	3.14	1.58	3.98	2.07
Na2O	2.97	3.61	4.26	3.33	3.19	3.21	3.50	3.29
K2O	1.72	1.20	0.70	1.18	1.73	1.90	1.62	1.84
MnO	0.12	0.09	0.08	0.10	0.07	0.09	0.10	0.08
P2O5	0.14	0.19	0.17	0.17	0.19	0.11	0.17	0.13
CO2	1.76	1.18	1.13	0.42	0.33	0.29	0.36	0.49
LOI	2.22	1.88	2.46	2.32	2.02	2.24	0.26	2.37
Total	99.64	98.81	99.63	99.51	98.84	99.67	99.25	98.49

TABLE 4.29

XRF Analyses: Shinnel Formation (B9)

Part 1

VAR. / ID.	AX01	AX36	AX38	AX149	AX164	AX177	AX226	AX229	AX235	AX236
SiO2	63.67	70.97	77.35	67.56	75.21	69.03	68.85	73.56	69.77	68.56
Al2O3	11.57	10.47	7.37	13.36	9.47	9.30	12.10	9.83	10.37	10.12
TiO2	0.91	0.77	0.99	0.96	0.99	0.77	0.79	0.85	0.84	0.68
Fe2O3	0.74	0.83	0.33	1.08	0.82	1.10	0.54	0.63	1.15	0.28
FeO	4.56	3.91	2.69	4.85	3.70	3.52	4.58	3.42	4.07	3.98
MgO	3.59	3.57	2.22	2.54	2.23	2.85	2.90	1.87	3.61	3.33
CaO	4.54	1.68	1.91	1.29	1.14	3.27	1.38	1.42	1.95	2.93
Na2O	3.37	2.51	2.16	2.84	2.63	2.84	3.62	2.26	3.19	2.22
K2O	0.65	1.79	0.72	1.74	1.19	0.69	1.11	1.56	0.56	1.37
MnO	0.11	0.05	0.08	0.07	0.06	0.05	0.05	0.03	0.06	0.05
P2O5	0.21	0.13	0.22	0.21	0.16	0.11	0.17	0.14	0.10	0.10
CO2	4.55	1.78	3.13	1.14	0.69	4.98	2.60	1.38	3.09	3.16
LOI	0.92	1.58	0.90	1.77	1.55	0.99	0.72	2.82	1.29	2.70
Total	99.39	100.04	100.07	99.41	99.84	99.50	99.41	99.77	100.05	99.48

TABLE 4.30

XRF Analyses: Shinnel Formation (B9)

Part 2

VAR. / ID.	AX276	AX287	S 54	S 56	S 57	S 58	S 64	N 400	N 401	N 456
SiO2	69.04	76.33	70.48	62.22	66.64	77.02	78.00	68.96	75.59	79.66
Al2O3	9.89	8.39	10.45	11.16	11.21	10.10	9.28	10.58	9.81	7.66
TiO2	0.82	0.85	0.83	0.68	0.73	0.81	0.87	0.83	0.79	0.58
Fe2O3	1.20	0.95	1.24	1.00	0.98	0.77	0.66	1.63	0.91	0.72
FeO	3.62	2.81	3.96	4.00	4.33	3.12	2.97	4.25	3.21	2.27
MgO	3.89	2.08	3.01	3.12	3.40	1.36	1.46	4.02	2.08	1.71
CaO	2.98	2.04	2.20	5.97	3.69	0.65	1.46	1.84	1.02	1.75
Na2O	2.17	2.31	2.74	2.75	1.30	2.61	1.43	2.74	2.15	1.99
K2O	1.38	1.08	1.51	1.74	1.97	1.28	1.37	1.50	1.66	0.85
MnO	0.06	0.06	0.08	0.18	0.07	0.05	0.05	0.09	0.04	0.05
P2O5	0.13	0.11	0.15	0.21	0.14	0.22	0.15	0.14	0.14	0.09
CO2	3.26	2.61	0.76	0.82	2.97	0.75	1.13	1.50	0.32	2.15
LOI	0.98	0.59	2.10	5.95	2.50	1.24	1.08	1.43	2.14	0.58
Total	99.42	100.21	99.51	99.80	99.93	99.98	99.91	99.51	99.86	100.06

TABLE 4.30

XRF Analyses: Shinnel Formation (B9)

Part 3

VAR. / ID.	S 466	S 492	S 494
SiO2	69.69	80.40	76.33
Al2O3	10.77	7.92	9.31
TiO2	0.78	0.62	0.75
Fe2O3	0.34	0.72	0.24
FeO	4.61	2.30	3.27
MgO	3.42	1.57	1.50
CaO	2.28	1.28	1.87
Na2O	2.48	2.08	2.53
K2O	1.48	0.79	1.03
MnO	0.06	0.05	0.07
P2O5	0.13	0.12	0.13
CO2	1.54	1.04	1.47
LOI	2.35	1.16	1.32
Total	99.93	100.05	99.82

TABLE 4.30

XRF Analyses: Pyroxenous Formation (B11)

Part 1

VAR. / ID.	AX150	AX151	AX182	AX194	AX195	AX196	AX197	AX198	AX199	AX221
SiO2	58.98	62.04	63.31	63.53	59.54	64.79	67.06	65.20	63.34	61.28
Al2O3	12.97	13.80	12.13	14.00	13.61	12.68	12.53	12.25	12.50	13.71
TiO2	0.93	0.81	0.71	0.80	0.90	0.80	0.86	0.76	0.84	0.88
Fe2O3	2.29	2.70	0.56	1.15	2.70	1.89	1.89	2.00	2.33	1.81
FeO	5.30	4.27	4.76	5.20	5.08	4.16	3.97	3.94	4.23	4.91
MgO	6.77	4.65	4.02	4.17	5.01	4.50	4.05	4.31	4.12	4.92
CaO	3.37	1.10	3.91	2.16	4.67	2.76	1.80	3.85	4.36	3.46
Na2O	3.25	3.84	3.21	3.10	3.51	3.19	4.23	3.06	2.78	3.28
K2O	1.47	2.15	1.65	2.63	0.92	1.36	0.83	1.50	1.52	1.54
MnO	0.14	0.08	0.10	0.09	0.11	0.09	0.08	0.08	0.09	0.10
P2O5	0.20	0.22	0.18	0.17	0.19	0.16	0.16	0.19	0.17	0.17
CO2	0.88	0.28	1.56	1.70	0.58	1.85	0.53	1.82	1.63	2.30
LOI	2.95	3.49	3.68	1.09	2.51	1.85	1.94	1.17	1.69	0.83
Total	99.50	99.43	99.78	99.79	99.33	100.08	99.93	100.13	99.60	99.19

TABLE 4.31

XRF Analyses: Pyroxenous Formation (B11)

Part 2

VAR. / ID.	AX274	AX286	AX657	AX659	AX781	AX782	AX783	AX784	AX789	AX790
SiO2	62.42	63.51	66.42	64.68	63.39	61.52	61.08	66.14	66.34	61.96
Al2O3	12.32	13.20	11.49	12.57	13.17	13.03	12.97	11.62	12.79	12.92
TiO2	0.88	0.79	0.78	0.82	0.79	0.92	0.91	0.84	0.78	0.97
Fe2O3	2.16	1.96	1.36	1.19	2.23	4.97	2.04	1.58	1.61	1.63
FeO	4.32	3.56	4.16	4.89	3.88	2.47	5.89	4.14	4.04	5.91
MgO	4.74	4.77	3.66	4.23	3.98	4.09	4.72	4.11	4.47	5.06
CaO	4.37	2.92	3.55	3.28	4.76	4.95	1.99	3.73	2.39	2.89
Na2O	2.31	3.01	3.28	3.20	3.07	2.30	2.52	2.96	3.04	2.97
K2O	1.68	1.97	1.12	1.70	1.69	2.09	1.93	1.51	1.96	1.27
MnO	0.08	0.08	0.13	0.10	0.09	0.14	0.08	0.09	0.08	0.09
P2O5	0.18	0.18	0.15	0.16	0.17	0.20	0.19	0.17	0.16	0.21
CO2	0.95	0.43	1.10	0.78	0.71	0.25	1.38	0.71	1.05	1.53
LOI	3.62	3.51	2.52	1.76	1.72	2.49	2.65	2.04	1.37	1.47
Total	100.03	99.89	99.72	99.36	99.65	99.42	98.35	99.64	100.08	98.88

TABLE 4.31

XRF Analyses: Pyroxenous Formation (B11)

Part 3

VAR. / ID.	AX791	AX796	AX797	AX834
SiO2	64.08	60.64	66.06	67.48
Al2O3	12.52	14.35	12.63	11.94
TiO2	0.78	0.89	0.81	0.78
Fe2O3	1.59	1.58	1.73	1.39
FeO	4.33	5.11	3.99	3.67
MgO	4.11	4.98	4.30	3.62
CaO	4.00	4.03	2.86	2.90
Na2O	2.70	3.35	3.96	3.01
K2O	1.62	1.74	0.92	2.29
MnO	0.09	0.10	0.10	0.08
P2O5	0.17	0.23	0.17	0.19
CO2	1.33	1.65	1.63	1.01
LOI	2.46	0.96	0.92	1.33
Total	99.78	99.61	100.08	99.69

TABLE 4.31

XRF Analyses: Intermediate Formation (B13)

Part 1

VAR. / ID.	AX44	AX46	AX48	AX94	AX96	AX97	AX107	AX108	AX109	AX272
SiO2	69.33	72.46	73.10	69.72	72.39	63.82	76.97	79.96	78.81	74.86
Al2O3	12.02	11.14	9.59	11.34	10.45	13.96	8.21	7.56	8.07	10.29
TiO2	0.74	0.64	1.02	0.75	0.68	0.91	0.94	0.68	0.89	0.89
Fe2O3	1.55	0.84	0.91	1.16	1.01	1.43	0.78	0.38	0.76	2.35
FeO	3.20	2.89	3.41	3.96	2.96	5.02	3.28	3.11	3.15	2.77
MgO	3.51	3.06	2.77	3.39	2.84	3.87	1.62	1.73	1.65	2.64
CaO	0.86	1.08	1.50	1.81	1.90	1.66	2.30	1.33	1.12	0.33
Na2O	3.04	2.90	2.03	2.30	2.76	4.09	1.62	1.69	1.61	2.25
K2O	2.30	2.19	1.59	2.47	1.98	1.71	1.14	1.05	1.15	1.27
MnO	0.06	0.03	0.05	0.05	0.04	0.11	0.05	0.04	0.04	0.05
P2O5	0.17	0.13	0.15	0.19	0.14	0.23	0.14	0.11	0.13	0.14
CO2	2.13	0.20	1.17	0.77	1.59	0.74	2.02	0.94	1.45	0.15
LOI	0.44	2.31	1.64	1.94	1.06	2.34	0.88	1.07	0.73	2.12
Total	99.35	99.87	98.93	99.85	99.80	99.89	99.95	99.65	99.56	100.11

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TABLE 4.32

XRF Analyses: Intermediate Formation (B13)

Part 2

VAR. / ID.	AX280	AX281	AX283	AX285	AX604	AX840	AX841	AX842	AX847	AX851
SiO2	75.04	75.79	75.23	73.50	72.29	71.44	68.87	70.96	72.88	67.63
Al2O3	10.44	9.72	9.55	10.79	9.62	10.95	11.25	10.52	10.13	11.66
TiO2	0.74	0.71	0.92	0.82	0.60	0.78	0.90	0.69	0.64	0.67
Fe2O3	1.63	1.39	1.58	1.82	0.99	1.33	1.64	0.63	0.87	0.94
FeO	2.61	2.45	3.33	2.88	2.84	3.31	3.70	3.25	3.11	3.31
MgO	2.45	2.07	2.85	2.69	2.47	3.45	3.86	3.22	2.86	3.26
CaO	0.68	1.14	0.74	0.86	3.40	1.14	1.68	2.34	2.06	2.94
Na2O	1.91	1.59	1.50	1.87	2.22	2.37	2.34	2.34	2.17	2.80
K2O	1.82	1.87	1.65	1.79	2.10	2.19	2.18	2.07	2.13	2.48
MnO	0.05	0.04	0.06	0.05	0.06	0.07	0.05	0.05	0.06	0.10
P2O5	0.12	0.11	0.12	0.13	0.15	0.14	0.16	0.14	0.14	0.19
CO2	0.07	0.65	2.92	0.40	2.48	0.70	1.71	2.63	1.39	2.64
LOI	2.53	2.14	-0.47	2.67	0.79	2.11	1.45	0.92	1.32	1.19
Total	100.09	99.67	99.98	100.27	100.01	99.98	99.79	99.76	99.76	99.81

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VAR. / ID.	DJR-761	DJR-761D	DJR-761D	DJR-761D	DJR-761D
SiO2	57.61	56.46	56.65	57.33	57.50
Al2O3	14.79	14.27	14.42	14.83	14.75
TiO2	0.82	0.83	0.81	0.83	0.83
Fe2O3	5.94	5.94	5.97	5.92	5.93
MgO	4.80	4.53	4.63	4.70	4.73
CaO	7.93	7.97	7.86	8.21	8.08
Na2O	1.60	1.59	1.61	1.60	1.63
K2O	2.54	2.54	2.51	2.52	2.54
MnO	0.09	0.09	0.08	0.09	0.09
P2O5	0.17	0.17	0.17	0.17	0.17
As	3	5	5	6	6
Ba	327	357	331	353	338
Cl	34	24	0	14	0
Co	20	14	19	23	21
Cr	133	120	126	129	131
Cu	27	29	29	32	26
Ga	14	15	15	15	15
La	29	29	33	28	27
Ni	63	61	63	64	64
Nb	15	14	13	14	14
Pb	26	25	24	23	23
Rb	81	80	83	81	82
Sr	155	158	159	162	163
Sb	0	1	0	0	0
S	310	300	279	282	291
Th	10	13	13	8	7
V	104	103	103	109	103
Y	33	31	33	32	32
Zn	78	74	84	78	71
Zr	176	173	182	175	177
Tl	0	0	0	0	0

VAR. / ID.	DJR-769	DJR-769D	DJR-769D	DJR-769D	DJR-769D
SiO2	56.85	57.25	57.17	57.58	57.06
Al2O3	13.21	13.43	13.23	13.38	13.35
TiO2	0.84	0.83	0.82	0.84	0.83
Fe2O3	5.37	5.28	5.17	5.31	5.24
MgO	4.25	4.34	4.36	4.38	4.44
CaO	9.92	10.38	10.47	10.16	10.58
Na2O	1.77	1.74	1.83	1.85	1.74
K2O	2.31	2.28	2.26	2.28	2.27
MnO	0.13	0.14	0.13	0.12	0.13
P2O5	0.19	0.20	0.20	0.20	0.20
As	3	5	6	6	8
Ba	306	293	272	296	285
Cl	34	14	16	9	17
Co	26	18	21	24	21
Cr	125	132	134	132	139
Cu	21	23	24	23	25
Ga	14	13	14	13	13
La	27	41	33	40	34
Ni	49	50	49	51	52
Nb	15	12	13	16	14
Pb	16	12	12	12	8
Rb	77	75	74	76	74
Sr	151	159	156	155	158
Sb	0	0	0	0	0
S	0	18	0	0	0
Th	10	12	10	12	8
V	104	108	100	106	110
Y	37	35	36	35	36
Zn	58	13	52	55	58
Zr	214	214	211	223	221
Tl	0	0	2	0	0

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 1

VAR. / ID.	PDG1	PDG2	PDG3	PDG4	PDG5	PDG6	PDG7	PDG8	PDG9	PDG10
East	40	41	42	43	44	45	46	47	48	49
North	50	50	50	50	50	50	50	50	50	50
SiO2	62.19	59.19	60.22	62.50	62.18	61.23	61.73	63.65	61.50	59.32
Al2O3	16.42	16.85	17.50	19.10	18.15	20.42	18.35	17.87	18.18	19.02
Fe2O3	8.16	8.24	8.53	8.03	7.89	8.26	7.75	7.68	8.15	8.67
MgO	2.29	2.99	2.26	1.90	3.11	1.84	2.13	1.80	1.28	1.18
Na2O	0.81	0.63	0.63	0.98	0.87	0.80	0.89	0.85	0.76	0.68
K2O	2.44	2.93	2.99	2.93	2.92	3.39	2.65	2.77	2.60	3.12
As	4	10	7	5	7	3	6	4	4	4
Ba	304	303	316	304	491	504	442	313	313	316
Co	19	18	28	14	22	21	20	37	11	25
Cu	23	22	27	24	28	27	18	17	22	31
Ga	16	14	18	18	18	19	17	17	17	20
Ni	45	59	63	62	71	66	65	52	47	60
Pb	24	42	25	21	26	19	13	20	22	19
Rb	104	125	115	98	97	111	106	112	102	117
Sr	48	42	67	69	78	112	64	67	75	72
V	102	108	103	111	111	118	108	111	106	127
Zn	77	96	83	65	82	75	79	66	67	65
Tl	0	0	0	0	0	0	0	0	0	0
Sb	4	1	4	6	2	8	3	4	4	1
S	802	1360	965	504	239	363	775	831	773	841

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 2

VAR. / ID.	PDG11	PDG12	PDG13	PDG14	PDG15	PDG16	PDG17	PDG18	PDG19	PDG20
East	50	51	52	53	54	55	56	57	58	59
North	50	50	50	50	50	50	50	50	50	50
SiO2	60.43	61.86	61.97	66.83	58.54	60.73	59.24	61.31	60.87	58.48
Al2O3	18.80	17.06	16.58	15.19	17.83	16.52	18.33	16.88	18.17	17.37
Fe2O3	8.35	8.00	7.47	5.88	8.52	7.49	8.49	7.76	8.40	9.20
MgO	1.23	2.22	1.51	1.64	2.84	1.60	2.16	2.15	1.91	2.14
Na2O	0.61	0.74	0.67	1.00	0.52	0.86	0.88	0.75	0.61	0.68
K2O	3.05	2.74	2.63	2.20	3.15	2.73	3.07	2.71	3.27	2.79
As	2	6	6	3	4	2	3	3	4	2
Ba	324	317	304	289	349	298	332	330	345	305
Co	16	31	18	28	18	29	19	26	18	27
Cu	24	20	13	14	19	16	21	18	24	25
Ga	19	17	20	15	21	17	19	19	21	19
Ni	51	53	25	30	65	37	58	46	38	48
Pb	22	28	22	17	24	41	16	20	19	18
Rb	119	111	119	94	126	105	125	118	142	118
Sr	69	48	50	44	43	43	46	47	48	46
V	127	112	107	84	125	104	129	121	135	127
Zn	69	74	56	56	90	65	84	70	72	73
Tl	0	0	0	0	0	0	0	0	0	0
Sb	2	6	2	0	2	2	1	1	3	4
S	761	930	910	592	914	1006	748	694	718	834

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 3

VAR. / ID.	PDG21	PDG22	PDG23	PDG24	PDG25	PDG26	PDG27	PDG28	PDG29	PDG30
East	40	41	42	43	44	45	46	47	48	49
North	52	52	52	52	52	52	52	52	52	52
SiO2	61.07	62.10	61.28	60.90	59.19	61.78	55.93	59.05	60.48	58.26
Al2O3	16.35	16.62	16.71	17.25	17.68	18.15	20.79	18.92	18.29	19.32
Fe2O3	7.75	7.72	8.15	7.77	8.24	6.14	9.24	8.32	8.29	9.31
MgO	1.99	2.11	2.10	2.35	2.58	2.26	1.43	2.22	1.27	1.40
Na2O	0.77	0.92	0.79	0.84	0.72	0.92	0.69	0.54	0.85	0.51
K2O	2.53	2.53	2.47	2.58	2.91	2.74	3.08	3.66	2.91	3.66
As	4	4	5	5	9	4	4	5	3	3
Ba	307	301	331	334	346	334	518	369	297	360
Co	13	18	15	30	20	25	24	24	9	20
Cu	15	16	16	18	24	22	33	35	13	23
Ga	18	18	18	17	18	18	18	23	18	23
Ni	34	37	36	48	63	68	72	90	51	79
Pb	20	19	21	27	31	19	25	22	18	26
Rb	115	114	111	112	112	102	102	139	107	144
Sr	43	43	45	47	59	63	124	95	89	113
V	114	106	104	113	121	109	124	142	113	144
Zn	63	74	70	77	90	77	76	100	57	94
Tl	0	0	0	0	0	2	0	4	0	0
Sb	2	3	3	4	8	6	3	5	2	2
S	940	959	1047	841	719	332	659	638	644	663

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 4

VAR. / ID.	PDG31	PDG32	PDG33	PDG34	PDG35	PDG36	PDG37	PDG38	PDG39	PDG40
East	50	51	52	53	54	55	56	57	58	59
North	52	52	52	52	52	52	52	52	52	52
SiO2	58.92	58.11	61.18	57.61	60.35	59.59	59.43	59.92	58.83	61.37
Al2O3	19.37	19.89	19.17	18.02	16.22	17.40	18.86	19.48	19.21	16.54
Fe2O3	8.72	8.80	8.31	8.40	8.03	8.47	8.55	9.16	9.40	7.53
MgO	1.26	1.23	1.14	1.90	1.73	2.08	2.57	2.12	2.01	1.17
Na2O	0.50	0.63	0.82	0.49	0.66	0.67	0.61	0.46	0.32	0.61
K2O	3.29	3.58	3.05	3.53	2.53	2.99	3.08	3.37	3.52	2.84
As	3	3	3	4	3	5	5	3	4	4
Ba	308	351	333	347	315	335	354	361	330	321
Co	20	23	17	24	13	88	17	22	42	13
Cu	14	21	21	28	13	18	23	22	22	8
Ga	21	22	19	21	19	21	21	23	22	21
Ni	70	67	55	66	27	45	62	50	53	15
Pb	19	14	16	16	17	16	19	18	23	22
Rb	125	128	120	138	107	126	126	146	141	134
Sr	102	108	75	67	39	44	49	55	73	48
V	127	140	117	131	119	132	131	141	145	120
Zn	72	86	79	77	51	66	111	75	73	38
Tl	0	2	3	0	0	0	0	0	0	0
Sb	9	7	6	5	4	3	6	6	5	0
S	636	651	720	618	853	760	740	748	689	934

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 5

VAR. / ID.	PDG41	PDG42	PDG43	PDG44	PDG45	PDG46	PDG47	PDG48	PDG49	PDG50
East	40	41	42	43	44	45	46	47	48	49
North	54	54	54	54	54	54	54	54	54	54
SiO2	63.68	63.53	59.56	62.91	63.42	60.24	60.45	59.06	64.76	62.97
Al2O3	16.79	17.67	17.88	16.57	15.36	19.46	18.98	21.68	17.41	18.39
Fe2O3	7.49	7.69	8.43	7.56	7.63	5.53	7.70	9.52	6.99	8.15
MgO	2.29	2.32	3.46	2.05	1.44	1.58	2.36	2.00	1.66	1.97
Na2O	0.85	0.81	0.84	0.81	0.75	0.60	0.74	0.54	0.82	0.89
K2O	2.56	2.60	3.12	2.52	2.55	2.49	2.76	4.26	2.56	2.93
As	6	2	4	6	11	16	4	4	3	4
Ba	333	320	344	297	302	486	457	519	336	352
Co	30	14	19	18	15	27	24	25	18	23
Cu	19	19	26	15	14	27	22	33	11	15
Ga	19	19	21	18	17	18	19	26	17	19
Ni	48	44	70	35	20	56	65	121	37	63
Pb	24	21	17	21	51	48	20	20	22	18
Rb	110	109	126	108	135	90	107	160	112	117
Sr	49	47	40	45	46	84	68	144	57	63
V	113	112	129	114	111	112	110	170	108	120
Zn	74	79	104	60	55	131	77	118	57	76
Tl	0	0	0	4	0	0	2	+	0	2
Sb	1	0	2	4	3	9	6	4	5	0
S	714	808	562	700	1354	1063	341	373	631	628

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 6

VAR. / ID.	PDG51	PDG52	PDG53	PDG54	PDG55	PDG56	PDG57	PDG58	PDG59	PDG60
East	50	51	52	53	54	55	56	57	58	59
North	54	54	54	54	54	54	54	54	54	54
SiO2	60.73	60.02	61.43	63.03	60.21	63.74	61.75	61.68	59.81	60.65
Al2O3	17.66	18.58	17.19	17.04	15.69	16.53	18.04	16.47	16.57	17.39
Fe2O3	8.80	8.97	8.41	7.99	7.46	7.59	8.50	7.77	8.62	7.93
MgO	1.74	2.84	1.97	1.29	1.84	2.13	2.72	1.85	1.80	1.64
Na2O	0.62	0.68	0.76	0.67	0.76	0.83	0.75	0.77	0.65	0.57
K2O	2.80	3.11	2.66	2.75	2.50	2.54	2.78	2.62	2.56	3.15
As	3	3	3	4	3	4	3	4	4	2
Ba	332	339	309	305	322	311	342	332	302	318
Co	10	22	37	13	49	22	15	19	11	21
Cu	14	30	20	15	18	17	18	14	13	19
Ga	18	21	18	17	18	18	21	19	17	20
Ni	32	72	45	33	40	39	47	30	27	44
Pb	17	17	22	21	18	18	18	16	16	16
Rb	123	122	103	113	104	104	118	120	111	129
Sr	47	51	53	57	44	41	40	42	39	61
V	119	129	114	114	110	105	123	120	109	115
Zn	58	99	71	36	65	68	85	59	49	56
Tl	0	2	0	0	0	0	0	0	0	0
Sb	0	4	6	0	4	2	1	1	0	6
S	1026	704	1020	1022	846	774	815	727	937	667

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 7

VAR. / ID.	PDG61	PDG62	PDG63	PDG64	PDG65	PDG66	PDG67	PDG68	PDG69	PDG70
East	40	41	42	43	44	45	46	47	48	49
North	56	56	56	56	56	56	56	56	56	56
SiO2	61.71	58.58	61.22	59.29	60.85	60.05	56.24	61.47	61.06	57.56
Al2O3	17.79	16.55	17.83	17.02	16.76	15.77	16.04	16.98	17.48	16.59
Fe2O3	7.87	8.10	8.26	8.33	8.23	7.78	11.69	7.80	7.97	8.60
MgO	1.81	2.17	2.68	2.00	2.12	1.66	1.71	1.20	2.59	2.61
Na2O	0.76	0.71	0.86	0.67	0.74	0.58	0.57	0.78	0.86	0.69
K2O	2.75	2.79	2.80	2.70	2.63	2.72	2.61	2.63	2.95	3.12
As	3	5	4	5	4	12	19	4	5	6
Ba	334	339	337	335	294	294	328	321	332	351
Co	17	21	19	13	18	22	27	18	18	27
Cu	17	13	14	17	20	18	32	14	27	36
Ga	20	20	19	19	18	19	18	18	18	20
Ni	36	37	47	35	47	37	86	34	69	77
Pb	21	28	16	22	24	38	51	21	18	25
Rb	119	125	121	119	106	115	91	108	101	118
Sr	45	37	38	45	46	57	80	80	53	53
V	113	115	112	120	108	106	146	104	104	122
Zn	77	89	92	72	68	57	112	45	88	99
Tl	0	0	0	0	0	0	0	0	0	2
Sb	2	0	5	6	5	11	20	4	5	0
S	812	1009	891	927	884	980	727	729	536	570

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 8

VAR. / ID.	PDG71	PDG72	PDG73	PDG74	PDG75	PDG76	PDG77	PDG78	PDG79	PDG80
East	50	51	52	53	54	55	56	57	58	59
North	56	56	56	56	56	56	56	56	56	56
SiO2	60.81	58.50	59.42	57.40	64.20	61.97	60.95	60.14	56.74	53.98
Al2O3	17.56	19.08	17.37	18.85	17.48	15.08	18.60	16.57	18.74	17.40
Fe2O3	8.83	9.52	8.22	9.69	8.12	8.04	8.62	7.50	9.02	10.48
MgO	2.30	2.39	2.04	2.47	1.99	1.64	2.58	1.95	3.28	3.27
Na2O	0.64	0.63	0.86	0.40	0.82	0.80	0.69	0.60	0.54	0.44
K2O	2.73	3.34	2.90	3.09	2.56	2.30	2.86	2.72	3.45	3.58
As	4	4	2	3	3	4	3	6	6	8
Ba	347	355	323	312	306	277	370	367	355	355
Co	17	19	18	27	20	9	20	16	21	18
Cu	19	21	15	23	18	13	20	13	18	22
Ga	19	23	19	19	15	18	22	20	22	25
Ni	43	48	45	65	44	36	48	32	64	67
Pb	18	15	21	19	18	24	24	36	14	34
Rb	106	147	123	115	101	89	128	141	137	144
Sr	46	45	44	66	51	46	46	45	36	33
V	110	145	119	127	111	98	128	115	133	146
Zn	66	91	79	80	69	51	132	94	106	100
Tl	0	0	0	0	0	0	0	0	0	0
Sb	0	4	0	2	4	0	3	6	6	2
S	729	828	764	752	612	1284	762	1152	762	1227

TABLE 4.35

-2375-

VAR. / ID.	PDG81	PDG82	PDG83	PDG84	PDG85	PDG86	PDG87	PDG88	PDG89	PDG90
East	40	41	42	43	44	45	46	47	48	49
North	58	58	58	58	58	58	58	58	58	58
SiO2	59.53	60.78	62.10	58.68	60.21	57.63	56.68	59.72	59.87	64.34
Al2O3	17.47	16.21	17.52	16.92	16.99	17.50	17.46	18.59	16.73	18.65
Fe2O3	8.82	8.45	8.72	8.96	8.78	9.33	9.66	8.49	8.82	6.95
MgO	2.16	2.43	2.18	2.52	2.68	2.64	1.56	1.58	1.83	1.05
Na2O	0.52	0.81	0.71	0.44	0.70	0.77	0.37	0.65	0.68	0.65
K2O	3.00	2.56	2.70	2.75	2.67	2.86	2.95	3.06	2.60	3.10
As	6	6	4	6	5	6	27	8	4	1
Ba	345	307	323	319	316	309	340	327	328	337
Co	21	13	16	15	16	16	18	18	11	4
Cu	28	19	21	21	19	19	33	31	20	15
Ga	18	18	19	20	18	20	18	18	18	19
Ni	45	53	43	47	56	55	69	52	49	42
Pb	22	25	19	23	21	24	101	21	19	21
Rb	113	90	111	106	103	108	105	127	101	124
Sr	42	41	41	42	43	43	81	80	54	101
V	114	107	115	114	112	121	125	120	112	119
Zn	61	56	73	79	79	86	86	68	66	37
Tl	0	0	0	0	11	0	0	0	0	8
Sb	5	7	2	0	2	3	19	8	0	4
S	977	1300	851	915	961	874	812	767	806	639

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 10

VAR. / ID.	PDG91	PDG92	PDG93	PDG94	PDG95	PDG96	PDG97	PDG98	PDG99	PDG100
East	50	51	52	53	54	55	56	57	58	59
North	58	58	58	58	58	58	58	58	58	58
SiO2	59.71	56.40	57.59	59.06	62.33	62.54	61.56	61.93	59.71	59.08
Al2O3	18.28	20.12	18.29	18.35	18.14	17.08	17.97	17.43	17.83	18.92
Fe2O3	8.21	9.59	9.44	9.76	7.53	6.96	8.11	7.53	8.28	9.03
MgO	2.56	2.23	2.50	2.16	1.81	1.36	1.24	2.13	2.62	2.06
Na2O	0.65	0.56	0.51	0.62	0.67	0.55	0.61	0.74	0.70	0.62
K2O	3.14	3.99	3.16	3.18	3.02	2.79	2.47	2.52	2.83	3.16
As	5	4	5	2	2	3	3	3	3	4
Ba	341	360	322	314	281	273	285	323	361	331
Co	20	23	19	16	18	12	12	12	16	15
Cu	29	27	38	26	16	17	20	16	21	21
Ga	19	23	21	22	19	18	17	18	20	21
Ni	66	81	61	47	32	29	37	44	59	56
Pb	20	19	22	18	18	19	19	15	23	24
Rb	109	144	115	125	135	116	102	106	121	123
Sr	59	63	49	45	48	52	54	47	50	56
V	120	144	125	134	121	105	108	112	116	131
Zn	77	102	90	71	63	54	62	66	102	92
Tl	0	0	0	0	0	0	0	0	0	0
Sb	5	5	6	3	5	0	6	2	3	0
S	521	765	734	784	696	716	552	689	679	805

TABLE 4.35

-2377-

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 11

VAR. / ID.	PDG101	PDG102	PDG103	PDG104	PDG105	PDG106	PDG107	PDG108	PDG109	PDG110
East	40	41	42	43	44	45	46	47	48	49
North	60	60	60	60	60	60	60	60	60	60
SiO2	62.70	58.05	60.21	60.24	58.33	59.98	57.76	60.78	52.83	59.04
Al2O3	16.75	16.55	17.14	16.59	16.93	17.83	18.89	20.42	20.10	18.59
Fe2O3	7.73	9.02	8.69	7.44	8.84	8.79	9.86	7.84	11.47	9.16
MgO	1.74	2.02	2.53	2.27	2.39	2.30	2.49	1.76	1.47	2.30
Na2O	0.76	0.59	0.75	0.73	0.63	0.76	0.43	0.54	0.39	0.76
K2O	2.61	2.86	2.84	2.71	2.74	2.67	3.53	2.76	3.88	3.02
As	4	4	4	5	5	6	6	26	3	5
Ba	341	312	325	305	327	307	318	410	391	343
Co	17	13	16	7	12	15	16	21	21	18
Cu	14	18	22	14	19	16	24	28	25	24
Ga	18	18	19	18	20	19	22	20	17	21
Ni	31	41	56	43	48	40	54	65	74	65
Pb	19	21	27	29	22	22	24	77	22	24
Rb	120	117	112	101	111	111	136	99	139	117
Sr	41	36	39	42	43	45	47	94	111	61
V	120	112	125	110	115	112	133	128	145	123
Zn	95	68	75	49	65	68	76	134	91	82
Tl	0	0	0	0	0	0	1	0	0	0
Sb	0	4	4	0	5	0	2	14	10	4
S	750	843	815	1307	958	827	768	703	890	828

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 12

VAR. / ID.	PDG111	PDG112	PDG113	PDG114	PDG115	PDG116	PDG117	PDG118	PDG119	PDG120
East	50	51	52	53	54	55	56	57	58	59
North	60	60	60	60	60	60	60	60	60	60
SiO2	59.27	61.91	61.29	57.57	54.52	59.96	60.76	57.62	62.55	60.17
Al2O3	18.43	18.12	19.65	21.23	17.25	17.59	17.99	19.80	16.71	18.11
Fe2O3	8.91	7.93	7.93	9.36	9.95	8.45	7.25	9.57	7.58	8.53
MgO	2.08	2.70	2.48	1.34	2.61	1.33	1.11	1.07	1.50	2.54
Na2O	0.66	0.68	0.72	0.41	0.46	0.51	0.47	0.26	0.71	0.71
K2O	3.07	2.78	3.16	4.17	3.34	2.95	3.06	3.01	2.58	2.93
As	4	4	5	3	4	3	3	8	3	3
Ba	360	323	377	327	325	321	322	286	252	355
Co	12	17	21	19	24	6	9	9	12	18
Cu	18	20	26	20	15	12	12	42	12	19
Ga	19	17	20	23	21	20	20	20	17	20
Ni	51	55	65	59	69	31	30	32	21	53
Pb	20	17	24	21	18	21	21	21	20	18
Rb	119	99	121	146	119	119	123	107	112	122
Sr	56	51	62	119	42	61	78	95	45	43
V	133	115	125	162	131	125	118	134	114	125
Zn	65	70	97	58	81	40	31	42	42	81
Tl	0	0	0	0	0	0	0	0	0	0
Sb	4	0	3	4	3	4	2	10	3	5
S	803	661	494	786	979	825	810	685	703	758

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 13

VAR. / ID.	PDG121	PDG122	PDG123	PDG124	PDG125	PDG126	PDG127	PDG128	PDG129	PDG130
East	40	41	42	43	44	45	46	47	48	49
North	62	62	62	62	62	62	62	62	62	62
SiO2	60.50	58.56	58.02	59.09	59.50	58.81	60.31	58.41	58.41	58.31
Al2O3	16.81	17.37	18.50	18.13	17.42	17.28	18.02	17.37	18.51	18.14
Fe2O3	7.14	8.44	9.27	9.44	8.80	9.76	8.77	9.92	6.90	8.42
MgO	1.78	2.57	1.44	2.16	2.39	2.39	1.55	1.35	2.05	2.21
Na2O	0.73	0.62	0.28	0.57	0.76	0.66	0.61	0.54	0.73	0.71
K2O	2.86	2.82	3.50	3.03	2.82	2.65	2.55	2.55	2.71	2.61
As	5	3	7	3	5	5	9	15	11	4
Ba	337	339	329	342	337	334	319	359	501	371
Co	0	14	13	16	13	17	10	24	18	20
Cu	12	18	23	19	14	22	12	13	25	14
Ga	18	18	20	21	19	18	19	18	20	18
Ni	25	44	42	40	37	49	29	33	58	63
Pb	27	18	29	19	22	22	34	52	50	19
Rb	127	117	133	129	115	101	105	109	113	93
Sr	33	36	37	35	38	44	54	55	67	55
V	108	119	123	129	126	120	102	112	116	111
Zn	55	80	55	71	65	84	46	83	109	91
Tl	0	0	0	0	0	8	2	0	0	0
Sb	4	4	10	5	2	3	4	5	5	6
S	1240	855	1130	956	1120	801	949	637	917	577

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 14

VAR. / ID.	PDG131	PDG132	PDG133	PDG134	PDG135	PDG136	PDG137	PDG138	PDG139	PDG140
East	50	51	52	53	54	55	56	57	58	59
North	62	62	62	62	62	62	62	62	62	62
SiO2	59.39	58.63	60.03	58.88	57.30	59.55	54.90	58.03	56.76	58.71
Al2O3	16.35	18.86	17.44	18.81	17.93	17.87	20.19	17.65	17.97	17.12
Fe2O3	8.93	8.83	8.30	9.28	8.64	5.91	10.24	8.86	10.33	8.54
MgO	2.07	1.56	1.25	1.54	1.58	1.86	2.49	1.76	1.26	2.03
Na2O	0.85	0.33	0.63	0.60	0.44	0.80	0.44	0.50	0.25	0.65
K2O	2.55	3.29	2.81	3.01	3.10	2.31	3.99	2.79	2.85	2.56
As	5	5	12	5	3	4	3	3	15	5
Ba	288	342	306	325	322	338	375	285	270	334
Co	13	12	4	13	10	9	21	15	8	9
Cu	13	16	13	14	16	14	29	20	33	11
Ga	18	19	18	19	19	16	25	19	20	18
Ni	35	60	33	46	45	50	93	62	47	33
Pb	23	26	50	21	24	26	18	21	22	25
Rb	98	126	127	120	116	79	148	101	99	98
Sr	45	66	64	67	67	56	68	65	97	40
V	106	132	107	129	124	102	143	115	131	106
Zn	50	70	46	52	51	60	107	63	61	59
Tl	0	0	0	0	0	0	0	0	0	0
Sb	4	7	6	6	3	7	5	5	19	2
S	1057	939	1575	873	1018	1099	837	796	843	1090

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 15

VAR. / ID.	PDG141	PDG142	PDG143	PDG144	PDG145	PDG146	PDG147	PDG148	PDG149	PDG150
East	40	41	42	43	44	45	46	47	48	49
North	64	64	64	64	64	64	64	64	64	64
SiO2	60.42	55.93	55.94	60.99	55.90	57.81	59.41	58.74	62.09	60.70
Al2O3	15.84	15.45	17.18	16.71	17.74	16.78	16.71	17.95	18.77	19.47
Fe2O3	6.61	7.50	9.47	6.76	9.72	8.72	8.97	9.75	6.34	8.17
MgO	1.78	2.11	2.70	2.05	2.39	2.64	2.34	2.12	3.15	3.63
Na2O	0.84	0.60	0.55	0.64	0.56	0.69	0.65	0.59	0.81	0.69
K2O	2.36	2.77	2.88	2.78	3.30	2.75	2.77	2.91	2.69	2.91
As	4	2	3	4	6	5	3	6	7	5
Ba	326	339	361	312	352	325	315	335	368	458
Co	8	10	14	12	18	10	11	14	17	21
Cu	11	9	15	9	20	16	14	20	27	32
Ga	17	20	19	19	19	19	20	18	17	19
Ni	28	32	41	34	55	47	38	46	68	80
Pb	20	17	14	24	22	16	17	28	28	24
Rb	92	116	111	108	125	109	102	113	90	101
Sr	37	34	33	35	33	35	31	36	51	53
V	102	114	118	106	126	120	126	124	110	128
Zn	53	53	72	45	81	65	52	69	76	78
Tl	0	0	0	0	0	0	0	0	0	2
Sb	6	0	6	4	5	2	0	1	5	6
S	1023	1183	1042	1072	1018	917	1053	935	357	238

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 16

VAR. / ID.	PDG151	PDG152	PDG153	PDG154	PDG155	PDG156	PDG157	PDG158	PDG159	PDG160
East	50	51	52	53	54	55	56	57	58	59
North	64	64	64	64	64	64	64	64	64	64
SiO2	62.49	59.94	61.58	62.29	64.43	57.13	59.56	62.82	59.50	62.52
Al2O3	19.33	18.48	22.73	16.97	16.25	18.61	18.64	17.76	19.63	18.58
Fe2O3	7.06	8.61	5.93	10.20	8.65	10.17	9.08	4.43	8.32	8.25
MgO	3.60	3.58	1.73	2.04	1.62	1.32	1.30	1.79	1.55	1.12
Na2O	0.86	0.71	0.66	0.80	0.80	0.44	0.39	0.94	0.65	0.80
K2O	2.72	3.25	3.71	2.46	2.24	2.82	3.32	2.07	3.30	2.82
As	5	9	2	4	2	2	4	5	8	2
Ba	551	436	437	343	288	331	355	359	406	267
Co	19	26	12	16	9	12	11	12	16	14
Cu	26	56	23	12	11	20	25	23	22	18
Ga	18	21	22	16	16	18	19	15	19	19
Ni	79	91	62	45	33	42	51	53	71	53
Pb	22	18	23	21	18	15	28	31	40	17
Rb	95	121	123	107	89	98	118	63	107	99
Sr	57	58	101	50	52	66	74	67	82	96
V	111	128	134	111	91	117	116	85	120	109
Zn	92	107	78	62	38	59	56	79	97	59
Tl	0	0	2	0	1	0	0	0	0	0
Sb	3	15	10	4	7	4	11	7	11	4
S	370	251	439	727	498	737	1156	1850	837	807

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 17

VAR. / ID.	PDG161	PDG162	PDG163	PDG164	PDG165	PDG166	PDG167	PDG168	PDG169	PDG170
East	40	41	42	43	44	45	46	47	48	49
North	66	66	66	66	66	66	66	66	66	66
SiO2	65.12	62.12	62.73	59.58	59.99	55.96	60.56	58.88	63.67	60.92
Al2O3	16.83	17.29	17.42	16.92	16.81	17.21	19.20	19.41	19.32	21.27
Fe2O3	6.28	6.41	5.07	7.07	7.86	8.53	9.17	8.83	7.75	6.94
MgO	1.73	2.23	2.83	2.16	1.90	2.11	2.84	1.77	1.33	2.19
Na2O	0.86	0.77	0.65	0.65	0.64	0.58	0.57	0.49	0.65	0.71
K2O	2.59	2.68	2.84	2.89	2.83	2.96	3.20	3.67	2.70	3.46
As	3	2	0	2	3	4	2	2	10	4
Ba	274	329	340	272	330	324	353	337	322	471
Co	10	11	9	10	11	11	11	11	8	19
Cu	12	12	13	15	13	19	20	15	14	30
Ga	19	18	21	21	19	19	21	21	18	22
Ni	25	37	39	30	27	51	53	51	28	87
Pb	18	17	17	16	18	19	17	21	38	22
Rb	101	99	98	117	107	106	124	126	102	124
Sr	40	38	32	36	35	32	33	39	41	61
V	112	105	110	112	111	123	139	139	112	130
Zn	41	47	46	57	48	67	65	59	62	75
Tl	0	0	0	0	0	0	2	0	0	0
Sb	2	3	6	3	0	8	2	5	8	1
S	474	701	720	744	964	844	514	1046	837	337

TABLE 4.35

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 18

VAR. / ID.	PDG171	PDG172	PDG173	PDG174	PDG175	PDG176	PDG177	PDG178	PDG179	PDG180
East	50	51	52	53	54	55	56	57	58	59
North	66	66	66	66	66	66	66	66	66	66
SiO2	62.78	62.30	60.60	63.28	64.10	61.09	65.26	59.05	59.06	58.57
Al2O3	18.42	19.78	17.52	19.16	18.66	19.99	20.90	23.50	15.72	17.32
Fe2O3	6.73	7.08	6.63	5.95	5.51	6.89	4.41	8.27	5.70	8.47
MgO	2.75	4.00	3.22	2.76	2.82	3.46	1.45	2.49	2.85	2.30
Na2O	1.02	0.80	0.86	0.85	0.96	0.76	0.78	0.57	1.02	0.71
K2O	2.26	2.96	2.51	2.59	2.42	3.04	2.36	4.60	2.14	2.73
As	4	5	3	3	2	2	4	3	3	4
Ba	374	414	408	446	380	435	391	491	344	307
Co	15	20	20	15	16	18	10	24	14	16
Cu	18	34	23	20	14	27	13	38	15	19
Ga	17	18	18	18	18	19	18	27	15	17
Ni	57	80	64	69	58	82	46	115	54	60
Pb	26	22	22	20	23	20	26	20	20	17
Rb	79	97	84	90	78	100	84	162	66	95
Sr	52	52	49	60	53	60	74	86	45	47
V	102	116	113	108	93	126	94	183	80	108
Zn	77	81	93	114	76	101	41	117	93	88
Tl	0	0	0	0	0	1	0	0	0	0
Sb	2	6	3	3	3	3	6	3	3	6
S	600	222	472	668	507	281	681	310	1170	813

TABLE 4.35

-2385-

XRF Analyses: Rams Cleuch Soil Grid (GRD1)

Part 19

VAR. / ID.	PDG181	PDG182	PDG183	PDG184	PDG185	PDG186	PDG187	PDG188	PDG189	PDG190
East	40	41	42	43	44	45	46	47	48	49
North	68	68	68	68	68	68	68	68	68	68
SiO2	65.23	66.02	67.59	71.50	68.93	58.32	60.66	60.49	61.87	58.21
Al2O3	16.21	17.70	16.53	16.37	15.27	17.66	18.03	17.25	18.34	17.21
Fe2O3	6.61	5.26	6.05	2.51	2.90	7.57	7.74	8.14	8.20	9.86
MgO	1.88	2.88	2.09	1.42	1.79	2.56	2.58	1.91	2.64	1.46
Na2O	0.75	0.86	0.86	0.90	1.01	0.38	0.53	0.55	0.78	0.61
K2O	2.41	2.56	2.37	2.29	2.05	3.00	2.90	2.73	2.47	2.03
As	3	4	3	1	0	2	3	4	5	13
Ba	295	282	258	252	218	342	363	340	362	313
Co	8	11	7	3	3	8	13	10	18	9
Cu	8	16	13	7	6	12	13	13	17	8
Ga	18	17	18	17	15	21	19	18	17	16
Ni	29	50	27	15	21	47	45	42	59	25
Pb	17	19	21	18	17	19	18	23	23	54
Rb	87	97	91	93	70	103	106	104	96	69
Sr	41	42	44	45	37	27	35	37	47	56
V	103	106	104	88	76	105	106	110	115	98
Zn	35	61	40	19	21	56	56	60	122	40
Tl	0	1	0	0	0	0	0	0	0	0
Sb	1	3	0	3	0	5	3	0	3	7
S	839	560	536	571	1045	903	802	672	505	1609

TABLE 4.35

-2386-

VAR. / ID.	PDG191	PDG192	PDG193	PDG194	PDG200
East	50	51	52	53	59
North	68	68	68	68	68
SiO2	62.12	58.82	61.69	52.33	64.23
Al2O3	19.28	17.30	19.05	15.03	18.53
Fe2O3	8.89	11.18	6.97	6.16	5.68
MgO	2.95	2.31	3.47	2.62	2.85
Na2O	0.68	0.73	0.80	0.69	0.83
K2O	2.88	2.07	2.42	1.90	2.16
As	4	7	3	5	2
Ba	384	367	418	467	512
Co	13	27	18	9	16
Cu	14	25	26	11	17
Ga	20	19	18	13	16
Ni	60	64	73	40	58
Pb	21	26	27	31	21
Rb	107	78	79	54	80
Sr	37	37	50	45	59
V	123	133	110	67	98
Zn	99	110	90	69	72
Tl	0	0	0	0	0
Sb	1	7	3	4	3
S	532	601	446	3382	645

TABLE 4.35

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 1

VAR. / ID.	PDG201	PDG202	PDG203	PDG204	PDG205	PDG206	PDG207	PDG208	PDG209	PDG210
East	57	56	55	54	53	52	51	50	49	48
North	544	544	544	544	544	544	544	544	544	544
SiO2	62.23	61.76	61.27	62.85	61.93	63.19	62.24	60.98	59.13	61.35
Al2O3	17.72	16.56	17.99	20.55	18.61	18.67	18.89	18.15	15.94	17.25
Fe2O3	7.60	7.58	7.33	4.81	6.52	5.02	6.55	8.04	7.56	8.41
MgO	3.02	3.07	2.79	2.71	3.88	2.95	4.18	3.14	2.67	2.13
Na2O	0.68	0.77	0.83	0.80	0.87	0.71	1.11	0.78	0.99	0.80
K2O	2.90	2.71	2.12	2.22	2.98	2.80	2.67	2.61	2.26	2.71
As	11	9	10	2	2	3	1	11	10	14
Ba	407	504	767	737	478	563	533	629	649	377
Co	21	18	12	14	20	14	17	16	18	32
Cu	26	23	12	13	29	28	19	16	12	15
Ga	17	17	18	19	19	19	18	19	17	19
Ni	61	63	43	45	68	54	63	55	43	34
Pb	34	25	39	28	27	28	28	31	39	43
Rb	105	105	100	101	106	101	98	115	108	127
Sr	48	48	52	53	50	54	50	47	50	37
V	116	119	111	112	115	107	117	123	103	116
Zn	96	94	117	97	102	89	104	110	155	90
Tl	0	0	0	0	0	2	0	0	0	0
Sb	4	4	0	4	2	2	2	2	5	8
S	331	174	1026	835	113	601	298	206	721	558

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 2

VAR. / ID.	PDG211	PDG212	PDG213	PDG214	PDG215	PDG216	PDG217	PDG218	PDG219	PDG220
East	47	46	45	44	43	42	41	40	39	38
North	544	544	544	544	544	544	544	544	544	544
SiO2	59.98	61.31	60.19	60.73	60.83	57.58	56.92	59.45	60.41	59.93
Al2O3	17.78	17.33	18.35	16.97	16.48	16.33	17.18	17.19	16.09	16.59
Fe2O3	9.10	8.02	9.10	9.55	9.21	11.27	10.32	10.26	8.84	9.73
MgO	2.20	1.72	2.47	2.02	2.37	2.51	2.73	2.16	1.99	2.55
Na2O	0.59	0.66	0.41	0.61	0.89	0.63	0.61	0.73	0.85	0.91
K2O	3.10	2.89	3.07	2.87	2.62	2.88	2.97	2.96	2.60	2.74
As	15	12	7	4	10	18	29	15	15	3
Ba	360	371	371	349	348	370	361	367	292	360
Co	19	19	18	16	21	14	23	17	15	16
Cu	19	15	17	12	15	22	28	19	13	18
Ga	21	19	20	21	20	21	21	20	21	21
Ni	41	34	37	25	31	37	46	31	27	40
Pb	43	28	24	23	32	38	49	30	31	26
Rb	134	126	142	129	108	116	111	125	105	115
Sr	37	42	28	34	36	30	32	33	35	34
V	130	118	131	125	122	126	126	139	136	135
Zn	84	68	79	59	75	93	145	92	60	73
Tl	0	0	0	0	0	0	0	0	0	0
Sb	6	5	6	6	2	6	9	4	5	0
S	629	532	516	408	391	637	557	381	532	423

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 3

VAR. / ID.	PDG221	PDG222	PDG223	PDG224	PDG225	PDG226	PDG227	PDG228	PDG229	PDG230
East	37	36	35	34	33	32	31	30	29	28
North	544	544	544	544	544	544	544	544	544	544
SiO2	58.27	62.43	67.02	63.21	59.26	64.11	64.63	61.31	61.12	59.27
Al2O3	14.78	18.82	16.62	17.89	15.01	17.72	16.87	16.32	19.17	17.19
Fe2O3	9.79	6.55	4.69	3.68	7.01	2.99	4.53	4.67	3.56	8.17
MgO	2.19	2.62	1.91	2.43	1.54	1.55	1.47	2.05	1.47	2.46
Na2O	0.74	0.90	1.18	0.74	0.78	0.68	0.69	0.65	0.34	0.80
K2O	2.69	2.97	2.38	2.87	2.20	2.85	2.76	2.93	3.11	2.33
As	19	5	2	3	2	0	3	2	8	13
Ba	292	310	264	346	299	278	270	285	346	1003
Co	21	17	10	10	13	6	6	8	90	27
Cu	19	19	11	7	6	1	8	4	6	14
Ga	21	21	19	20	17	18	19	22	19	17
Ni	31	41	20	31	22	20	18	25	13	47
Pb	50	28	22	30	21	23	23	24	28	50
Rb	100	115	88	95	63	89	90	97	94	115
Sr	27	35	37	33	30	30	30	30	26	50
V	136	141	93	107	96	103	101	118	116	113
Zn	69	70	32	47	30	27	23	30	20	125
Tl	0	0	0	0	0	0	0	0	0	0
Sb	4	4	5	4	4	6	3	4	6	0
S	836	329	444	884	880	825	687	916	1106	1076

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 4

VAR. / ID.	PDG231	PDG232	PDG233	PDG234	PDG235	PDG236	PDG237	PDG238	PDG239	PDG240
East	57	56	55	54	53	52	51	50	49	48
North	549	549	549	549	549	549	549	549	549	549
SiO2	63.58	60.24	62.12	63.28	59.75	59.59	59.28	61.44	60.76	61.32
Al2O3	15.94	19.99	19.25	18.45	17.87	18.46	17.37	18.91	18.45	18.70
Fe2O3	4.21	7.47	5.57	7.61	7.70	8.26	7.07	8.10	8.30	8.73
MgO	2.26	3.06	3.25	3.83	2.87	3.19	2.36	2.86	2.55	2.23
Na2O	1.21	0.92	1.04	0.91	0.68	0.64	0.63	0.66	0.67	0.68
K2O	2.32	2.32	2.48	2.97	2.47	2.86	2.32	2.87	2.71	2.76
As	0	3	3	7	8	10	8	10	10	8
Ba	222	789	669	502	679	736	1010	648	654	424
Co	40	20	13	21	17	27	18	23	17	24
Cu	3	9	11	32	21	26	16	24	23	20
Ga	19	19	17	18	18	17	16	19	18	19
Ni	23	49	51	72	59	61	45	67	47	44
Pb	17	21	20	24	22	32	42	35	33	30
Rb	74	115	94	97	103	106	109	121	113	111
Sr	34	57	60	51	54	53	63	52	51	51
V	97	112	106	113	109	110	93	118	119	123
Zn	30	104	89	102	93	112	115	117	118	91
Tl	0	0	0	0	1	0	0	0	0	0
Sb	4	3	0	1	2	5	3	2	4	6
S	899	714	655	0	297	533	1540	469	657	357

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 5

VAR. / ID.	PDG241	PDG242	PDG243	PDG244	PDG245	PDG246	PDG247	PDG248	PDG249	PDG250
East	47	46	45	44	43	42	41	40	39	38
North	549	549	549	549	549	549	549	549	549	549
SiO2	62.85	61.75	62.16	61.26	61.71	60.94	61.11	58.76	61.71	60.23
Al2O3	19.01	19.33	19.61	18.82	18.12	14.43	16.09	16.47	15.53	16.88
Fe2O3	8.12	8.00	8.11	8.30	7.90	8.33	7.76	10.06	9.66	9.14
MgO	2.19	1.94	1.50	1.76	1.94	2.10	2.17	2.49	1.57	2.28
Na2O	0.54	0.52	0.48	0.55	0.46	0.84	0.97	0.84	0.83	0.70
K2O	2.82	2.97	2.96	3.01	3.09	2.55	2.65	2.87	2.54	2.90
As	12	10	13	9	7	8	4	6	8	10
Ba	508	702	620	373	368	326	363	373	328	333
Co	19	24	21	15	11	24	11	22	15	22
Cu	20	20	16	14	17	9	8	14	12	20
Ga	18	22	19	21	20	18	20	20	18	18
Ni	43	46	36	30	33	27	26	35	22	39
Pb	29	31	33	36	27	44	27	26	32	30
Rb	114	124	119	123	131	120	117	116	107	97
Sr	60	82	113	90	35	34	37	35	37	35
V	119	129	127	125	130	115	114	141	115	115
Zn	77	87	72	65	67	51	59	66	41	56
Tl	0	2	0	0	0	0	0	0	0	0
Sb	4	5	7	8	5	6	4	4	5	9
S	420	306	373	713	458	879	565	652	610	403

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 6

VAR. / ID.	PDG251	PDG252	PDG253	PDG254	PDG255	PDG256	PDG257	PDG258	PDG259	PDG260
East	37	36	35	34	33	32	31	30	29	28
North	549	549	549	549	549	549	549	549	549	549
SiO2	64.22	59.49	58.85	56.96	63.89	59.62	65.57	60.90	64.21	61.91
Al2O3	15.82	16.80	18.05	16.42	14.30	17.86	17.41	18.42	14.88	17.41
Fe2O3	7.76	7.68	9.47	9.19	2.04	9.68	6.18	7.26	5.02	6.20
MgO	2.15	2.21	2.39	2.26	1.26	2.89	2.02	2.73	1.68	2.05
Na2O	1.16	0.71	0.61	0.63	0.90	0.83	0.82	0.73	1.06	0.64
K2O	2.45	2.76	2.94	2.76	2.40	2.82	2.87	3.02	2.30	2.99
As	8	11	9	12	4	5	2	2	0	6
Ba	316	335	380	370	286	375	314	372	235	359
Co	7	23	19	24	15	21	12	14	14	12
Cu	6	14	25	24	1	23	11	15	4	11
Ga	19	19	20	19	17	19	20	23	15	22
Ni	25	34	45	38	11	43	22	36	19	32
Pb	25	29	28	33	36	21	20	23	16	17
Rb	85	93	107	91	78	106	110	105	71	101
Sr	41	33	34	31	31	34	33	30	34	30
V	132	105	123	117	81	139	133	134	94	108
Zn	45	56	93	71	27	68	31	45	25	39
Tl	0	0	0	0	0	0	0	0	0	0
Sb	5	5	5	8	3	3	6	4	5	5
S	259	911	544	1278	1784	322	273	600	877	954

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 7

VAR. / ID.	PDG261	PDG262	PDG263	PDG264	PDG265	PDG266	PDG267	PDG268	PDG269	PDG270
East	57	56	55	54	53	52	51	50	49	48
North	554	554	554	554	554	554	554	554	554	554
SiO2	59.01	62.07	59.56	61.23	59.62	61.49	61.28	61.39	60.02	62.31
Al2O3	17.21	15.95	15.60	16.32	17.69	16.52	16.97	17.39	16.19	17.72
Fe2O3	9.10	7.85	8.82	8.05	8.80	7.72	7.23	8.42	9.18	8.05
MgO	2.56	2.08	1.66	1.74	2.36	2.47	3.11	3.36	1.98	1.70
Na2O	0.78	0.79	0.73	0.83	0.78	0.77	0.76	0.84	0.75	0.60
K2O	2.80	2.83	2.79	2.72	2.97	2.65	2.87	2.72	2.44	2.70
As	5	8	9	13	9	7	6	8	20	8
Ba	372	359	353	373	385	346	481	469	553	453
Co	27	44	18	24	19	36	24	28	31	13
Cu	17	14	17	13	20	20	22	24	13	11
Ga	19	18	20	18	21	16	17	18	17	19
Ni	37	23	28	28	41	45	60	59	35	24
Pb	22	26	30	48	29	25	25	34	66	31
Rb	107	117	113	130	129	97	97	103	110	112
Sr	39	39	39	42	42	49	51	47	50	51
V	117	124	121	114	115	99	109	110	112	116
Zn	82	60	58	82	96	88	103	129	147	73
Tl	0	0	0	0	0	0	0	0	0	0
Sb	0	5	1	2	3	2	5	3	3	0
S	784	541	723	1100	612	509	336	450	934	469

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 8

VAR. / ID.	PDG271	PDG272	PDG273	PDG274	PDG275	PDG276	PDG277	PDG278	PDG279	PDG280
East	47	46	45	44	43	42	41	40	39	38
North	554	554	554	554	554	554	554	554	554	554
SiO2	62.31	63.74	60.26	60.75	61.64	59.83	61.46	59.28	60.01	59.12
Al2O3	16.68	17.05	17.76	19.15	18.54	17.32	17.98	17.88	17.24	17.09
Fe2O3	8.55	6.57	8.91	8.79	7.72	8.40	7.93	9.24	8.86	8.38
MgO	2.40	1.88	2.13	1.67	2.36	2.67	1.81	1.84	2.01	1.49
Na2O	0.60	0.54	0.48	0.42	0.44	0.67	0.60	0.59	0.53	0.47
K2O	2.55	2.64	2.82	2.89	2.91	2.83	2.84	2.96	2.97	2.95
As	5	7	9	8	12	12	9	10	9	13
Ba	358	379	380	381	614	604	370	374	365	379
Co	13	20	17	19	18	21	17	33	18	23
Cu	30	14	24	20	17	24	17	21	23	17
Ga	17	19	18	20	18	18	19	21	19	19
Ni	44	34	52	43	56	57	31	38	40	23
Pb	26	30	24	28	38	40	31	28	24	41
Rb	93	98	94	108	103	109	118	113	111	109
Sr	47	51	56	46	55	44	37	36	34	34
V	113	118	107	121	115	116	130	129	129	112
Zn	72	53	76	65	101	101	63	73	56	52
Tl	0	0	0	0	0	0	0	0	0	0
Sb	3	5	7	1	3	0	7	4	3	5
S	332	557	345	517	463	649	398	535	559	830

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 9

VAR. / ID.	PDG281	PDG282	PDG283	PDG284	PDG285	PDG286	PDG287	PDG288	PDG289	PDG290
East	37	36	35	34	33	32	31	30	29	28
North	554	554	554	554	554	554	554	554	554	554
SiO2	57.17	60.94	62.36	60.43	62.47	62.54	60.07	62.29	62.33	61.15
Al2O3	15.90	16.74	16.28	17.84	15.87	18.59	18.05	17.41	16.89	16.46
Fe2O3	10.19	9.38	8.16	8.53	7.78	6.81	5.74	4.30	6.50	5.62
MgO	1.32	1.95	1.16	2.65	2.14	1.37	1.11	2.01	2.47	2.51
Na2O	0.45	0.74	0.62	0.79	0.98	0.46	0.40	0.73	0.99	0.82
K2O	3.05	2.71	2.70	2.85	2.53	3.60	3.05	2.74	2.50	2.62
As	11	8	10	9	7	26	3	3	0	0
Ba	369	347	348	339	293	401	334	333	274	315
Co	15	19	10	23	7	18	5	17	11	18
Cu	21	20	17	22	11	22	6	10	12	7
Ga	18	19	19	18	17	19	19	19	18	18
Ni	28	30	21	44	24	40	18	28	35	28
Pb	27	21	21	26	27	40	23	10	12	16
Rb	108	98	104	95	84	107	100	83	81	81
Sr	42	39	64	36	36	43	41	28	32	32
V	127	131	124	122	107	115	112	117	115	121
Zn	49	53	32	70	41	48	25	31	48	31
Tl	0	0	0	1	0	0	0	0	0	0
Sb	3	4	8	5	7	15	0	3	5	5
S	564	334	451	228	634	235	681	790	501	557

TABLE 4.36

-2396-

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 10

VAR. / ID.	PDG291	PDG292	PDG293	PDG294	PDG295	PDG296	PDG297	PDG298	PDG299	PDG300
East	57	56	55	54	53	52	51	50	49	48
North	559	559	559	559	559	559	559	559	559	559
SiO2	61.60	64.40	63.29	61.04	60.12	59.92	62.71	58.13	59.80	58.28
Al2O3	15.61	16.97	14.21	14.61	15.07	16.65	18.93	15.91	17.13	16.28
Fe2O3	7.55	7.36	7.10	7.62	8.03	7.80	6.48	6.97	8.04	9.74
MgO	2.03	1.77	1.92	1.82	1.64	3.02	2.58	2.77	2.34	2.37
Na2O	1.05	0.90	1.09	0.84	0.84	0.71	0.75	0.89	0.64	0.57
K2O	2.60	2.93	2.64	2.87	2.51	2.89	2.44	2.40	2.53	2.61
As	2	4	8	13	13	10	4	6	10	8
Ba	330	357	296	342	422	489	585	508	349	349
Co	23	21	24	29	21	23	22	16	17	18
Cu	11	14	11	10	16	26	11	18	13	13
Ga	17	19	18	16	17	17	14	16	18	17
Ni	26	22	21	22	22	60	44	56	48	39
Pb	24	20	31	52	54	31	27	27	30	30
Rb	91	124	101	116	115	95	88	85	88	81
Sr	38	38	36	34	37	45	51	52	46	38
V	110	129	114	104	103	116	110	96	108	121
Zn	55	47	47	55	73	94	68	124	73	57
Tl	0	0	0	0	0	0	0	0	0	0
Sb	2	4	1	4	0	2	6	5	2	4
S	559	425	505	957	1467	286	786	567	637	775

TABLE 4.36

-2397-

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 11

VAR. / ID.	PDG301	PDG302	PDG303	PDG304	PDG305	PDG306	PDG307	PDG308	PDG309	PDG310
East	47	46	45	44	43	42	41	40	39	38
North	559	559	559	559	559	559	559	559	559	559
SiO2	65.71	65.70	63.72	61.04	59.20	60.87	61.27	61.50	61.87	60.74
Al2O3	18.09	18.10	16.87	16.78	16.37	17.54	18.09	18.10	17.88	17.98
Fe2O3	6.25	5.59	7.94	9.07	8.37	8.13	7.92	8.31	8.12	7.84
MgO	1.55	1.50	2.12	1.53	1.98	2.15	2.10	1.61	1.53	1.77
Na2O	0.73	0.65	0.69	0.39	0.47	0.48	0.70	0.54	0.71	0.71
K2O	2.86	2.78	2.72	2.64	2.72	2.78	2.70	2.76	2.73	2.78
As	6	3	6	5	6	5	7	7	7	8
Ba	291	287	337	325	354	393	505	376	468	627
Co	10	10	27	15	10	30	25	17	19	18
Cu	8	9	13	13	22	19	13	19	16	18
Ga	18	19	18	19	18	18	17	18	18	18
Ni	20	20	35	26	40	42	37	48	32	41
Pb	27	18	23	23	22	25	26	25	29	28
Rb	108	102	94	92	99	110	99	99	116	124
Sr	46	48	44	51	51	59	57	64	51	57
V	124	112	113	118	110	115	124	116	111	119
Zn	34	37	54	44	65	72	64	65	72	86
Tl	0	0	0	0	0	0	0	0	0	0
Sb	3	3	5	5	0	3	0	9	7	6
S	412	245	452	385	453	376	433	231	573	541

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 12

VAR. / ID.	PDG311	PDG312	PDG313	PDG314	PDG315	PDG316	PDG317	PDG318	PDG319	PDG320
East	37	36	35	34	33	32	31	30	29	28
North	559	559	559	559	559	559	559	559	559	559
SiO2	62.03	60.24	60.92	56.77	62.97	58.35	58.46	65.52	59.79	62.06
Al2O3	21.02	20.43	13.15	17.02	16.16	14.89	15.51	19.10	16.01	17.04
Fe2O3	8.04	8.31	9.15	10.48	7.52	8.16	9.54	4.26	7.38	5.81
MgO	1.30	1.88	1.38	3.00	1.71	2.77	2.26	2.27	2.84	2.81
Na2O	0.41	0.47	0.92	0.82	0.92	1.02	0.70	1.00	0.80	0.88
K2O	4.11	3.48	2.22	2.88	2.60	2.34	2.63	2.81	2.78	3.02
As	36	6	13	8	5	11	15	5	11	4
Ba	533	502	328	343	270	319	351	292	325	339
Co	47	27	217	164	19	48	26	14	34	13
Cu	68	27	9	21	8	17	16	13	7	12
Ga	24	19	17	20	19	16	17	22	20	20
Ni	73	85	17	53	16	39	30	27	37	37
Pb	62	24	51	24	25	40	41	22	33	29
Rb	140	129	101	106	93	73	85	105	88	94
Sr	183	51	36	36	34	33	30	36	32	33
V	127	138	99	127	123	105	114	120	120	109
Zn	67	115	31	91	34	66	53	49	73	55
Tl	0	0	0	1	0	0	0	0	0	0
Sb	34	5	3	3	0	4	3	3	4	3
S	52	229	1319	384	428	1006	1027	382	477	778

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 13

VAR. / ID.	PDG327	PDG328	PDG329	PDG330	PDG331	PDG332	PDG333	PDG334	PDG335	PDG336
East	51	50	49	48	47	46	45	44	43	42
North	564	564	564	564	564	564	564	564	564	564
SiO2	60.10	57.71	59.28	56.58	56.89	57.44	62.06	60.63	58.64	63.34
Al2O3	15.83	15.03	16.24	15.77	17.64	15.90	18.36	18.27	15.81	17.46
Fe2O3	7.94	8.84	8.90	8.45	8.78	8.03	7.98	7.75	7.86	6.46
MgO	2.69	2.11	2.46	2.53	3.04	2.62	2.95	2.79	1.91	2.96
Na2O	0.96	0.83	0.80	0.87	0.84	0.87	0.77	0.78	0.69	0.99
K2O	2.67	2.52	2.88	2.30	2.64	2.45	2.85	2.51	1.90	2.24
As	12	18	17	15	15	10	15	10	10	3
Ba	344	413	378	786	738	648	597	692	797	616
Co	33	39	42	20	28	20	23	26	23	17
Cu	17	17	19	15	19	18	34	18	10	13
Ga	20	18	21	17	18	17	18	18	17	17
Ni	37	32	41	42	55	51	65	56	32	45
Pb	39	72	48	61	41	40	42	27	42	26
Rb	109	122	133	116	117	109	108	110	95	96
Sr	40	38	35	47	51	53	52	53	57	55
V	115	99	120	107	114	102	113	111	93	111
Zn	82	98	84	146	115	119	126	119	121	109
Tl	0	2	0	0	0	0	0	0	0	0
Sb	3	3	2	0	3	4	5	6	1	2
S	639	1425	733	1364	1144	1026	370	802	1741	556

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 14

VAR. / ID.	PDG337	PDG338	PDG339	PDG340	PDG341	PDG342	PDG343	PDG344	PDG345	PDG346
East	41	40	39	38	37	36	35	34	33	32
North	564	564	564	564	564	564	564	564	564	564
SiO2	63.52	62.01	61.37	60.93	62.28	56.37	61.92	60.12	58.78	59.64
Al2O3	17.67	17.93	15.67	15.57	17.81	15.47	15.50	16.68	18.37	14.10
Fe2O3	5.30	8.34	7.18	6.17	6.91	10.08	7.02	7.87	9.45	8.55
MgO	2.14	1.81	1.27	1.50	1.75	2.15	1.33	1.65	2.63	1.85
Na2O	0.70	0.60	0.47	0.54	0.54	0.53	0.58	0.54	0.42	0.86
K2O	2.45	2.66	2.70	2.58	2.67	2.62	2.70	2.81	3.12	2.22
As	6	6	14	13	12	15	20	19	18	12
Ba	562	336	352	329	337	344	353	349	360	307
Co	12	15	47	14	14	20	14	16	20	13
Cu	16	13	8	9	15	16	6	12	19	7
Ga	18	20	19	18	20	20	20	20	22	16
Ni	27	29	16	24	30	39	12	20	38	24
Pb	42	22	26	30	19	36	37	30	32	46
Rb	110	104	106	100	101	97	117	118	127	92
Sr	53	45	41	41	44	39	33	36	28	31
V	115	110	119	101	109	108	117	112	130	90
Zn	106	57	38	57	58	83	44	68	118	52
Tl	0	0	1	0	0	0	0	0	0	0
Sb	0	3	0	3	2	2	3	5	7	2
S	1149	490	664	962	645	729	840	591	496	1056

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 15

VAR. / ID.	PDG347	PDG348	PDG349	PDG350	PDG351	PDG352	PDG353	PDG354	PDG355	PDG356
East	31	30	29	28	57	56	55	54	53	52
North	564	564	564	564	569	569	569	569	569	569
SiO2	60.00	61.23	61.55	61.72	63.05	59.10	61.59	59.75	57.07	58.09
Al2O3	15.91	14.53	15.00	17.72	15.89	17.42	14.21	17.87	17.14	14.09
Fe2O3	10.14	9.14	8.77	5.70	6.65	8.61	8.33	8.96	10.59	8.85
MgO	2.19	1.76	1.46	1.75	1.41	2.27	1.55	2.07	2.73	1.46
Na2O	0.79	0.90	0.67	0.67	0.75	0.74	0.82	0.61	0.70	0.69
K2O	2.62	2.46	2.69	3.01	2.59	2.95	2.46	2.97	2.88	2.42
As	8	5	23	13	4	2	5	17	17	14
Ba	353	353	341	342	306	333	325	378	356	311
Co	20	13	10	24	28	23	24	27	27	20
Cu	13	8	11	9	4	16	8	20	26	11
Ga	21	19	21	22	18	19	19	21	20	20
Ni	25	18	17	29	16	49	22	38	45	18
Pb	24	28	39	31	16	18	26	32	28	27
Rb	117	113	114	110	99	109	98	130	119	114
Sr	35	36	32	36	34	35	33	36	32	37
V	124	120	134	118	110	124	102	127	131	119
Zn	60	40	33	38	27	64	36	83	118	50
Tl	0	0	0	0	0	0	0	0	0	0
Sb	3	2	3	4	0	1	0	2	4	2
S	409	490	570	549	862	614	752	547	601	677

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 16

VAR. / ID.	PDG357	PDG358	PDG359	PDG360	PDG361	PDG362	PDG363	PDG364	PDG365	PDG366
East	51	50	49	48	47	46	45	44	43	42
North	569	569	569	569	569	569	569	569	569	569
SiO2	58.68	59.49	60.18	60.78	58.32	58.08	59.92	61.21	60.46	60.63
Al2O3	13.70	15.84	14.28	15.24	17.15	14.41	17.00	17.37	15.91	19.18
Fe2O3	7.68	8.49	8.85	6.92	9.27	7.56	6.89	7.78	7.93	5.28
MgO	1.58	2.05	1.35	1.47	2.44	1.20	2.92	1.95	2.11	2.41
Na2O	0.87	0.77	0.89	0.88	0.84	0.71	0.91	1.03	0.74	0.83
K2O	2.51	2.65	2.51	2.72	2.59	2.39	2.72	2.70	2.51	2.24
As	10	16	48	12	3	13	7	6	4	4
Ba	334	388	373	350	322	340	455	299	356	348
Co	37	16	22	18	25	23	32	24	28	16
Cu	6	15	12	9	14	9	24	13	16	10
Ga	19	20	19	19	19	20	18	18	19	23
Ni	18	27	15	18	41	22	57	38	40	40
Pb	33	50	117	48	15	51	23	23	21	28
Rb	105	136	148	129	104	129	101	120	100	94
Sr	34	35	40	38	37	40	55	49	52	46
V	110	117	129	112	115	96	105	100	106	111
Zn	46	81	68	49	73	51	93	79	65	105
Tl	0	0	0	0	0	0	0	0	0	0
Sb	3	1	3	0	0	3	1	4	4	2
S	1045	1302	1345	977	376	1331	234	633	491	1008

TABLE 4.36

-2403-

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 17

VAR. / ID.	PDG367	PDG368	PDG369	PDG370	PDG371	PDG372	PDG373	PDG374	PDG375	PDG376
East	41	40	39	38	37	36	35	34	33	32
North	569	569	569	569	569	569	569	569	569	569
SiO2	63.13	53.81	61.69	65.85	59.33	61.64	58.69	59.84	59.00	59.46
Al2O3	15.08	12.90	16.40	15.76	16.09	14.62	16.35	17.60	16.07	16.78
Fe2O3	4.35	14.38	6.15	5.52	8.74	6.63	8.83	8.50	8.48	7.53
MgO	1.93	2.09	2.25	1.58	2.23	1.72	2.62	2.73	2.28	1.61
Na2O	0.80	0.47	0.63	0.64	0.69	0.92	0.81	0.89	0.70	0.50
K2O	2.33	2.38	2.75	2.79	2.75	2.77	2.71	3.04	2.94	2.94
As	2	7	7	3	6	6	5	13	29	15
Ba	318	304	248	276	341	276	361	320	345	356
Co	34	23	33	20	10	20	12	21	28	350
Cu	5	17	8	5	10	7	14	19	16	10
Ga	18	15	19	21	20	21	19	22	19	20
Ni	27	36	30	16	33	20	40	40	36	20
Pb	24	27	23	23	26	29	27	28	61	37
Rb	88	83	101	109	103	107	103	126	110	109
Sr	38	37	37	40	37	36	35	34	35	42
V	89	100	110	111	115	102	110	133	112	101
Zn	42	58	50	36	58	46	73	96	122	55
Tl	0	0	0	0	0	0	0	0	0	0
Sb	4	0	3	0	0	0	0	0	0	0
S	1021	1022	576	376	847	803	743	536	894	745

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 18

VAR. / ID.	PDG377	PDG378	PDG379	PDG380	PDG381	PDG382	PDG383	PDG384	PDG385	PDG386
East	31	30	29	28	57	56	55	54	53	52
North	569	569	569	569	574	574	574	574	574	574
SiO2	64.14	62.65	63.28	58.39	61.79	59.14	59.96	63.24	59.77	61.30
Al2O3	16.03	14.38	14.52	15.56	15.25	15.74	15.20	16.42	17.01	15.56
Fe2O3	8.23	8.67	6.78	9.70	6.87	9.89	8.03	8.32	9.32	7.75
MgO	1.76	1.41	1.18	1.86	1.89	2.11	1.97	1.95	2.71	1.74
Na2O	0.79	0.90	0.79	0.59	1.01	0.67	0.70	0.95	0.81	0.77
K2O	2.97	2.62	2.46	2.73	2.38	2.94	2.52	2.52	2.90	2.71
As	7	3	11	18	6	65	18	7	10	9
Ba	331	252	266	342	253	350	278	257	314	298
Co	33	54	8	41	12	8	10	19	16	15
Cu	13	4	10	13	7	18	13	11	19	12
Ga	22	19	19	19	20	20	19	20	22	19
Ni	24	10	18	38	24	31	34	27	41	24
Pb	24	24	36	29	28	75	40	24	23	27
Rb	120	107	100	100	81	105	92	94	113	116
Sr	38	38	36	36	34	33	34	37	35	36
V	112	120	99	119	109	122	105	128	121	120
Zn	39	19	26	53	37	130	80	48	77	58
Tl	0	0	0	0	0	0	0	0	0	0
Sb	0	0	0	0	0	0	0	0	0	0
S	458	455	914	651	901	978	976	450	495	523

TABLE 4.36

-2405-

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 19

VAR. / ID.	PDG387	PDG388	PDG389	PDG390	PDG391	PDG392	PDG393	PDG394	PDG395	PDG396
East	51	50	49	48	47	46	45	44	43	42
North	574	574	574	574	574	574	574	574	574	574
SiO2	62.15	62.07	62.48	56.82	62.21	59.84	59.03	63.11	56.94	59.66
Al2O3	14.74	16.42	13.03	15.59	20.59	16.97	16.05	16.62	15.16	14.80
Fe2O3	6.76	8.42	6.76	8.03	5.87	6.77	8.39	6.78	8.41	7.93
MgO	1.58	1.61	1.00	1.64	2.78	2.46	2.31	1.84	2.97	1.68
Na2O	0.74	0.84	1.04	0.72	0.76	0.97	0.75	0.89	0.88	0.84
K2O	2.73	2.63	2.42	2.68	3.58	2.50	3.05	2.65	2.68	2.35
As	8	3	20	15	0	9	7	4	7	8
Ba	272	262	254	516	492	601	365	273	327	350
Co	32	9	12	27	12	17	34	12	16	40
Cu	3	8	10	18	21	9	16	7	13	10
Ga	20	19	18	16	20	19	21	20	18	19
Ni	18	22	11	54	67	38	37	21	46	23
Pb	28	21	73	56	23	51	25	30	39	44
Rb	117	105	132	109	120	114	122	110	96	127
Sr	36	38	38	46	57	47	36	38	34	37
V	119	118	91	108	127	99	120	110	104	103
Zn	43	41	34	197	89	118	96	50	106	67
Tl	0	0	0	0	0	0	0	0	0	0
Sb	0	0	0	0	0	0	0	0	0	0
S	556	511	1242	1122	208	1389	416	797	1142	974

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 20

VAR. / ID.	PDG397	PDG398	PDG399	PDG400	PDG401	PDG402	PDG403	PDG404	PDG405	PDG406
East	41	40	39	38	37	36	35	34	33	32
North	574	574	574	574	574	574	574	574	574	574
SiO2	60.92	62.38	61.38	61.56	59.70	63.47	59.55	59.03	59.20	60.25
Al2O3	16.17	15.27	16.66	15.76	16.87	17.19	15.62	15.87	17.26	17.37
Fe2O3	7.69	8.12	7.66	7.54	8.88	7.16	8.07	6.76	9.07	8.34
MgO	2.82	2.70	2.61	1.76	2.45	1.90	2.12	2.07	2.89	2.53
Na2O	0.98	1.05	0.82	0.56	0.75	0.89	0.60	0.73	0.66	0.60
K2O	3.08	2.73	2.57	2.68	2.75	2.89	2.81	2.86	2.93	3.07
As	6	8	10	1	3	2	6	4	6	8
Ba	362	344	437	267	347	271	336	339	336	361
Co	25	16	21	15	27	13	15	15	19	18
Cu	29	15	15	7	11	10	23	9	19	20
Ga	17	17	18	19	18	18	17	17	16	18
Ni	63	43	48	25	38	27	42	33	58	47
Pb	28	36	34	21	17	13	22	29	21	21
Rb	104	98	96	86	91	97	91	84	88	100
Sr	49	52	52	42	42	40	43	36	38	39
V	114	106	104	103	120	104	110	86	114	119
Zn	83	80	78	30	61	45	53	53	74	67
Tl	0	0	0	0	0	0	0	0	0	0
Sb	3	0	0	3	0	0	3	0	1	2
S	243	310	626	987	609	500	571	1372	586	424

TABLE 4.36

-2407-

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 21

VAR. / ID.	PDG407	PDG408	PDG409	PDG410	PDG411	PDG412	PDG413	PDG414	PDG415	PDG416
East	31	30	29	28	57	56	55	54	53	52
North	574	574	574	574	579	579	579	579	579	579
SiO2	58.98	60.50	59.66	56.24	60.41	62.81	62.60	63.76	55.97	62.07
Al2O3	17.30	17.76	15.83	17.92	15.79	17.17	16.03	17.95	17.02	15.77
Fe2O3	9.11	8.89	8.71	11.44	8.73	7.09	6.84	7.41	10.60	7.80
MgO	2.51	1.98	1.33	1.76	1.67	1.38	1.64	1.14	1.55	2.00
Na2O	0.61	0.52	0.40	0.38	0.44	0.56	0.76	0.61	0.26	1.13
K2O	3.12	3.12	3.00	2.92	2.72	2.78	2.71	2.66	3.18	2.27
As	17	20	23	14	8	3	2	9	5	2
Ba	371	375	277	358	284	267	240	273	327	285
Co	39	17	34	15	13	7	12	7	9	22
Cu	21	19	13	21	11	8	9	9	20	19
Ga	19	20	19	19	19	17	18	19	20	18
Ni	54	38	26	47	29	25	28	21	41	27
Pb	34	41	38	29	29	21	17	28	20	23
Rb	103	104	94	88	82	77	78	82	94	77
Sr	41	41	42	43	35	40	35	43	40	37
V	121	109	104	120	104	107	109	114	115	104
Zn	93	86	42	69	41	32	34	31	40	52
Tl	0	0	0	0	0	0	0	0	0	0
Sb	1	0	0	2	0	0	0	0	4	0
S	564	796	629	821	617	875	529	593	602	696

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 22

VAR. / ID.	PDG417	PDG418	PDG419	PDG420	PDG421	PDG422	PDG423	PDG424	PDG425	PDG426
East	51	50	49	48	47	46	45	44	43	42
North	579	579	579	579	579	579	579	579	579	579
SiO2	55.17	60.48	58.99	59.43	61.70	59.72	56.96	60.70	62.16	61.52
Al2O3	14.73	16.93	17.76	15.36	16.26	15.99	14.33	15.60	15.46	14.31
Fe2O3	13.50	8.87	9.17	8.47	8.35	7.81	9.34	8.29	6.58	5.66
MgO	1.60	2.30	1.93	1.67	2.31	1.87	1.80	1.97	1.46	1.33
Na2O	0.44	0.80	0.65	0.75	1.03	0.68	0.67	0.89	0.84	0.83
K2O	3.15	2.97	3.08	2.65	2.62	2.86	2.65	2.66	2.70	2.83
As	28	0	0	2	0	3	4	3	4	6
Ba	340	277	361	285	267	328	267	282	283	286
Co	26	15	18	25	17	27	21	11	4	17
Cu	32	16	15	11	13	11	6	9	7	2
Ga	19	19	19	18	16	19	18	18	20	19
Ni	47	43	39	26	36	34	21	22	19	13
Pb	53	16	18	17	18	22	30	30	30	37
Rb	94	97	104	102	90	98	93	99	102	121
Sr	32	34	34	34	35	41	29	35	33	36
V	117	122	118	115	105	108	98	111	97	95
Zn	88	55	63	47	57	55	44	48	34	35
Tl	0	0	0	0	0	0	0	0	0	0
Sb	6	0	0	0	3	0	0	0	3	0
S	612	552	646	662	476	639	1218	855	1088	1293

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 23

VAR. / ID.	PDG427	PDG428	PDG429	PDG430	PDG431	PDG432	PDG433	PDG434	PDG435	PDG436
East	41	40	39	38	37	36	35	34	33	32
North	579	579	579	579	579	579	579	579	579	579
SiO2	59.97	55.96	59.82	64.51	60.42	69.31	65.39	62.38	67.71	51.81
Al2O3	16.75	14.43	18.50	16.59	16.17	16.56	17.34	15.41	15.51	9.59
Fe2O3	8.43	10.77	6.96	6.60	4.09	1.95	4.95	7.14	1.71	2.06
MgO	2.49	2.56	3.29	2.09	2.54	1.49	2.08	1.29	1.15	0.94
Na2O	0.88	0.79	0.93	1.01	0.99	1.20	0.98	1.15	0.63	0.54
K2O	2.44	2.63	2.53	2.84	2.36	2.54	2.90	2.54	2.73	2.42
As	3	39	8	7	0	0	0	1	0	1
Ba	367	765	667	273	289	293	336	249	265	293
Co	21	22	23	5	10	8	7	13	13	0
Cu	15	15	14	7	11	0	5	4	0	0
Ga	19	19	19	20	19	20	21	20	19	12
Ni	37	39	55	24	34	10	23	13	9	8
Pb	29	122	37	31	16	21	19	18	13	33
Rb	97	136	116	95	93	100	105	93	94	60
Sr	38	46	50	48	43	48	46	42	42	24
V	107	130	108	102	91	80	115	98	95	45
Zn	90	254	165	35	56	17	31	30	13	18
Tl	0	0	0	0	0	0	0	0	0	0
Sb	0	0	2	0	0	0	0	0	1	0
S	711	1640	932	521	572	825	627	856	566	3766

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 24

VAR. / ID.	PDG437	PDG438	PDG439	PDG440	PDG441	PDG442	PDG443	PDG444	PDG445	PDG446
East	31	30	29	28	57	56	55	54	53	52
North	579	579	579	579	584	584	584	584	584	584
SiO2	59.88	67.07	61.47	60.25	60.94	60.93	58.85	62.23	61.24	59.31
Al2O3	15.56	16.26	16.15	16.94	14.23	16.17	15.05	14.04	15.03	14.99
Fe2O3	7.18	3.81	7.23	8.41	4.25	5.67	8.33	6.48	5.86	7.74
MgO	2.29	1.24	1.73	1.44	1.49	2.51	2.18	1.97	1.77	2.42
Na2O	0.85	1.03	0.86	0.62	0.98	0.79	0.73	1.12	0.74	0.83
K2O	2.88	2.93	2.71	2.93	2.45	2.80	2.75	2.46	2.56	2.52
As	4	0	2	2	0	0	0	0	0	1
Ba	329	279	273	327	249	246	328	309	259	307
Co	16	25	6	34	20	10	39	11	5	13
Cu	11	5	11	17	2	6	15	15	0	13
Ga	20	19	20	19	18	18	18	17	18	20
Ni	29	12	22	34	13	36	38	28	20	43
Pb	21	22	24	22	13	18	21	20	23	21
Rb	103	108	89	103	83	87	91	73	80	85
Sr	34	43	39	54	32	31	30	31	31	35
V	112	103	113	115	80	100	101	89	92	116
Zn	49	30	38	49	21	43	57	34	26	60
Tl	0	0	0	0	0	0	0	0	0	0
Sb	0	0	0	0	0	0	2	0	3	0
S	629	485	823	401	894	741	966	1036	1157	413

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 25

VAR. / ID.	PDG447	PDG448	PDG449	PDG450	PDG451	PDG452	PDG453	PDG454	PDG455	PDG456
East	51	50	49	48	47	46	45	44	43	42
North	584	584	584	584	584	584	584	584	584	584
SiO2	61.99	61.38	63.29	56.63	57.52	57.65	62.49	59.05	58.60	60.16
Al2O3	17.12	15.62	15.97	14.75	15.76	13.97	10.25	16.62	18.89	15.27
Fe2O3	7.19	8.53	8.09	9.52	8.15	9.76	2.55	9.62	9.54	8.56
MgO	2.52	1.71	1.55	2.73	2.54	2.28	0.76	2.73	2.99	2.08
Na2O	1.09	0.76	0.90	0.87	0.90	0.89	0.72	0.76	0.70	0.76
K2O	2.89	2.74	2.62	2.63	2.73	2.48	1.90	2.92	3.21	2.77
As	2	3	1	1	0	2	22	3	1	12
Ba	340	268	258	323	324	258	237	298	386	260
Co	14	9	21	29	14	16	9	16	20	14
Cu	17	7	6	15	11	11	2	15	21	14
Ga	19	21	19	20	19	20	16	21	21	18
Ni	41	25	17	53	38	35	7	38	48	35
Pb	20	17	18	22	25	19	117	22	17	30
Rb	93	96	100	89	100	89	65	106	124	95
Sr	37	34	38	32	34	35	31	34	35	38
V	108	110	118	103	108	118	38	126	136	100
Zn	50	37	32	66	62	54	28	62	86	54
Tl	0	0	0	0	0	0	0	0	0	0
Sb	1	3	0	1	0	0	0	0	0	3
S	645	802	721	565	833	525	2287	576	308	918

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 26

VAR. / ID.	PDG457	PDG458	PDG459	PDG460	PDG461	PDG462	PDG463	PDG464	PDG465	PDG466
East	41	40	39	38	37	36	35	34	33	32
North	584	584	584	584	584	584	584	584	584	584
SiO2	62.93	58.55	57.94	59.42	59.68	55.98	47.21	65.22	68.15	64.69
Al2O3	16.82	16.56	15.24	17.44	17.56	15.25	8.75	15.52	15.77	17.82
Fe2O3	7.75	8.25	7.90	8.26	4.86	9.89	3.85	3.84	2.13	4.80
MgO	1.59	3.61	2.93	3.69	2.76	2.21	1.04	1.36	1.27	1.68
Na2O	0.76	0.98	1.04	1.08	1.00	0.68	0.57	0.98	1.10	0.84
K2O	2.81	2.98	2.24	2.52	2.36	2.42	1.85	2.50	2.44	2.85
As	7	10	7	6	6	11	8	0	0	0
Ba	281	549	635	673	738	1561	298	248	254	302
Co	5	16	22	18	15	60	3	3	15	5
Cu	11	29	11	17	12	28	0	1	4	7
Ga	21	19	16	18	17	18	11	18	17	19
Ni	17	68	49	60	46	81	12	13	11	27
Pb	23	55	42	28	45	41	53	14	18	17
Rb	112	110	85	89	97	83	47	88	91	108
Sr	37	46	51	52	66	51	31	42	45	45
V	124	119	98	118	95	122	37	97	85	109
Zn	41	109	101	83	94	127	32	19	18	34
Tl	0	0	0	0	0	0	0	0	0	0
Sb	0	2	1	0	0	2	0	1	0	0
S	580	1029	1722	622	1938	750	5312	710	605	646

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 27

VAR. / ID.	PDG467	PDG468	PDG469	PDG470	PDG471	PDG472	PDG473	PDG474	PDG475	PDG476
East	31	30	29	28	57	56	55	54	53	52
North	584	584	584	584	589	589	589	589	589	589
SiO2	62.78	63.13	64.68	62.00	57.62	66.42	59.97	64.10	57.21	58.59
Al2O3	17.64	18.55	19.98	17.49	16.40	16.03	15.26	14.33	15.09	13.03
Fe2O3	7.44	5.64	4.21	6.60	7.53	2.57	8.88	1.72	5.61	7.62
MgO	2.09	1.60	1.78	2.05	2.38	1.30	2.38	1.29	2.18	1.51
Na2O	0.77	0.65	0.52	0.68	0.55	0.95	0.89	0.86	0.81	0.90
K2O	2.66	2.90	3.13	2.78	2.97	2.49	2.35	2.40	2.38	2.13
As	1	2	4	9	5	0	0	0	2	0
Ba	288	273	339	340	346	260	241	248	259	246
Co	12	22	6	9	21	0	36	130	7	10
Cu	11	9	16	13	13	0	17	0	8	5
Ga	19	20	19	19	17	20	18	17	19	17
Ni	32	27	33	43	39	9	33	6	29	17
Pb	17	20	23	35	32	29	18	18	32	21
Rb	98	107	111	104	90	86	79	77	77	79
Sr	45	47	57	56	29	34	32	34	34	35
V	123	107	100	108	93	88	112	76	95	98
Zn	50	38	41	60	55	18	48	15	45	27
Tl	0	0	0	0	0	0	0	0	0	0
Sb	2	0	0	0	3	0	0	0	0	0
S	433	397	544	645	1126	840	513	1152	1426	1062

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 28

VAR. / ID.	PDG477	PDG478	PDG479	PDG480	PDG481	PDG482	PDG483	PDG484	PDG485	PDG486
East	51	50	49	48	47	46	45	44	43	42
North	589	589	589	589	589	589	589	589	589	589
SiO2	62.74	62.31	59.08	59.12	57.61	58.23	56.65	59.01	59.94	62.93
Al2O3	15.07	17.05	13.73	15.70	14.91	14.74	15.31	15.18	15.46	15.66
Fe2O3	6.01	3.22	3.88	7.77	10.50	10.49	9.19	8.17	9.35	7.78
MgO	1.78	2.14	1.18	2.71	1.93	2.11	2.62	1.92	1.64	1.28
Na2O	1.19	0.91	0.77	0.91	0.74	0.74	0.69	0.78	0.81	0.77
K2O	2.40	2.60	2.17	2.44	2.45	2.54	2.61	2.55	2.49	2.27
As	0	0	0	5	1	3	7	10	7	4
Ba	236	254	252	318	268	323	338	266	285	257
Co	23	5	8	25	8	26	16	9	15	9
Cu	8	5	1	12	17	16	19	12	8	5
Ga	18	20	17	19	18	19	19	19	21	20
Ni	21	25	14	45	29	37	49	22	18	12
Pb	19	22	22	27	19	21	30	35	27	22
Rb	85	95	69	86	94	101	98	101	104	87
Sr	35	37	28	34	31	30	30	29	34	34
V	93	100	73	108	119	122	114	110	113	103
Zn	37	30	24	65	45	69	84	53	47	26
Tl	0	0	0	0	0	0	0	0	0	0
Sb	0	0	0	0	2	0	1	1	0	0
S	348	698	1533	523	945	394	795	1185	715	661

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 29

VAR. / ID.	PDG487	PDG488	PDG489	PDG490	PDG491	PDG492	PDG493	PDG494	PDG495	PDG496
East	41	40	39	38	37	36	35	34	33	32
North	589	589	589	589	589	589	589	589	589	589
SiO2	59.88	62.72	63.69	62.91	61.42	60.53	60.28	59.83	60.96	62.36
Al2O3	17.29	17.44	16.32	16.26	17.76	19.42	19.21	17.49	18.10	18.00
Fe2O3	9.48	7.03	4.20	8.94	8.07	7.22	6.85	8.18	7.34	7.66
MgO	2.77	1.43	1.77	1.39	1.68	3.20	3.45	3.11	3.29	2.86
Na2O	0.82	0.65	0.99	0.77	0.73	0.88	0.92	0.97	0.88	0.89
K2O	2.89	2.76	2.15	2.81	3.08	2.77	2.35	2.73	2.92	2.59
As	2	1	3	3	6	5	6	5	2	6
Ba	342	295	242	292	299	734	747	546	452	433
Co	17	16	9	5	10	20	18	20	25	0
Cu	18	7	2	6	11	18	11	17	21	15
Ga	21	22	18	19	22	20	17	19	19	20
Ni	49	14	20	18	25	56	55	63	61	54
Pb	18	21	23	27	26	27	27	27	25	20
Rb	102	111	72	106	145	107	85	100	101	92
Sr	35	35	36	36	38	55	53	53	61	56
V	129	120	84	127	123	124	110	119	105	109
Zn	78	31	29	26	50	93	74	89	92	75
Tl	0	0	0	0	0	0	0	0	0	0
Sb	0	0	0	0	0	0	2	0	1	0
S	346	748	992	509	578	539	697	234	454	126

TABLE 4.36

XRF Analyses: Swin Gill Soil Grid (GRD2)

Part 30

VAR. / ID.	PDG497	PDG498	PDG499	PDG500
East	31	30	29	28
North	589	589	589	589
SiO2	60.81	58.90	61.52	59.76
Al2O3	17.82	16.93	18.70	18.15
Fe2O3	7.92	7.68	7.80	6.07
MgO	3.28	3.57	3.56	2.62
Na2O	0.92	1.02	0.94	0.87
K2O	2.65	2.35	2.83	2.54
As	5	4	2	7
Ba	453	416	412	581
Co	17	13	18	10
Cu	17	9	16	9
Ga	20	20	18	19
Ni	59	50	63	46
Pb	21	29	17	36
Rb	96	80	102	99
Sr	52	49	56	54
V	114	102	115	105
Zn	80	89	88	95
Tl	0	0	3	0
Sb	0	0	0	0
S	166	669	74	985

TABLE 4.36

VAR. / ID.	DJR-1	DJR-2	DJR-3	DJR-4	DJR-5	DJR-6	DJR-7	DJR-8	DJR-9	DJR-10
East	33555	33535	33500	33464	33447	33388	33409	33370	33358	33330
North	59802	59800	59778	59755	59736	59666	59650	59615	59598	59563
SiO2	62.49	56.08	58.36	56.79	56.24	52.14	56.42	59.95	59.13	56.92
Al2O3	18.03	13.72	13.81	16.60	11.68	10.86	15.10	14.48	12.62	14.44
TiO2	1.07	0.76	0.92	1.01	0.88	0.68	0.90	0.85	1.06	0.81
Fe2O3	6.98	4.74	6.25	7.64	5.85	4.12	6.73	5.89	5.93	6.11
MgO	4.71	4.05	3.58	5.42	4.30	2.96	5.42	2.78	4.53	3.49
CaO	0.23	10.64	6.91	4.30	10.59	16.61	6.60	7.87	9.11	8.55
Na2O	1.86	1.74	1.88	1.46	1.58	1.65	1.61	1.86	1.88	1.56
K2O	2.58	2.21	2.11	2.81	1.40	1.62	2.11	2.17	1.69	1.85
MnO	0.05	0.13	0.11	0.10	0.12	0.17	0.08	0.10	0.10	0.09
P2O5	0.18	0.19	0.21	0.19	0.18	0.18	0.18	0.19	0.21	0.18
Total	98.18	94.26	94.14	96.32	92.82	90.99	95.15	96.14	96.26	94.00
As	0	0	1	8	0	0	0	0	0	0
Ba	320	248	353	392	222	179	300	317	199	287
Cl	0	59	6	25	76	64	46	89	79	39
Co	41	34	32	27	39	26	27	32	45	32
Cr	165	116	125	144	181	105	125	130	256	132
Cu	19	36	20	38	30	51	31	13	16	10
Ga	16	14	15	19	12	11	17	13	13	13
La	39	38	39	48	35	34	31	30	44	33
Ni	65	48	64	82	45	43	65	55	53	48
Nb	16	13	16	16	15	12	16	14	18	13
Pb	13	15	36	49	13	12	12	12	16	14
Rb	86	74	71	96	44	51	70	68	57	56
Sr	55	188	98	98	156	167	134	103	156	176
Sb	3	0	0	0	3	0	0	0	0	0
S	4	25	8	19	33	71	7	0	22	16
Th	6	7	10	3	10	0	5	5	15	1
V	112	87	101	125	101	80	110	102	123	89
Y	30	29	37	37	28	29	25	26	34	25
Zn	77	64	94	99	61	51	75	54	72	30
Zr	222	194	219	204	295	178	186	224	436	194
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-11	DJR-12	DJR-13	DJR-14	DJR-15	DJR-16	DJR-17	DJR-18	DJR-19	DJR-20
East	33321	33310	33271	32997	32980	32998	33052	33081	33103	33112
North	59542	59522	59507	59661	59234	59273	59275	59280	59301	59314
SiO2	61.99	57.74	63.86	60.22	64.90	61.85	53.97	60.15	59.01	58.42
Al2O3	13.41	17.28	13.02	15.40	16.58	13.52	13.07	14.33	12.26	13.06
TiO2	0.81	1.03	0.72	0.89	1.05	0.87	0.76	0.79	0.68	0.70
Fe2O3	5.12	7.95	5.12	6.70	6.78	5.59	4.94	5.63	5.12	4.93
MgO	3.68	5.35	3.78	5.30	4.88	3.91	4.07	4.68	4.01	4.10
CaO	7.64	3.21	6.78	4.27	0.55	6.53	12.44	6.32	10.13	9.33
Na2O	1.78	1.28	2.31	1.48	2.20	2.27	1.45	1.86	1.95	1.89
K2O	1.86	2.89	1.60	2.47	2.33	1.75	2.19	2.12	1.64	2.01
MnO	0.10	0.07	0.08	0.09	0.06	0.08	0.18	0.07	0.10	0.09
P2O5	0.18	0.18	0.17	0.18	0.20	0.19	0.18	0.17	0.17	0.16
Total	96.57	96.98	97.44	97.00	99.53	96.56	93.25	96.12	95.07	94.69
As	0	0	0	0	0	0	0	0	0	0
Ba	179	375	176	262	308	239	263	347	270	206
Cl	146	12	62	15	45	72	65	14	33	12
Co	38	32	42	29	42	36	26	26	31	29
Cr	154	140	109	147	155	165	131	118	115	102
Cu	7	7	10	23	18	20	16	25	16	10
Ga	12	19	13	17	18	12	14	14	12	14
La	39	31	29	31	39	41	42	29	29	44
Ni	61	82	45	73	62	46	55	58	51	51
Nb	14	17	12	15	16	14	15	14	15	12
Pb	16	14	15	14	15	14	11	13	11	13
Rb	60	107	55	82	79	58	70	72	55	67
Sr	233	69	153	87	60	125	214	148	176	161
Sb	0	2	0	3	7	6	0	0	0	0
S	41	0	11	29	0	86	102	26	229	5
Th	8	6	7	7	8	4	7	5	5	5
V	90	122	86	109	115	105	97	91	87	89
Y	26	27	26	28	26	29	28	24	24	25
Zn	45	86	51	78	72	52	61	63	53	51
Zr	240	193	201	188	265	274	219	180	179	169
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-21	DJR-22	DJR-23	DJR-24	DJR-25	DJR-26	DJR-27	DJR-28	DJR-29	DJR-30
East	33156	33180	33219	33250	33258	33273	33270	33274	33102	33108
North	59321	59320	59355	59380	59403	59467	59457	59448	59635	59631
SiO2	59.75	57.66	58.75	58.31	55.07	58.15	52.01	57.66	58.55	63.06
Al2O3	14.69	13.87	11.75	14.16	12.01	13.79	11.35	12.30	11.97	18.26
TiO2	0.75	0.77	0.79	0.84	0.86	0.80	0.65	0.71	0.67	1.14
Fe2O3	5.18	6.11	5.22	5.88	5.23	5.59	4.90	4.63	4.82	7.23
MgO	4.48	4.40	4.09	5.08	4.53	4.71	4.40	4.43	3.60	4.55
CaO	6.60	8.28	9.52	7.06	11.48	8.65	14.55	10.81	11.77	0.29
Na2O	1.78	1.53	1.52	1.62	1.76	1.77	1.56	1.76	1.66	1.44
K2O	1.95	2.28	1.62	2.26	1.61	2.09	1.57	1.78	1.79	3.24
MnO	0.06	0.11	0.08	0.07	0.10	0.08	0.12	0.10	0.12	0.04
P2O5	0.17	0.15	0.17	0.18	0.20	0.18	0.16	0.17	0.19	0.24
Total	95.41	95.16	93.51	95.46	92.85	95.81	91.27	94.35	95.14	99.49
As	0	0	0	0	0	0	0	0	0	2
Ba	263	465	222	299	196	226	192	154	203	256
Cl	21	31	43	50	17	26	11	44	56	25
Co	33	26	34	31	31	36	27	23	24	30
Cr	103	117	164	135	175	135	111	134	107	278
Cu	17	23	24	24	16	46	24	12	19	15
Ga	14	14	13	15	13	15	11	14	12	17
La	29	29	35	34	37	37	32	34	28	47
Ni	52	59	46	61	51	60	51	51	51	79
Nb	14	16	12	15	14	15	13	13	14	17
Pb	28	16	15	13	13	11	12	10	10	12
Rb	63	75	52	77	52	70	47	59	59	108
Sr	145	175	199	153	177	155	190	136	165	44
Sb	0	4	0	0	2	0	0	0	0	0
S	0	201	9	50	15	89	55	24	102	46
Th	6	5	10	7	8	8	0	9	6	14
V	81	94	88	98	93	100	76	91	87	124
Y	22	28	24	27	30	27	27	25	29	32
Zn	53	67	53	67	54	62	53	50	53	85
Zr	176	197	258	197	282	197	173	187	180	290
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-31	DJR-32	DJR-33	DJR-34	DJR-35	DJR-36	DJR-37	DJR-38	DJR-39	DJR-40
East	33114	33111	33093	33087	33082	33070	33055	33047	33037	33028
North	59628	59589	59586	59572	59564	59555	59550	59546	59543	59538
SiO2	60.58	58.86	57.03	57.15	63.64	61.68	59.97	60.82	60.31	60.37
Al2O3	12.44	13.85	14.05	12.67	15.42	11.42	10.90	15.16	13.72	13.96
TiO2	0.79	0.83	0.70	0.75	0.90	0.72	0.75	0.98	0.72	0.83
Fe2O3	5.26	5.58	5.79	5.20	6.01	4.78	4.83	6.57	5.38	5.93
MgO	4.02	4.02	3.61	4.13	4.77	3.80	3.90	5.39	4.39	4.82
CaO	8.43	8.42	11.01	10.17	3.33	8.47	11.07	3.54	7.77	6.28
Na2O	1.67	1.74	0.41	1.25	1.36	2.04	1.58	1.59	1.42	1.82
K2O	1.84	2.10	1.87	2.02	2.31	1.49	1.42	2.44	2.35	2.06
MnO	0.09	0.10	0.11	0.11	0.06	0.10	0.10	0.06	0.11	0.08
P2O5	0.18	0.20	0.17	0.17	0.19	0.17	0.17	0.19	0.17	0.19
Total	95.30	95.70	94.75	93.62	97.99	94.67	94.69	96.74	96.34	96.34
As	0	0	0	0	0	0	0	0	0	0
Ba	246	272	218	204	259	230	191	260	189	218
Cl	0	55	57	10	52	13	71	8	53	33
Co	30	25	35	30	44	29	30	28	27	26
Cr	187	140	136	141	165	140	179	156	121	128
Cu	11	13	14	25	36	18	46	23	18	20
Ga	12	14	12	11	15	13	10	16	12	15
La	43	36	32	32	27	32	26	36	29	34
Ni	53	65	76	56	67	51	48	74	58	61
Nb	13	15	11	13	15	13	12	15	13	15
Pb	16	15	16	13	12	9	14	11	12	14
Rb	59	72	58	65	77	48	48	84	76	69
Sr	138	134	56	124	77	133	161	77	115	120
Sb	0	0	0	0	0	0	0	0	0	0
S	13	25	23	13	8	5	53	0	29	21
Th	6	7	8	5	8	7	3	8	3	6
V	93	95	79	90	96	74	89	111	91	99
Y	30	30	28	27	29	27	25	29	26	27
Zn	54	61	43	59	68	55	50	71	56	63
Zr	271	232	231	215	241	248	277	235	183	225
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-41	DJR-42	DJR-43	DJR-44	DJR-45	DJR-46	DJR-47	DJR-48	DJR-49	DJR-50
East	33018	32990	32994	33006	33010	33002	32980	32911	32960	32964
North	59534	59596	59578	59553	59525	59502	59448	59478	59390	59370
SiO2	59.11	58.51	59.30	59.16	60.15	56.98	59.13	55.62	54.93	60.38
Al2O3	14.33	12.16	11.11	12.32	12.03	12.88	13.08	11.95	14.53	13.86
TiO2	0.82	0.73	0.69	0.86	0.75	0.80	0.74	0.80	0.69	0.86
Fe2O3	6.26	4.85	4.58	5.28	5.10	5.30	5.31	4.78	5.63	6.34
MgO	4.68	4.05	4.04	4.23	4.10	4.55	4.08	3.81	4.20	4.92
CaO	6.74	9.73	11.81	8.58	9.05	9.51	8.04	13.07	11.30	5.42
Na2O	1.53	1.67	1.58	1.63	1.81	1.57	1.85	1.52	0.35	1.65
K2O	2.36	1.81	1.63	1.86	1.71	1.92	2.02	1.89	2.36	2.03
MnO	0.08	0.08	0.10	0.08	0.09	0.08	0.10	0.14	0.12	0.07
P2O5	0.18	0.17	0.18	0.20	0.18	0.18	0.18	0.20	0.16	0.19
Total	96.09	93.76	95.02	94.20	94.97	93.77	94.53	93.78	94.27	95.72
As	0	0	0	0	0	0	0	0	0	0
Ba	194	239	160	185	180	214	233	200	282	213
Cl	25	12	45	21	105	8	0	32	113	20
Co	28	32	39	32	36	27	25	22	31	28
Cr	134	132	171	187	156	136	140	221	140	292
Cu	17	15	8	19	9	32	25	13	7	20
Ga	15	12	12	12	12	13	13	12	11	14
La	34	33	34	47	32	31	31	40	23	33
Ni	64	51	49	52	53	60	57	50	60	64
Nb	15	12	13	15	13	13	13	14	12	14
Pb	15	12	13	15	16	13	13	15	14	13
Rb	79	56	54	61	55	62	68	62	69	69
Sr	112	151	166	163	142	192	145	193	175	128
Sb	0	3	0	0	0	0	0	0	6	0
S	14	21	35	5	28	0	24	26	6	28
Th	2	9	8	7	6	7	12	8	5	4
V	107	89	78	106	88	90	89	101	89	98
Y	29	24	28	32	27	28	26	27	23	26
Zn	70	49	56	56	53	63	58	51	52	64
Zr	208	215	294	319	258	234	205	279	206	249
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-51	DJR-52	DJR-53	DJR-54	DJR-55	DJR-56	DJR-57	DJR-58	DJR-59	DJR-60
East	33120	33116	33114	33109	33105	33102	33082	33066	33059	33037
North	59666	59658	59659	59661	59671	59678	59692	59698	59698	59698
SiO2	57.50	62.39	61.09	56.88	59.31	60.38	60.78	57.69	57.16	60.54
Al2O3	12.38	13.66	14.78	11.24	13.43	11.94	12.29	12.62	12.15	14.82
TiO2	0.88	0.73	0.83	0.64	0.79	0.65	0.72	0.72	0.66	0.88
Fe2O3	5.62	5.16	5.43	4.71	5.86	4.89	4.71	5.08	4.94	6.46
MgO	4.42	3.81	3.99	3.46	4.86	4.17	4.10	3.60	4.25	5.02
CaO	9.05	7.21	6.96	12.18	7.39	9.68	9.54	9.73	10.57	4.84
Na2O	1.39	1.91	0.67	1.45	1.48	1.84	1.59	1.83	1.62	1.46
K2O	1.98	2.01	2.09	1.35	1.81	1.66	1.84	1.55	1.75	2.38
MnO	0.09	0.08	0.08	0.11	0.10	0.10	0.08	0.10	0.09	0.07
P2O5	0.20	0.17	0.19	0.17	0.19	0.17	0.18	0.18	0.16	0.19
Total	93.51	97.13	96.11	92.19	95.22	95.48	95.83	93.10	93.35	96.66
As	10	1	5	1	0	0	0	0	0	0
Ba	218	212	248	189	209	194	263	175	189	285
Cl	11	48	41	14	46	36	89	38	26	47
Co	27	27	36	24	25	29	30	29	23	24
Cr	223	116	169	114	128	108	149	125	198	136
Cu	9	16	18	22	13	24	18	15	14	22
Ga	12	12	13	11	13	12	12	12	13	16
La	38	26	26	35	26	34	29	33	30	35
Ni	55	55	59	43	53	50	49	53	52	72
Nb	15	13	13	12	13	13	13	13	13	15
Pb	13	14	12	10	17	11	16	11	16	16
Rb	65	64	67	42	60	53	59	50	54	79
Sr	134	117	76	147	105	118	159	116	149	124
Sb	2	0	11	2	0	4	0	0	3	0
S	6	17	22	31	4	6	40	0	10	19
Th	9	7	7	4	4	1	6	3	5	8
V	103	85	91	75	82	74	91	84	86	104
Y	29	26	23	25	29	28	28	24	26	28
Zn	60	55	65	47	59	58	51	54	57	76
Zr	340	192	254	195	210	173	256	203	194	204
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

XRF Analyses: Glendinning Greywacke Exploration Suite (GWKE1) Part 7

VAR. / ID.	DJR-61	DJR-62	DJR63	DJR64	DJR65	DJR66	DJR-700	DJR-702	DJR-703	DJR-704
East	33020	33004	33140	33140	33140	33140	32742	34361	34287	34276
North	59698	59694	59686	59686	59686	59686	59175	60352	60479	60483
SiO2	62.76	57.87	57.19	50.69	49.91	57.00	53.32	58.58	58.15	55.60
Al2O3	12.55	12.81	12.24	9.93	7.76	12.77	11.91	17.31	16.20	17.44
TiO2	0.71	0.68	0.64	0.55	0.41	0.79	0.66	0.94	0.90	0.97
Fe2O3	5.01	4.88	5.47	6.28	5.85	5.98	4.53	7.89	7.18	8.30
MgO	4.47	4.16	3.72	5.87	6.79	3.78	3.81	5.46	5.20	5.40
CaO	7.40	10.13	12.26	18.35	21.89	11.91	15.17	3.44	3.58	3.20
Na2O	1.78	1.56	0.10	0.05	0.06	0.05	1.49	1.38	1.67	1.03
K2O	1.79	1.95	2.48	2.50	1.83	3.23	1.87	2.99	2.40	3.36
MnO	0.08	0.11	0.14	0.18	0.22	0.16	0.13	0.09	0.14	0.11
P2O5	0.17	0.17	0.16	0.12	0.11	0.16	0.17	0.17	0.19	0.17
Total	96.72	94.32	94.40	94.52	94.83	95.83	93.06	98.25	95.61	95.58
As	0	0	33	23	13	25	1	7	4	8
Ba	183	158	211	233	215	204	571	462	327	483
Cl	102	45	0	0	0	0	53	29	26	30
Co	33	23	15	19	11	14	21	28	34	30
Cr	132	191	151	87	71	108	121	141	123	145
Cu	17	13	14	20	12	21	61	35	38	46
Ga	12	13	13	13	10	15	12	18	14	18
La	31	37	29	25	16	24	28	32	32	43
Ni	53	60	56	55	44	56	49	86	76	89
Nb	13	11	13	10	8	14	13	16	15	16
Pb	14	10	12	11	15	11	11	10	13	15
Rb	60	58	90	86	60	109	58	106	82	123
Sr	154	115	88	148	156	90	157	76	88	65
Sb	2	0	26	31	22	29	0	0	0	16
S	0	21	0	0	0	0	196	4	36	19
Th	5	2	7	1	2	5	11	12	9	14
V	84	78	74	77	51	90	88	126	114	142
Y	21	24	24	23	28	22	31	37	33	41
Zn	52	53	40	49	43	39	52	94	93	101
Zr	188	181	150	110	87	157	175	160	167	169
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-705	DJR-706	DJR-707	DJR-708	DJR-709	DJR-710	DJR-711	DJR-712	DJR-713	DJR-714
East	34284	34197	34165	34168	34105	34101	34107	34109	34084	34044
North	60490	60505	60536	60540	60647	60652	60654	60659	60685	60735
SiO2	55.70	57.88	57.94	57.89	59.29	58.19	60.53	59.89	61.54	58.04
Al2O3	15.29	13.84	15.06	16.80	11.85	13.79	18.66	14.69	13.22	13.14
TiO2	0.87	0.77	0.91	0.98	0.75	0.79	1.11	0.78	0.79	0.75
Fe2O3	6.85	5.37	6.40	7.40	5.10	5.51	8.57	5.46	5.32	5.40
MgO	5.60	4.20	5.81	6.21	3.67	4.17	5.48	4.29	4.47	4.34
CaO	6.47	7.71	5.54	2.89	6.40	8.01	0.17	6.73	5.19	8.63
Na2O	1.30	1.63	1.50	1.19	1.52	1.68	1.15	1.62	1.62	1.57
K2O	2.62	2.31	2.35	3.08	2.05	2.15	3.49	2.36	2.01	2.04
MnO	0.09	0.16	0.11	0.07	0.11	0.10	0.08	0.15	0.10	0.11
P2O5	0.18	0.17	0.19	0.19	0.17	0.18	0.21	0.19	0.20	0.18
Total	94.97	94.04	95.81	96.70	90.91	94.57	99.45	96.16	94.46	94.20
As	0	0	0	4	0	4	5	0	0	1
Ba	324	287	304	372	222	259	365	282	227	236
Cl	36	29	24	31	46	47	21	47	38	30
Co	26	28	26	29	25	24	33	23	27	16
Cr	129	109	136	130	132	121	159	115	134	130
Cu	40	22	24	47	18	29	41	52	20	21
Ga	16	13	13	18	11	13	20	14	12	11
La	33	24	32	45	33	30	41	34	36	35
Ni	72	52	62	81	51	58	97	63	56	58
Nb	16	15	13	17	12	13	18	13	11	13
Pb	16	16	15	16	16	10	12	16	13	13
Rb	90	73	78	102	64	69	133	73	63	60
Sr	108	146	111	75	107	128	33	108	93	122
Sb	0	2	2	4	0	2	0	0	0	0
S	33	31	34	0	0	29	0	30	13	30
Th	14	9	14	9	4	14	18	7	7	4
V	107	101	115	130	92	94	149	103	92	98
Y	35	32	34	43	30	35	28	34	33	31
Zn	103	65	92	88	68	65	98	89	70	71
Zr	162	170	192	169	222	191	192	166	196	192
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-715	DJR-716	DJR-717	DJR-720	DJR-721	DJR-722	DJR-723	DJR-724	DJR-726	DJR-727
East	34046	34007	34002	34020	33995	34001	34006	34004	34118	34112
North	60730	60778	60772	60927	60895	60888	60869	60823	60562	60543
SiO2	58.07	55.78	55.66	58.08	58.14	58.90	59.17	62.24	61.96	58.78
Al2O3	12.40	11.74	11.61	12.22	12.44	12.53	12.37	13.52	14.90	12.47
TiO2	0.64	0.66	0.66	0.67	0.69	0.68	0.72	0.75	0.87	0.89
Fe2O3	4.19	4.67	4.45	4.76	4.77	5.00	4.85	4.95	5.52	5.56
MgO	3.48	4.20	3.41	4.13	4.02	4.00	4.07	3.93	3.53	4.26
CaO	11.71	12.26	11.97	9.48	9.73	9.60	9.46	6.12	5.18	8.90
Na2O	1.95	1.46	1.57	1.65	1.60	1.73	1.67	1.78	1.45	1.50
K2O	1.93	1.80	1.88	1.96	1.91	1.87	1.87	2.08	2.44	1.90
MnO	0.21	0.10	0.20	0.09	0.10	0.12	0.10	0.17	0.07	0.09
P2O5	0.17	0.17	0.18	0.16	0.17	0.18	0.17	0.18	0.19	0.19
Total	94.75	92.84	91.59	93.20	93.57	94.61	94.45	95.72	96.11	94.54
As	0	0	0	0	0	0	3	0	2	3
Ba	188	209	222	202	242	255	196	225	365	217
Cl	37	45	73	31	37	34	40	38	33	44
Co	22	23	20	26	23	27	30	27	24	33
Cr	104	127	112	123	129	123	155	134	161	185
Cu	10	18	18	14	16	16	18	15	17	16
Ga	12	11	9	12	11	12	11	12	14	10
La	24	19	29	27	26	26	29	23	39	41
Ni	40	51	51	49	50	52	50	47	70	47
Nb	11	13	10	11	11	11	11	11	14	15
Pb	13	16	16	15	13	16	12	17	8	15
Rb	57	55	57	57	58	56	54	59	77	58
Sr	170	151	131	131	135	132	117	107	93	129
Sb	4	0	0	0	0	0	0	0	5	3
S	112	18	14	0	18	30	0	15	0	7
Th	3	2	7	9	12	9	6	2	8	9
V	77	91	86	88	88	81	85	93	96	108
Y	26	28	32	28	31	27	32	33	37	36
Zn	39	68	54	63	68	61	57	87	63	52
Zr	151	179	165	197	184	188	215	196	221	325
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-728	DJR-729	DJR-730	DJR-731	DJR-732	DJR-733	DJR-734	DJR-735	DJR-736	DJR-737
East	34111	34120	34166	34211	34215	34212	34373	34396	34398	34400
North	60533	60511	60493	60557	60555	60568	60750	60734	60724	60715
SiO2	57.98	61.25	57.37	56.57	60.26	57.46	53.77	59.72	54.74	61.05
Al2O3	14.99	15.98	13.95	10.75	15.06	14.84	13.98	15.57	13.41	14.38
TiO2	0.91	1.10	0.86	0.59	0.93	0.92	0.77	0.93	0.76	0.91
Fe2O3	6.43	6.95	5.71	4.31	6.38	6.40	6.24	6.16	5.59	5.96
MgO	5.06	5.16	4.75	4.44	4.67	5.28	4.79	4.75	4.71	5.19
CaO	5.61	2.18	8.32	13.40	4.49	6.03	10.07	5.03	11.34	4.93
Na2O	1.79	1.89	1.67	1.71	1.75	1.57	1.24	1.58	1.47	1.82
K2O	2.24	2.21	2.26	1.55	2.27	2.43	2.37	2.57	2.17	2.06
MnO	0.09	0.14	0.08	0.14	0.08	0.09	0.12	0.09	0.13	0.09
P2O5	0.20	0.22	0.19	0.15	0.20	0.19	0.17	0.19	0.18	0.19
Total	95.30	97.08	95.16	93.61	96.09	95.21	93.52	96.59	94.50	96.58
As	0	3	5	0	0	1	0	3	2	2
Ba	284	323	231	247	315	274	355	269	326	443
Cl	20	42	34	61	36	22	32	33	32	39
Co	27	32	27	29	29	27	26	30	25	28
Cr	133	202	139	105	129	138	111	135	120	144
Cu	19	20	17	12	23	22	54	21	32	16
Ga	15	13	12	10	13	15	16	15	13	13
La	36	40	34	25	35	35	28	32	24	30
Ni	65	59	50	33	56	56	63	57	59	50
Nb	15	14	19	9	14	15	15	14	14	14
Pb	16	14	12	14	14	17	13	10	13	11
Rb	73	69	70	46	72	77	79	84	70	62
Sr	111	66	152	136	93	111	146	97	148	70
Sb	0	0	0	0	2	0	0	2	0	0
S	39	0	0	16	0	10	17	0	50	97
Th	10	11	13	5	15	6	6	11	8	13
V	115	123	105	79	105	110	105	112	97	105
Y	32	37	34	22	29	34	32	34	36	33
Zn	88	67	62	39	73	75	79	63	65	59
Zr	191	280	207	164	206	209	157	210	170	230
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

-2427-

XRF Analyses: Glendinning Greywacke Exploration Suite (GWKE1) Part 11

VAR. / ID.	DJR-738	DJR-739	DJR-740	DJR-741	DJR-742	DJR-743	DJR-751	DJR-752	DJR-753	DJR-754
East	34428	34395	34372	34189	34199	34172	33560	33601	33644	33654
North	60693	60651	60598	60538	60588	60614	59750	59718	59680	59667
SiO2	58.79	60.27	57.49	56.51	56.29	59.11	58.19	57.54	60.01	59.60
Al2O3	14.63	14.67	13.45	13.13	13.19	11.90	12.90	13.21	16.21	14.23
TiO2	0.95	0.97	0.89	0.79	0.83	0.68	0.72	0.75	0.93	0.80
Fe2O3	6.68	6.42	5.81	5.18	5.70	4.79	5.09	5.32	5.04	5.11
MgO	5.34	5.32	4.43	4.31	4.43	3.92	4.27	4.21	2.68	4.11
CaO	4.13	4.47	9.06	9.56	8.21	11.03	10.84	10.13	7.59	7.84
Na2O	1.72	1.91	1.72	1.57	1.78	1.82	1.31	1.52	1.56	1.86
K2O	2.04	2.00	1.89	2.19	2.00	1.68	2.15	2.12	2.62	1.93
MnO	0.09	0.09	0.10	0.15	0.10	0.09	0.09	0.12	0.10	0.13
P2O5	0.20	0.19	0.20	0.18	0.17	0.18	0.17	0.18	0.20	0.19
Total	94.57	96.31	95.04	93.57	92.70	95.20	95.73	95.10	96.94	95.80
As	0	3	4	0	4	7	3	3	0	2
Ba	304	285	247	255	273	386	258	280	258	342
Cl	31	41	40	20	21	31	60	25	29	32
Co	28	34	28	23	26	31	19	24	20	26
Cr	143	166	156	125	151	114	130	126	137	121
Cu	23	15	23	19	17	16	28	21	27	42
Ga	14	14	12	12	12	10	12	12	13	12
La	42	35	34	33	31	31	32	34	17	29
Ni	56	56	52	48	50	40	53	53	49	54
Nb	15	14	14	13	15	12	14	12	14	13
Pb	14	12	11	17	12	13	11	12	14	12
Rb	73	64	61	69	64	52	65	64	86	59
Sr	100	117	132	171	140	167	143	130	108	134
Sb	2	0	2	0	3	0	2	2	0	0
S	0	0	0	9	4	84	31	27	5	61
Th	10	13	11	10	11	7	9	9	7	3
V	110	108	101	105	100	84	93	96	103	95
Y	33	29	37	34	32	28	32	32	29	30
Zn	70	68	62	81	57	47	62	59	135	68
Zr	235	244	239	198	218	187	184	188	215	174
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-755	DJR-756	DJR-757	DJR-758	DJR-759	DJR-760	DJR-761	DJR-762	DJR-763	DJR-764
East	33661	33667	33669	33678	33687	33686	33686	33690	33689	34540
North	59658	59644	59627	59617	59590	59562	59544	59528	59511	61066
SiO2	56.21	58.64	61.48	57.80	57.87	57.85	57.61	58.80	59.87	54.10
Al2O3	13.57	15.27	14.43	14.08	13.27	13.52	14.79	13.59	13.91	12.45
TiO2	0.77	0.90	0.63	0.86	0.87	0.93	0.82	0.82	0.86	0.66
Fe2O3	5.50	5.69	4.71	5.88	5.61	5.65	5.94	5.18	5.83	5.10
MgO	4.37	3.35	2.96	4.62	4.42	4.52	4.80	4.24	4.81	4.23
CaO	10.49	6.12	7.76	7.65	8.44	7.22	7.93	8.21	6.77	14.42
Na2O	1.49	1.60	1.89	1.64	1.78	1.86	1.60	1.86	1.85	1.20
K2O	2.14	2.48	2.27	2.02	2.07	2.22	2.54	2.18	2.12	2.19
MnO	0.18	0.14	0.14	0.09	0.10	0.11	0.09	0.09	0.11	0.12
P2O5	0.18	0.19	0.16	0.18	0.18	0.19	0.17	0.18	0.19	0.17
Total	94.90	94.38	96.43	94.82	94.61	94.07	96.29	95.15	96.32	94.64
As	0	0	0	0	0	0	3	0	2	3
Ba	255	257	280	380	277	275	327	279	406	247
Cl	54	18	116	55	30	32	34	44	39	67
Co	26	23	24	28	26	30	20	26	27	23
Cr	125	164	103	150	149	158	133	138	150	113
Cu	37	34	38	15	23	20	27	19	20	32
Ga	13	14	14	13	13	14	14	12	14	13
La	29	30	33	38	31	29	29	25	30	37
Ni	60	61	38	52	49	52	63	49	53	56
Nb	13	15	34	13	14	15	15	13	14	13
Pb	13	10	14	14	12	14	26	12	9	11
Rb	68	76	84	61	64	70	81	66	69	68
Sr	190	72	62	118	158	153	155	167	143	205
Sb	3	0	0	0	0	0	0	0	3	0
S	43	0	38	61	11	33	310	25	175	59
Th	12	10	7	5	6	7	10	7	13	6
V	97	113	72	107	108	109	104	99	102	89
Y	30	32	40	32	34	33	33	29	33	33
Zn	89	64	65	67	54	59	78	55	66	62
Zr	181	222	319	209	234	246	176	198	227	154
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-765	DJR-766	DJR-767	DJR-768	DJR-769	DJR-770	DJR-771	DJR-772	DJR-773	DJR-774
East	34551	34544	34493	34488	34065	34065	33649	33787	33814	33880
North	61078	61072	61022	61012	60313	60290	60117	60227	60264	60348
SiO2	55.34	46.19	58.19	57.97	56.85	57.30	59.35	63.30	58.26	57.30
Al2O3	12.57	14.93	13.45	12.80	13.21	14.31	14.28	17.37	13.69	15.10
TiO2	0.69	0.56	0.76	0.92	0.84	0.93	1.01	1.02	0.78	0.89
Fe2O3	5.14	6.42	5.56	5.71	5.37	6.40	6.46	7.28	5.75	6.58
MgO	4.48	1.60	4.23	4.54	4.25	4.79	5.76	4.47	4.37	4.91
CaO	13.19	24.36	9.62	9.81	9.92	7.34	5.67	0.75	8.02	6.02
Na2O	1.19	0.09	1.68	1.59	1.77	1.72	1.85	1.51	1.80	1.48
K2O	2.16	4.12	2.11	1.96	2.31	2.42	2.04	2.62	1.92	2.55
MnO	0.11	0.14	0.10	0.10	0.13	0.10	0.09	0.10	0.13	0.10
P2O5	0.16	0.14	0.18	0.20	0.19	0.19	0.21	0.21	0.18	0.17
Total	95.03	98.55	95.88	95.60	94.84	95.50	96.72	98.63	94.90	95.10
As	0	11	0	8	3	5	2	2	0	3
Ba	302	299	234	360	306	349	263	317	268	301
Cl	64	49	41	34	34	36	30	30	25	50
Co	19	22	25	30	26	20	28	28	27	30
Cr	121	116	128	197	125	136	208	169	124	141
Cu	26	22	18	26	21	26	27	24	25	43
Ga	11	13	13	13	14	14	13	15	14	15
La	28	31	25	28	27	34	42	30	25	38
Ni	56	62	53	52	49	58	62	74	60	73
Nb	13	11	13	17	15	15	16	15	14	14
Pb	14	39	16	35	16	18	14	15	15	12
Rb	69	95	65	62	77	83	69	87	60	85
Sr	228	92	140	151	151	132	114	56	148	93
Sb	0	0	0	0	0	0	1	4	4	0
S	69	57	10	181	0	4	4	24	0	10
Th	8	15	10	9	10	8	10	19	9	4
V	88	121	94	109	104	109	115	117	97	106
Y	33	29	31	39	37	38	42	40	37	46
Zn	58	91	56	60	58	64	68	72	64	74
Zr	174	101	186	305	214	218	288	240	181	187
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

XRF Analyses: Glendinning Greywacke Exploration Suite (GWKE1) Part 14

VAR. / ID.	DJR-775	DJR-776	DJR-777	DJR-778	DJR-779	DJR-780	DJR-781	DJR-782	DJR-783	DJR-784
East	33918	33951	33967	33690	33705	33692	33680	33680	33714	33562
North	60389	60430	60450	59478	59455	59428	59411	59398	59360	60236
SiO2	59.71	61.04	57.72	57.97	60.43	59.29	58.91	58.56	58.75	63.85
Al2O3	13.12	14.00	14.35	15.88	14.03	13.55	13.25	13.95	14.03	21.31
TiO2	0.76	0.81	0.86	0.97	0.87	0.89	0.85	0.91	0.87	1.07
Fe2O3	5.49	5.66	6.12	7.16	5.94	5.65	5.97	6.10	6.47	7.09
MgO	4.34	4.40	4.39	5.08	4.69	4.68	4.46	4.66	4.95	0.91
CaO	8.78	7.07	8.05	5.64	6.37	7.62	7.06	6.95	5.83	0.09
Na2O	1.69	1.53	1.29	1.78	1.90	1.91	1.77	1.77	1.69	0.76
K2O	1.98	2.33	2.39	2.65	2.18	2.00	2.06	2.16	2.21	2.95
MnO	0.10	0.10	0.09	0.09	0.08	0.08	0.09	0.10	0.08	0.19
P2O5	0.18	0.18	0.18	0.19	0.18	0.20	0.17	0.19	0.18	0.23
Total	96.15	97.12	95.44	97.41	96.67	95.87	94.59	95.35	95.06	98.45
As	5	0	0	6	0	0	0	0	0	36
Ba	259	242	262	341	397	300	424	461	371	291
Cl	37	48	56	25	48	36	28	33	30	16
Co	25	30	20	22	26	25	21	26	24	30
Cr	131	140	161	144	132	158	133	155	141	145
Cu	27	15	26	32	26	23	29	27	23	25
Ga	13	15	16	17	14	13	15	14	14	16
La	28	28	30	34	23	30	31	21	25	40
Ni	55	60	63	72	56	51	60	60	60	75
Nb	12	14	17	16	14	14	14	14	15	17
Pb	30	13	13	21	14	22	13	14	12	22
Rb	65	75	79	92	73	63	70	70	73	94
Sr	150	130	100	118	148	161	156	151	125	82
Sb	2	0	4	0	0	0	0	4	0	14
S	20	14	7	246	80	181	197	194	76	67
Th	8	12	11	10	11	14	9	12	8	14
V	91	104	106	120	97	99	99	101	99	110
Y	35	35	32	38	33	35	34	38	35	33
Zn	67	70	73	89	61	62	72	76	69	69
Zr	203	220	236	204	208	242	196	236	202	224
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-785	DJR-786	DJR-787	DJR-788	DJR-789	DJR-790	DJR-791	DJR-792	DJR-793	DJR-794
East	33551	33553	33555	33555	33503	33580	33596	33597	33620	33612
North	60259	60251	60240	60223	60255	60201	60179	60155	60132	60100
SiO2	61.51	60.49	54.19	56.00	58.26	61.28	57.79	59.87	57.20	62.50
Al2O3	14.65	18.03	14.85	15.46	17.19	13.99	13.52	13.40	12.48	15.52
TiO2	0.67	0.90	0.66	0.69	0.94	0.71	0.78	0.76	0.77	0.90
Fe2O3	6.91	6.98	7.07	6.97	7.59	5.32	5.59	5.45	5.35	6.83
MgO	2.74	2.54	3.27	3.58	4.28	1.27	3.94	4.33	3.90	5.36
CaO	7.83	5.36	10.88	10.68	4.94	9.16	8.76	8.96	11.87	3.40
Na2O	0.17	0.44	0.25	0.31	1.03	1.33	1.55	1.61	1.44	1.74
K2O	1.27	2.39	1.87	2.00	3.34	2.51	2.28	2.05	2.12	2.23
MnO	0.16	0.28	0.14	0.15	0.23	0.14	0.11	0.10	0.10	0.11
P2O5	0.15	0.18	0.16	0.16	0.18	0.18	0.17	0.17	0.17	0.19
Total	96.06	97.59	93.34	96.00	97.98	95.89	94.49	96.70	95.40	98.78
As	23	20	11	24	0	0	0	1	5	0
Ba	193	329	207	372	332	241	269	286	546	272
Cl	53	35	38	30	27	47	25	46	101	39
Co	34	27	33	29	23	26	23	25	27	28
Cr	124	143	118	117	142	126	123	138	170	151
Cu	22	24	30	29	37	16	25	24	12	26
Ga	10	13	12	12	17	10	13	13	11	14
La	35	33	29	23	31	32	28	31	32	32
Ni	59	57	65	68	81	50	60	60	57	72
Nb	11	14	12	12	17	11	14	14	14	14
Pb	20	16	25	53	15	13	15	14	16	14
Rb	37	72	50	62	115	69	74	69	68	76
Sr	116	97	170	164	88	91	131	160	192	76
Sb	24	9	17	14	1	7	0	0	0	0
S	211	117	48	179	14	6	0	12	123	0
Th	6	13	8	10	10	7	9	5	5	9
V	79	103	82	90	117	80	91	92	94	97
Y	29	37	30	33	35	33	35	36	33	38
Zn	69	57	76	73	84	53	61	64	62	66
Zr	179	215	168	159	181	190	190	192	209	197
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-795	DJR-796	DJR-797	DJR-798	DJR-799	DJR-800	DJR-801	DJR-802	DJR-803	DJR-804
East	34067	34078	34090	34100	34101	33552	33544	33538	33530	33522
North	60483	60478	60470	60464	60451	59938	59948	59963	59971	59983
SiO2	56.58	55.12	55.93	58.53	59.26	61.29	58.42	54.79	61.66	55.08
Al2O3	13.55	13.77	12.94	14.47	15.67	16.57	16.66	12.21	15.60	12.04
TiO2	0.85	0.82	0.79	0.84	0.99	1.04	0.99	0.97	1.03	0.76
Fe2O3	6.13	6.14	5.60	6.85	6.88	6.59	7.17	5.40	6.79	5.22
MgO	4.50	4.72	4.20	4.84	5.25	3.06	5.27	3.97	5.24	4.15
CaO	9.02	10.71	10.31	7.53	5.20	1.28	3.36	12.47	2.97	12.68
Na2O	1.57	1.49	1.58	1.30	1.70	1.91	1.50	1.72	1.91	1.75
K2O	2.04	2.22	1.99	2.37	2.39	2.36	2.69	1.69	2.29	1.58
MnO	0.13	0.16	0.13	0.14	0.10	0.33	0.27	0.16	0.12	0.15
P2O5	0.19	0.19	0.18	0.18	0.19	0.19	0.19	0.19	0.21	0.18
Total	94.56	95.34	93.65	97.05	97.63	94.62	96.52	93.42	97.82	93.59
As	2	2	0	4	3	2	4	3	4	0
Ba	267	282	235	261	310	413	370	258	319	234
Cl	29	59	26	29	27	16	25	26	28	37
Co	26	25	28	24	34	30	26	20	29	24
Cr	128	118	127	129	150	139	136	126	154	115
Cu	23	42	21	21	24	20	39	41	24	28
Ga	13	13	13	14	16	14	17	12	16	12
La	31	26	30	36	43	40	33	27	36	31
Ni	55	63	50	60	60	61	64	48	60	52
Nb	12	14	14	15	16	15	15	16	17	14
Pb	14	13	13	13	15	13	22	12	18	15
Rb	69	77	66	79	81	72	92	56	81	51
Sr	160	189	166	88	114	89	91	160	86	154
Sb	0	0	5	7	3	2	2	1	0	0
S	0	47	4	39	23	28	0	0	47	34
Th	10	9	7	5	11	12	14	7	7	8
V	94	96	92	91	111	109	117	84	108	91
Y	35	38	34	36	40	44	39	38	39	37
Zn	63	73	59	69	66	54	89	69	70	67
Zr	205	176	197	190	230	225	198	212	240	185
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-805	DJR-806	DJR-807	DJR-808	DJR-809	DJR-810	DJR-811	DJR-812	DJR-813	DJR-814
East	33520	33520	33510	33494	33473	33548	34325	34306	34289	34274
North	59996	60005	60015	60032	60031	60020	60248	60239	60250	60267
SiO2	59.52	58.45	55.80	55.69	55.67	61.37	63.58	60.12	64.68	61.86
Al2O3	16.32	16.69	13.85	13.12	16.09	15.54	18.13	18.06	20.43	15.72
TiO2	0.90	1.01	0.85	0.73	0.93	0.92	1.14	1.11	0.97	0.99
Fe2O3	6.32	7.42	6.12	5.62	8.97	6.49	7.75	8.09	5.84	6.49
MgO	2.22	4.92	5.00	3.32	5.05	3.83	3.14	4.86	1.91	4.65
CaO	7.36	4.32	9.72	10.94	5.85	4.43	0.65	0.23	3.08	3.63
Na2O	1.19	1.35	1.38	1.08	1.06	1.92	1.50	1.26	0.71	2.02
K2O	2.82	2.77	2.13	2.26	2.97	2.38	2.59	3.09	1.81	2.25
MnO	0.11	0.14	0.10	0.17	0.12	0.11	0.12	0.09	0.11	0.15
P2O5	0.19	0.20	0.18	0.16	0.19	0.19	0.19	0.18	0.19	0.20
Total	96.95	97.27	95.13	93.09	96.90	97.18	98.79	97.09	99.73	97.96
As	2	5	0	0	11	5	3	4	11	2
Ba	315	384	300	268	354	317	364	395	249	313
Cl	23	27	43	46	22	19	24	13	23	28
Co	34	21	26	23	28	28	33	30	30	26
Cr	161	157	135	129	144	134	163	151	145	154
Cu	25	26	26	35	52	22	32	37	29	24
Ga	15	16	12	12	18	14	16	18	12	13
La	31	27	27	29	37	27	44	34	38	30
Ni	77	74	58	56	85	68	80	82	63	61
Nb	15	17	15	14	17	14	18	19	14	15
Pb	24	11	14	13	12	12	14	10	15	16
Rb	89	94	68	73	108	80	89	112	59	74
Sr	74	78	151	99	95	83	76	51	173	92
Sb	0	1	0	3	13	0	2	2	3	0
S	5	0	0	0	7	0	34	0	28	6
Th	8	11	8	8	7	7	8	10	10	14
V	103	111	95	89	119	97	123	127	101	131
Y	36	43	38	34	43	39	48	43	34	45
Zn	72	81	75	57	97	73	67	91	66	67
Zr	225	207	205	175	179	187	277	221	231	248
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-815	DJR-816	DJR-817	DJR-818	DJR-819	DJR-820	DJR-821	DJR-822	DJR-823	DJR-824
East	34270	34257	34235	34210	34193	34173	34158	34125	34101	34076
North	60270	60290	60294	60294	60300	60314	60327	60329	60340	60350
SiO2	60.94	59.69	57.57	57.50	56.24	56.52	59.99	57.47	58.64	62.39
Al2O3	19.02	14.37	14.88	14.08	13.73	18.53	14.74	15.48	13.78	13.28
TiO2	0.45	0.89	0.86	0.80	0.80	1.08	0.92	0.94	0.94	0.83
Fe2O3	5.44	6.31	6.31	5.88	5.91	9.10	6.21	7.17	6.14	5.41
MgO	2.11	4.77	4.70	3.83	4.56	5.80	4.57	5.55	4.68	3.82
CaO	3.81	6.02	8.19	9.79	9.35	2.17	6.40	6.16	8.06	6.87
Na2O	4.30	1.83	1.57	1.55	1.49	1.15	1.69	1.54	1.74	2.12
K2O	2.39	2.03	2.45	2.20	2.29	3.60	2.32	2.45	1.92	2.00
MnO	0.15	0.10	0.13	0.16	0.13	0.16	0.09	0.09	0.12	0.10
P2O5	0.10	0.19	0.19	0.18	0.18	0.17	0.19	0.19	0.21	0.18
Total	98.71	96.20	96.85	95.97	94.68	98.28	97.12	97.04	96.23	97.00
As	0	0	3	3	5	11	2	2	4	2
Ba	278	313	325	532	410	520	252	342	293	219
Cl	19	27	33	55	52	31	37	20	30	38
Co	27	29	25	29	22	32	26	28	27	23
Cr	63	142	129	137	128	158	145	137	156	150
Cu	14	23	37	34	33	46	24	34	34	19
Ga	24	17	16	13	14	21	15	16	13	12
La	56	27	30	32	27	35	33	35	31	31
Ni	30	61	62	61	59	90	54	66	56	44
Nb	107	15	16	14	15	18	15	17	15	13
Pb	14	13	11	12	12	10	14	13	13	18
Rb	97	67	87	68	77	136	80	87	65	66
Sr	129	125	149	118	171	60	162	115	147	121
Sb	0	0	0	9	0	4	4	0	0	0
S	10	9	24	79	75	0	4	42	22	16
Th	22	12	12	9	8	10	0	11	8	6
V	43	102	104	92	98	142	110	114	102	97
Y	64	38	40	33	35	36	37	37	19	31
Zn	89	64	75	66	66	99	67	90	72	53
Zr	578	206	194	199	184	176	229	201	247	205
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

-2435-

VAR. / ID.	DJR-825	DJR-826	DJR-827	DJR-828	DJR-829	DJR-830	DJR-831	DJR-832	DJR-833	DJR-834
East	34050	34120	34121	34131	34149	34160	33930	33946	33955	33814
North	60365	60443	60432	60420	60410	60394	60653	60643	60630	60636
SiO2	56.96	58.37	57.29	58.71	59.28	59.27	59.20	56.56	60.82	59.85
Al2O3	15.22	13.90	13.39	14.63	13.96	14.65	12.10	14.76	12.08	13.96
TiO2	0.90	0.86	0.81	0.91	0.96	0.92	0.71	0.80	0.79	0.89
Fe2O3	6.66	5.92	5.61	6.73	6.01	6.08	4.90	6.28	5.13	6.17
MgO	5.30	4.86	3.52	5.16	5.24	4.61	3.83	4.83	4.14	4.55
CaO	7.89	7.84	11.02	6.89	6.65	6.76	10.74	9.17	9.02	5.23
Na2O	1.26	1.61	1.45	1.73	1.90	1.77	1.68	1.29	1.77	1.71
K2O	2.53	2.27	2.32	2.03	2.16	2.23	1.80	2.57	1.85	2.13
MnO	0.10	0.10	0.16	0.13	0.08	0.10	0.11	0.13	0.09	0.10
P2O5	0.18	0.18	0.18	0.19	0.20	0.20	0.18	0.18	0.19	0.18
Total	97.00	95.91	95.75	97.11	96.44	96.59	95.25	96.57	95.88	94.77
As	3	2	0	1	7	3	4	5	3	5
Ba	380	254	283	340	273	266	242	300	388	246
Cl	39	40	36	30	28	22	27	26	14	22
Co	25	29	27	24	31	20	23	22	31	22
Cr	145	138	142	133	162	138	129	124	154	161
Cu	38	25	22	21	19	20	19	32	21	22
Ga	15	13	12	14	13	11	12	15	12	14
La	25	27	27	44	31	33	22	28	26	22
Ni	63	55	47	60	53	57	45	64	47	58
Nb	16	13	14	16	14	14	11	13	7	11
Pb	13	18	14	15	12	14	13	10	16	13
Rb	88	78	73	69	71	74	55	85	58	66
Sr	133	146	147	145	145	147	142	129	167	100
Sb	0	0	0	0	2	1	0	0	0	0
S	38	13	0	60	17	0	14	19	77	0
Th	10	6	6	9	10	9	4	8	10	6
V	106	98	102	105	110	105	86	105	88	99
Y	37	36	37	40	32	34	28	26	27	32
Zn	75	64	51	73	77	66	47	71	48	66
Zr	200	217	227	217	263	214	214	171	262	220
Tl	0	0	0	0	0	1	1	2	0	0

TABLE 4.37

VAR. / ID.	DJR-835	DJR-836	DJR-837	DJR-838	DJR-839	DJR-840	DJR-841	DJR-842	DJR-843	DJR-844
East	33784	33746	33707	33684	33650	33619	33593	33569	33560	33530
North	60627	60626	60633	60630	60631	60630	60630	60600	60663	60678
SiO2	61.71	58.39	62.66	64.93	65.94	59.74	57.04	58.78	57.96	59.95
Al2O3	15.36	13.21	16.02	16.19	16.06	13.77	13.34	13.26	12.76	18.93
TiO2	0.91	0.76	1.00	0.94	0.95	0.96	0.84	0.86	0.67	1.16
Fe2O3	6.46	5.38	6.92	7.08	6.74	6.52	6.00	5.71	4.87	9.49
MgO	4.80	4.28	5.16	4.22	3.61	4.72	4.97	4.62	4.44	4.30
CaO	4.57	9.57	2.85	0.29	1.42	4.88	8.47	8.58	10.55	0.13
Na2O	1.64	1.60	1.72	1.84	2.04	1.72	1.44	1.70	1.78	1.04
K2O	2.31	2.02	2.49	2.49	2.09	1.94	2.15	1.95	1.97	3.49
MnO	0.10	0.12	0.08	0.08	0.12	0.11	0.09	0.10	0.09	0.08
P2O5	0.19	0.17	0.21	0.20	0.20	0.20	0.19	0.19	0.16	0.20
Total	98.05	95.50	99.11	98.26	99.17	94.56	94.53	95.75	95.25	98.77
As	3	3	3	2	2	4	3	5	2	0
Ba	279	218	295	244	263	234	233	199	208	372
Cl	15	18	30	13	32	32	24	31	17	0
Co	23	22	26	30	31	31	21	25	21	29
Cr	144	151	151	138	177	195	133	166	126	163
Cu	29	20	26	26	23	23	20	23	18	42
Ga	14	13	17	14	14	13	14	12	12	21
La	28	31	33	34	35	33	35	33	29	39
Ni	65	54	76	70	69	63	62	53	51	100
Nb	12	11	15	14	14	12	13	11	12	17
Pb	14	12	14	13	15	14	16	12	13	17
Rb	75	63	86	86	66	63	69	61	62	127
Sr	81	136	67	46	63	94	136	134	167	35
Sb	0	2	0	0	0	0	0	0	0	0
S	0	0	0	0	11	0	13	33	0	22
Th	8	5	10	10	10	6	11	9	10	13
V	104	89	113	102	99	101	101	98	72	144
Y	35	30	41	30	32	33	30	30	27	36
Zn	73	53	76	78	60	70	70	61	52	107
Zr	205	211	220	215	242	267	212	243	188	195
Tl	0	1	4	1	0	0	0	0	0	5

TABLE 4.37

VAR. / ID.	DJR-845	DJR-846	DJR-847	DJR-848	DJR-849	DJR-850	DJR-851	DJR-852	DJR-853	DJR-854
East	33599	33865	33716	33036	33121	33940	33924	33897	33872	33872
North	60625	60614	60620	59759	59738	60622	60641	60659	60685	60720
SiO2	59.65	62.42	61.35	61.46	60.23	60.16	55.83	57.91	59.02	59.04
Al2O3	14.79	13.58	15.31	15.02	12.57	13.78	15.54	13.86	14.20	16.68
TiO2	0.89	0.83	0.88	0.86	0.76	0.86	0.92	0.85	0.86	0.83
Fe2O3	6.31	5.70	6.49	6.20	5.27	5.95	7.20	6.05	5.97	7.03
MgO	4.55	4.62	5.06	4.52	3.92	4.02	5.37	4.47	4.56	3.94
CaO	5.83	6.12	4.12	5.23	8.68	7.74	5.28	6.93	7.61	7.24
Na2O	1.58	1.91	1.61	1.88	1.66	1.77	1.42	1.56	1.68	0.52
K2O	2.31	1.89	2.25	2.13	1.97	1.97	2.65	2.14	2.17	2.64
MnO	0.11	0.09	0.05	0.12	0.10	0.11	0.08	0.11	0.11	0.11
P2O5	0.18	0.18	0.19	0.18	0.18	0.19	0.17	0.18	0.19	0.17
Total	96.20	97.34	97.31	97.60	95.34	96.55	94.46	94.06	96.37	98.20
As	2	5	2	5	2	3	7	3	7	0
Ba	282	221	275	275	197	260	336	240	240	314
Cl	57	34	14	21	47	28	48	33	18	17
Co	26	27	27	28	24	27	25	23	23	28
Cr	152	153	134	135	141	148	130	139	138	128
Cu	23	22	25	17	24	21	28	23	22	35
Ga	13	14	14	14	12	12	16	13	13	15
La	34	35	25	27	30	34	32	26	28	37
Ni	65	51	61	61	48	52	68	56	50	84
Nb	14	10	13	13	12	14	15	12	13	12
Pb	13	14	16	10	12	14	16	14	10	15
Rb	75	59	74	68	62	61	87	65	68	80
Sr	99	110	85	93	131	117	90	102	110	67
Sb	1	0	0	0	3	2	0	0	0	0
S	0	0	0	0	0	13	34	0	13	11
Th	16	9	11	8	9	7	5	9	7	5
V	98	96	100	101	83	97	107	100	99	104
Y	35	36	29	34	30	31	29	33	33	30
Zn	65	56	62	66	50	63	78	63	61	71
Zr	218	231	202	194	216	266	181	204	200	172
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-855	DJR-856	DJR-857	DJR-858	DJR-860	DJR-861	DJR-862	DJR-863	DJR-864	DJR-865
East	33842	33826	33828	33820	33810	33133	33149	33176	33205	33220
North	60763	60770	60798	60850	60870	59739	59738	59734	59726	59708
SiO2	60.77	58.29	59.73	57.98	60.32	61.56	60.08	58.77	61.46	59.74
Al2O3	15.74	13.89	12.55	16.92	14.98	14.56	14.62	14.99	16.53	16.33
TiO2	0.92	0.82	0.83	1.03	0.86	0.88	0.84	0.72	1.15	0.88
Fe2O3	6.33	5.68	5.40	12.09	6.46	6.20	5.91	5.29	7.37	5.69
MgO	4.70	4.25	4.69	6.32	5.02	4.35	4.54	3.77	4.14	3.10
CaO	5.05	8.13	8.99	0.66	5.51	3.78	5.89	9.84	0.76	7.27
Na2O	1.37	1.29	1.55	0.38	1.70	1.94	1.70	0.50	1.64	1.14
K2O	2.22	2.34	1.95	2.76	2.29	2.14	2.21	1.82	2.48	2.83
MnO	0.12	0.12	0.08	0.06	0.10	0.11	0.10	0.12	0.07	0.07
P2O5	0.20	0.18	0.18	0.17	0.19	0.20	0.18	0.17	0.21	0.19
Total	97.42	94.99	95.95	98.37	97.43	95.72	96.07	95.99	95.81	97.24
As	1	3	3	4	2	6	0	65	11	0
Ba	246	231	197	524	249	218	247	190	285	239
Cl	15	47	31	85	8	0	12	43	22	9
Co	25	27	26	23	24	22	22	19	32	26
Cr	140	139	199	148	140	130	136	117	193	146
Cu	24	18	22	11	20	23	26	39	13	25
Ga	14	13	11	17	13	15	14	12	16	15
La	30	32	32	34	29	25	28	29	38	32
Ni	64	65	47	82	68	59	61	41	73	66
Nb	12	13	12	14	13	14	12	11	16	13
Pb	15	12	17	42	12	11	16	11	11	13
Rb	68	75	58	93	74	69	67	58	82	85
Sr	87	107	131	29	96	87	115	98	55	99
Sb	0	2	0	0	0	0	3	17	0	0
S	14	35	28	56	19	0	0	307	5	29
Th	5	7	12	6	6	14	14	7	10	10
V	94	100	94	132	101	101	94	85	123	100
Y	36	30	29	24	29	30	33	30	39	31
Zn	78	71	61	103	73	64	64	28	82	63
Zr	221	216	248	179	201	211	198	187	321	224
Tl	3	0	0	0	0	0	0	2	3	2

TABLE 4.37

-2439-

VAR. / ID.	DJR-866	DJR-867	DJR-868	DJR-869	DJR-870	DJR-871	DJR-872	DJR-873	DJR-874	DJR-875
East	33240	33230	33196	33177	33161	33097	33070	33140	33242	33260
North	59728	59775	59778	59778	59782	59797	59795	59829	59935	59950
SiO2	59.98	58.59	59.12	60.50	59.12	57.91	57.23	59.05	60.37	59.97
Al2O3	15.57	13.54	15.21	13.08	13.10	14.25	13.83	15.02	14.95	11.46
TiO2	0.96	0.84	0.89	0.80	0.78	0.82	0.69	0.86	0.95	0.75
Fe2O3	6.40	5.84	6.50	5.55	5.42	6.07	5.11	6.30	6.53	4.93
MgO	5.03	3.99	4.96	4.42	3.70	4.50	4.06	5.07	4.83	3.86
CaO	4.74	7.28	6.30	8.04	6.94	7.39	10.36	6.40	3.51	10.60
Na2O	1.76	1.71	1.61	1.77	1.87	1.44	0.98	1.62	1.63	1.72
K2O	2.43	2.20	2.50	1.96	2.03	2.40	2.17	2.39	2.14	1.62
MnO	0.09	0.09	0.09	0.10	0.10	0.10	0.13	0.11	0.12	0.12
P2O5	0.19	0.18	0.18	0.18	0.17	0.18	0.17	0.17	0.19	0.18
Total	97.15	94.26	97.36	96.40	93.23	95.06	94.73	96.99	95.22	95.21
As	6	0	7	4	2	3	5	4	7	1
Ba	500	251	341	230	236	281	218	262	272	264
Cl	8	8	6	7	20	24	18	16	0	14
Co	29	25	23	25	17	24	27	25	22	26
Cr	141	141	140	152	125	135	131	134	144	176
Cu	22	22	34	19	22	25	21	29	23	23
Ga	14	13	14	14	14	14	12	15	13	11
La	38	35	34	29	32	42	20	31	37	28
Ni	59	56	69	54	55	64	48	68	70	44
Nb	13	12	14	12	12	12	11	14	14	13
Pb	13	15	0	12	13	13	12	41	12	16
Rb	78	72	84	61	64	75	63	76	68	51
Sr	97	115	107	121	113	114	139	98	71	174
Sb	0	2	0	0	3	0	2	0	0	2
S	94	0	46	11	0	7	185	6	20	45
Th	12	12	6	5	3	11	6	0	10	13
V	110	97	110	96	91	102	84	105	112	89
Y	31	35	31	28	35	39	29	32	51	36
Zn	67	60	75	59	57	79	53	74	68	53
Zr	234	220	199	233	203	202	193	175	228	244
Tl	0	0	2	0	0	0	4	0	3	0

TABLE 4.37

VAR. / ID.	DJR-876	DJR-877	DJR-878	DJR-879	DJR-880	DJR-881	DJR-882	DJR-883	DJR-884	DJR-885
East	33174	32870	32904	32910	32992	33110	33008	32960	32920	32858
North	59832	60147	60143	60142	60149	60064	60176	60200	60197	60207
SiO2	59.41	58.56	61.65	59.16	59.59	59.10	60.60	56.96	58.53	59.51
Al2O3	12.44	14.62	15.43	14.13	14.43	12.78	14.83	13.46	15.12	13.90
TiO2	0.73	0.81	0.87	0.77	0.89	0.73	0.77	0.78	0.77	0.75
Fe2O3	4.98	5.87	6.56	5.61	5.96	5.03	5.23	5.49	5.61	5.55
MgO	4.10	4.88	4.74	4.25	4.83	3.85	3.83	4.64	3.09	4.14
CaO	10.32	7.27	3.21	8.54	5.69	9.07	7.26	9.38	9.49	8.26
Na2O	1.71	1.70	1.60	1.66	1.74	1.55	1.08	1.43	1.43	1.80
K2O	1.86	2.29	2.60	2.33	2.14	2.06	2.10	2.24	2.62	2.13
MnO	0.11	0.10	0.09	0.10	0.09	0.10	0.12	0.09	0.09	0.09
P2O5	0.19	0.17	0.18	0.18	0.19	0.18	0.18	0.17	0.18	0.17
Total	95.85	96.27	96.93	96.73	95.55	94.45	96.00	94.64	96.93	96.30
As	5	2	0	3	1	0	2	0	1	0
Ba	251	233	260	221	214	212	175	262	525	220
Cl	19	29	16	10	9	37	60	12	19	19
Co	17	20	24	19	24	23	27	20	21	24
Cr	118	138	130	115	159	125	163	146	130	117
Cu	28	26	23	20	16	44	17	26	14	15
Ga	12	15	15	15	14	13	13	14	15	13
La	32	37	37	32	27	30	29	26	37	24
Ni	52	58	65	60	58	59	56	56	64	58
Nb	13	13	14	12	12	12	12	12	12	12
Pb	12	11	14	13	15	12	13	14	15	14
Rb	61	73	83	75	66	62	62	69	84	66
Sr	129	117	82	133	108	129	92	140	123	126
Sb	0	0	0	0	0	0	0	0	0	0
S	12	47	5	16	0	0	32	17	88	0
Th	9	9	12	10	8	8	9	9	13	9
V	84	100	98	100	107	87	88	99	110	93
Y	29	30	37	30	32	27	29	30	30	27
Zn	62	68	69	63	62	57	53	66	62	62
Zr	192	202	185	182	237	217	207	229	173	182
Tl	3	0	1	0	3	0	0	3	0	0

TABLE 4.37

VAR. / ID.	DJR-886	DJR-887	DJR-888	DJR-889	DJR-890	DJR-891	DJR-892	DJR-893	DJR-894	DJR-895
East	32936	33005	33060	33036	33068	33085	33218	33272	33272	33080
North	60270	60305	60312	60410	60448	60292	60243	60131	60070	59980
SiO2	56.93	59.53	59.85	60.39	56.99	62.25	57.23	61.61	55.24	61.26
Al2O3	12.54	14.17	19.24	15.05	15.06	15.56	12.29	18.39	14.96	13.59
TiO2	0.76	0.81	1.06	0.86	0.87	0.88	0.68	1.05	0.80	0.76
Fe2O3	5.24	5.51	8.39	6.47	6.22	6.32	4.82	8.17	6.14	5.27
MgO	4.03	4.58	4.32	4.77	5.06	4.82	4.07	5.83	5.13	4.51
CaO	8.94	7.45	0.45	4.30	7.62	0.55	10.80	0.13	9.40	7.36
Na2O	1.71	1.69	0.27	1.71	1.48	1.90	1.66	0.94	1.16	1.72
K2O	1.90	2.26	3.39	2.18	2.54	2.15	1.82	3.11	2.67	2.22
MnO	0.10	0.06	0.09	0.10	0.09	0.14	0.11	0.09	0.10	0.08
P2O5	0.18	0.17	0.16	0.18	0.19	0.18	0.17	0.19	0.17	0.17
Total	92.33	96.23	97.22	96.01	96.12	94.75	93.65	99.51	95.77	96.94
As	4	6	5	5	3	6	2	4	1	4
Ba	212	210	455	239	253	252	287	333	239	234
Cl	27	9	0	10	10	11	19	0	6	9
Co	23	21	28	25	22	31	23	35	24	20
Cr	139	153	146	136	142	139	121	152	138	136
Cu	20	24	39	13	32	23	21	32	49	19
Ga	14	14	18	14	16	14	12	18	15	13
La	26	35	47	33	26	46	26	36	33	29
Ni	50	54	90	64	68	58	53	90	73	52
Nb	11	12	16	13	14	13	10	16	14	11
Pb	11	12	12	22	17	11	12	28	15	13
Rb	60	68	130	70	83	68	56	119	84	68
Sr	144	124	28	97	128	49	147	25	125	129
Sb	0	0	0	0	0	0	0	0	4	4
S	0	0	7	18	0	0	17	30	20	42
Th	7	9	14	6	7	11	9	14	7	10
V	84	97	122	95	110	97	84	135	114	99
Y	33	32	37	39	33	50	34	36	28	27
Zn	0	63	100	96	83	65	54	103	75	59
Zr	212	241	216	203	203	211	183	203	189	198
Tl	2	0	0	0	3	1	2	2	0	2

TABLE 4.37

VAR. / ID.	DJR-896	DJR-897	DJR-898	DJR-899	DJR-900	DJR-901	DJR-902	DJR-903	DJR-904	DJR-905
East	33047	33009	33014	33875	33843	33817	33823	33830	33807	33796
North	59947	59820	59785	59752	59780	59829	59853	59881	59925	59946
SiO2	65.41	58.79	56.08	59.61	58.31	57.78	58.48	55.46	57.33	59.57
Al2O3	13.98	13.15	11.69	15.88	11.84	15.61	14.89	17.04	14.53	15.70
TiO2	0.96	0.77	0.77	0.93	0.69	0.87	0.94	0.96	0.90	1.00
Fe2O3	5.94	5.55	5.21	7.03	4.72	6.15	6.16	7.93	5.41	5.76
MgO	4.39	4.98	4.19	4.85	4.56	4.77	4.42	4.85	3.66	3.48
CaO	2.38	8.56	11.86	4.44	8.95	7.07	6.98	5.06	9.83	6.02
Na2O	1.99	1.82	1.71	1.94	1.89	1.49	1.72	1.12	1.04	1.58
K2O	1.77	1.87	1.61	2.37	2.05	2.66	2.49	3.53	2.37	1.94
MnO	0.10	0.08	0.09	0.11	0.18	0.17	0.08	0.08	0.16	0.11
P2O5	0.20	0.18	0.17	0.19	0.16	0.19	0.20	0.19	0.18	0.20
Total	97.12	95.75	93.38	97.35	93.35	96.76	96.36	96.22	95.41	95.36
As	3	0	2	7	5	5	8	19	3	3
Ba	211	213	194	349	201	398	271	387	211	252
Cl	10	12	28	0	71	0	24	0	44	46
Co	28	23	24	27	23	28	26	26	23	27
Cr	209	147	154	135	117	130	162	142	207	196
Cu	17	18	15	38	16	24	20	70	17	15
Ga	13	12	12	14	11	16	15	20	13	14
La	30	33	29	27	31	34	36	36	44	44
Ni	55	49	53	71	42	59	63	90	46	85
Nb	13	12	12	15	10	16	15	15	12	13
Pb	17	15	12	11	11	12	11	9	13	8
Rb	53	58	49	79	57	88	79	128	19	58
Sr	82	138	163	91	113	98	134	72	130	70
Sb	4	0	2	0	12	0	0	23	0	0
S	27	21	8	69	10	67	26	13	19	10
Th	6	10	10	4	7	10	12	15	16	12
V	103	98	94	113	81	114	119	140	110	115
Y	29	30	27	32	24	29	31	31	44	32
Zn	57	60	53	81	45	73	69	113	46	47
Zr	293	207	224	189	163	182	233	171	310	290
Tl	0	2	0	0	0	1	3	5	0	0

TABLE 4.37

VAR. / ID.	DJR-906	DJR-908	DJR-909	DJR-910	DJR-911	DJR-912	DJR-913	DJR-914	DJR-915	DJR-916
East	33780	34198	34210	34205	34103	34072	33748	33818	33797	33749
North	59968	59945	59995	60012	60110	60183	60067	60151	60107	60158
SiO2	63.54	56.46	56.96	57.94	58.88	57.41	56.52	56.94	58.62	56.87
Al2O3	13.56	14.82	14.06	15.31	16.08	14.27	14.89	14.52	12.93	15.45
TiO2	0.75	0.81	0.74	0.88	1.04	0.82	0.86	0.85	0.81	0.81
Fe2O3	5.32	6.09	6.02	6.50	7.44	5.83	6.23	6.21	5.37	6.03
MgO	4.11	4.81	4.30	5.36	4.53	4.61	5.20	5.11	4.26	4.72
CaO	4.71	7.97	9.55	6.18	4.92	7.95	7.88	8.16	9.16	8.19
Na2O	2.29	1.64	1.20	1.67	1.28	1.90	1.50	1.63	1.92	1.24
K2O	2.00	2.38	2.25	2.36	2.29	2.22	2.47	2.24	1.92	2.64
MnO	0.06	0.08	0.10	0.10	0.10	0.18	0.13	0.09	0.13	0.10
P2O5	0.16	0.16	0.17	0.19	0.19	0.17	0.18	0.19	0.18	0.18
Total	96.50	95.22	95.35	96.49	96.75	95.36	95.86	95.94	95.30	96.23
As	0	13	0	0	4	6	7	5	3	8
Ba	226	594	421	305	316	308	275	270	271	912
Cl	17	14	15	0	8	0	0	0	12	15
Co	26	26	21	27	27	23	23	25	22	25
Cr	117	121	108	126	205	125	132	129	139	124
Cu	12	24	23	30	21	31	26	23	18	30
Ga	13	14	13	15	15	14	18	14	14	16
La	22	32	32	32	45	27	34	38	32	33
Ni	44	62	63	64	62	57	60	58	44	62
Nb	11	13	14	14	13	14	13	13	12	13
Pb	19	20	15	30	12	10	10	13	13	16
Rb	61	75	70	81	69	73	80	74	62	84
Sr	109	159	160	109	47	136	131	136	145	129
Sb	0	0	2	0	0	0	0	0	2	0
S	0	157	177	18	15	47	11	42	71	509
Th	11	10	0	9	9	6	12	10	5	8
V	90	112	90	108	120	102	112	105	100	109
Y	23	32	27	30	33	30	31	29	28	31
Zn	51	65	68	80	64	71	73	71	84	75
Zr	164	161	170	188	315	187	202	194	217	178
Tl	0	3	0	0	2	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-917	DJR-918	DJR-919	DJR-920	DJR-921	DJR-922	DJR-923	DJR-924	DJR-925	DJR-926
East	33756	33460	33490	33430	33416	33452	33433	33404	33346	33302
North	60194	59916	59953	60258	60286	60246	60222	60245	60263	60277
SiO2	57.14	59.97	60.49	57.51	62.77	63.64	60.44	59.67	62.15	60.94
Al2O3	13.90	14.96	15.70	14.31	19.01	15.21	15.25	14.29	17.98	13.94
TiO2	1.08	0.98	1.06	0.79	1.02	0.93	0.87	0.94	1.03	0.84
Fe2O3	6.18	6.66	6.53	5.78	6.78	6.19	6.34	6.67	8.26	5.78
MgO	4.31	5.14	5.07	4.85	3.95	4.61	4.82	4.43	4.91	4.53
CaO	8.64	4.42	3.77	8.80	0.06	3.70	5.04	3.14	0.21	6.34
Na2O	1.78	2.06	1.93	1.36	1.30	1.88	1.71	1.78	1.33	1.76
K2O	2.09	2.04	2.33	2.42	2.45	1.98	2.26	2.20	3.14	2.01
MnO	0.11	0.08	0.12	0.09	0.13	0.09	0.12	0.10	0.16	0.11
P2O5	0.21	0.20	0.21	0.17	0.12	0.20	0.19	0.19	0.18	0.19
Total	95.44	96.51	97.21	96.08	97.59	98.43	97.04	93.41	99.35	96.44
As	4	3	3	6	4	2	2	1	4	0
Ba	242	286	279	215	253	268	292	271	354	224
Cl	15	11	17	14	0	0	0	11	0	20
Co	26	27	26	25	30	28	25	25	33	29
Cr	239	145	153	137	156	156	129	152	137	162
Cu	25	20	14	25	17	38	24	27	41	22
Ga	13	14	16	15	14	15	14	14	17	13
La	40	27	38	30	33	37	43	37	29	35
Ni	54	59	59	61	69	60	68	70	76	55
Nb	16	13	13	12	14	13	14	15	15	13
Pb	15	13	14	11	14	13	13	14	18	15
Rb	67	69	77	76	74	65	76	75	112	62
Sr	133	92	83	109	38	70	88	76	43	119
Sb	0	0	4	0	2	0	0	0	1	3
S	11	0	35	85	31	44	20	0	29	66
Th	14	10	8	12	9	10	13	12	15	8
V	125	106	112	100	107	105	97	111	122	106
Y	37	35	36	27	32	31	53	36	27	31
Zn	65	74	71	68	79	67	73	72	82	65
Zr	387	236	251	207	243	235	190	208	217	233
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-927	DJR-928	DJR-929	DJR-930	DJR-931	DJR-932	DJR-933	DJR-934	DJR-935	DJR-936
East	33360	33359	33368	33435	33469	33507	33502	33498	33495	33490
North	60200	60178	60127	60114	60164	60234	60242	60247	60253	60266
SiO2	54.27	59.75	60.90	58.94	60.54	60.90	59.13	60.66	58.07	57.74
Al2O3	11.55	14.04	13.46	14.31	16.33	15.65	14.15	14.45	12.88	14.58
TiO2	0.68	0.83	0.85	0.78	0.95	0.86	0.85	0.84	0.72	0.83
Fe2O3	5.01	5.71	5.79	5.77	6.94	6.40	6.08	5.64	5.03	5.99
MgO	3.66	4.35	4.44	4.59	4.89	3.73	4.47	4.01	4.15	4.84
CaO	13.04	7.11	7.41	7.51	3.64	5.67	7.32	6.65	10.58	7.88
Na2O	1.38	1.71	1.75	1.61	1.51	1.45	1.59	1.58	1.51	1.45
K2O	1.89	2.06	1.81	2.18	2.72	2.58	2.11	2.22	2.16	2.34
MnO	0.10	0.10	0.11	0.08	0.10	0.14	0.09	0.11	0.10	0.08
P2O5	0.16	0.18	0.20	0.18	0.20	0.19	0.19	0.19	0.18	0.19
Total	91.74	95.84	96.72	95.95	97.82	97.57	95.98	96.35	95.38	95.92
As	0	2	0	2	4	5	2	5	4	6
Ba	199	205	240	266	323	300	232	239	201	279
Cl	38	0	13	8	17	9	12	13	28	7
Co	16	20	26	16	24	22	25	22	28	25
Cr	139	139	141	122	142	144	139	150	131	131
Cu	17	31	25	25	25	31	26	20	18	21
Ga	12	14	13	13	16	14	13	14	13	15
La	29	35	35	34	41	27	29	35	26	33
Ni	53	60	59	61	71	74	54	59	52	63
Nb	12	12	13	15	15	15	13	13	12	13
Pb	21	13	15	13	11	10	14	12	13	48
Rb	58	66	62	76	89	86	67	69	70	75
Sr	263	108	108	115	79	76	97	108	141	111
Sb	4	0	0	3	1	0	0	6	0	0
S	6	21	30	23	41	42	49	15	56	80
Th	12	7	9	7	7	6	8	13	22	6
V	90	99	96	98	113	104	103	103	85	107
Y	0	44	41	33	51	30	29	27	26	33
Zn	57	65	69	74	73	76	68	67	65	72
Zr	194	218	241	192	217	194	209	221	205	199
Tl	2	0	7	0	0	17	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-937	DJR-938	DJR-939	DJR-940	DJR-941	DJR-942	DJR-943	DJR-944	DJR-945	DJR-946
East	33538	33530	33504	33565	33595	33564	33830	33516	33522	33505
North	60169	60208	60205	60030	60050	60052	59463	59609	59581	59580
SiO2	60.46	58.44	58.60	59.89	58.73	61.67	59.46	57.49	58.67	87.84
Al2O3	13.30	13.44	13.47	15.32	13.31	14.85	11.76	13.47	14.28	6.86
TiO2	0.69	0.82	0.77	0.92	0.94	0.79	0.72	0.79	0.75	0.23
Fe2O3	4.94	5.45	5.58	6.38	5.71	5.67	4.78	5.33	5.25	2.95
MgO	3.80	4.20	3.89	4.48	4.81	4.03	3.96	3.85	3.33	0.80
CaO	8.84	7.88	8.62	3.33	8.57	5.43	9.12	9.17	9.26	0.02
Na2O	1.78	1.67	1.69	1.90	1.61	1.93	2.04	1.86	1.47	0.79
K2O	2.00	2.03	2.16	2.42	2.07	2.27	1.79	1.97	2.20	0.39
MnO	0.08	0.11	0.11	0.09	0.09	0.11	0.08	0.17	0.12	0.03
P2O5	0.17	0.17	0.19	0.17	0.21	0.19	0.17	0.18	0.18	0.12
Total	96.06	94.21	95.08	94.90	96.05	96.94	93.88	94.28	95.51	100.03
As	1	2	0	3	5	4	3	0	2	24
Ba	222	225	220	281	207	215	333	343	216	56
Cl	35	31	0	20	16	28	32	7	45	0
Co	23	25	22	25	33	27	25	22	24	43
Cr	119	150	120	128	280	142	152	130	132	49
Cu	15	20	24	16	21	10	22	30	38	11
Ga	15	12	14	14	14	14	11	13	14	6
La	33	39	29	39	41	45	22	24	34	12
Ni	49	55	61	59	55	53	41	49	37	12
Nb	11	12	14	14	14	13	11	12	11	4
Pb	14	14	14	15	18	9	10	13	12	8
Rb	61	61	74	80	65	73	55	60	65	15
Sr	127	106	115	87	136	93	169	157	109	9
Sb	0	0	0	0	2	2	0	0	0	55
S	46	23	10	0	25	32	118	106	152	28
Th	13	6	7	12	11	9	9	8	5	2
V	88	97	94	113	111	96	94	101	91	27
Y	23	32	31	34	33	27	28	28	24	9
Zn	55	59	73	70	59	55	43	63	63	18
Zr	183	221	182	198	332	196	204	196	208	68
Tl	0	2	0	0	2	0	0	0	0	0

TABLE 4.37

VAR. / ID.	DJR-947	DJR-948	DJR-949	DJR-950	DJR-951	DJR-952
East	33545	33552	33582	33606	33635	33655
North	59568	59554	59523	59510	59510	59507
SiO2	58.03	57.48	56.90	58.67	55.82	56.73
Al2O3	14.06	13.57	16.59	15.81	16.52	16.44
TiO2	0.87	0.76	0.82	0.90	0.97	0.97
Fe2O3	5.69	5.67	5.02	6.45	7.93	7.65
MgO	3.85	4.40	3.50	5.29	5.30	5.83
CaO	8.84	8.51	9.24	4.87	3.80	4.75
Na2O	1.47	1.85	1.18	1.63	1.29	1.51
K2O	2.42	1.97	2.23	2.53	3.09	2.87
MnO	0.09	0.09	0.09	0.07	0.06	0.07
P2O5	0.17	0.17	0.18	0.18	0.17	0.17
Total	95.49	94.47	95.75	96.40	94.95	96.99
As	39	10	0	1	12	12
Ba	514	327	255	271	436	373
Cl	11	10	89	24	0	17
Co	66	20	17	30	28	24
Cr	173	112	141	146	140	141
Cu	25	23	18	26	37	39
Ga	14	14	13	14	17	18
La	39	33	25	37	41	35
Ni	50	54	40	66	85	81
Nb	14	12	11	13	17	16
Pb	20	22	13	14	22	17
Rb	74	61	59	79	112	103
Sr	160	148	157	85	103	123
Sb	0	0	0	0	0	0
S	2755	84	176	99	17	763
Th	10	3	9	7	15	14
V	115	95	99	118	134	128
Y	32	26	27	28	34	31
Zn	165	81	36	77	104	94
Zr	277	172	205	195	185	181
Tl	0	2	0	0	0	0

TABLE 4.37

XRF Analyses: Glendinning Greywacke (BEAD1)

Part 1

VAR. / ID.	DJR-1	DJR-3	DJR-4	DJR-11	DJR-13	DJR-18	DJR-33	DJR-53	DJR-54	DJR-58
SiO ₂	68.20	58.18	57.99	60.12	64.82	62.99	57.17	64.85	55.98	57.42
Al ₂ O ₃	13.64	12.30	14.02	9.82	10.66	11.58	9.25	10.44	8.90	9.75
TiO ₂	0.88	0.89	0.89	0.75	0.70	0.69	0.66	0.76	0.63	0.67
Fe ₂ O ₃	2.90	2.20	2.23	1.89	1.67	1.17	1.52	2.00	1.10	1.88
FeO	2.82	3.45	4.39	2.75	2.85	3.55	3.68	2.69	3.18	2.71
MgO	3.31	3.30	4.47	3.46	2.83	3.52	3.16	3.08	3.32	3.36
CaO	0.18	6.87	4.07	6.90	5.96	5.33	9.52	5.92	10.74	8.64
Na ₂ O	2.15	2.55	1.90	1.91	2.43	2.27	0.34	0.85	1.81	2.08
K ₂ O	2.10	1.83	2.43	1.45	1.33	1.73	1.42	1.64	1.05	1.23
MnO	0.03	0.09	0.08	0.09	0.07	0.05	0.08	0.07	0.11	0.06
P ₂ O ₅	0.15	0.20	0.18	0.14	0.14	0.15	0.14	0.16	0.15	0.16
CO ₂	0.81	6.29	1.37	5.41	5.07	5.29	11.10	7.36	11.16	10.58
LOI	2.67	1.10	4.49	5.33	1.24	1.36	1.31	0.09	1.57	1.18
Total	99.84	99.25	98.51	100.02	99.77	99.68	99.35	99.91	99.70	99.72

TABLE 4.38

XRF Analyses: Glendinning Mudstone (BEAD2)

Part 1

VAR. / ID.	DJR-1001	DJR-1003	DJR-1004	DJR-1011	DJR-1013	DJR-1018	DJR-1033	DJR-1053	DJR-1054	DJR-1058
SiO2	62.84	59.89	57.54	51.83	52.87	54.18	65.19	55.42	54.53	51.42
Al2O3	15.66	16.67	17.34	12.78	17.80	17.33	14.04	15.26	15.34	16.24
TiO2	0.99	0.92	0.99	0.77	0.98	0.96	0.96	0.92	0.95	0.88
Fe2O3	3.32	2.77	3.15	6.22	2.58	2.24	5.16	3.99	3.92	4.04
FeO	3.80	3.93	4.96	0.30	5.99	5.76	1.75	3.14	3.00	3.60
MgO	4.44	3.83	5.26	4.09	6.24	5.95	2.51	3.28	3.62	3.72
CeO	0.09	1.29	0.51	8.67	1.99	1.81	2.01	5.39	5.30	6.04
Na2O	1.68	1.42	1.41	0.04	1.39	1.38	0.36	0.19	1.42	0.90
K2O	2.64	3.91	3.55	2.19	3.48	3.59	2.42	3.44	3.17	3.59
MnO	0.05	0.04	0.08	0.13	0.05	0.05	0.14	0.08	0.06	0.08
P2O5	0.12	0.14	0.20	0.20	0.19	0.20	0.22	0.19	0.20	0.16
CO2	2.44	2.38	1.87	12.40	2.81	1.97	2.03	3.14	4.00	7.01
LOI	0.92	1.62	2.05	0.84	2.91	3.16	3.19	4.66	3.77	1.88
Total	98.99	98.81	98.91	100.46	99.28	98.58	99.98	99.10	99.28	99.56

TABLE 4.39

XRF Analyses: Glendinning Mineralisation (BEAD3) Part 1

VAR. / ID.	CXD-1001	CXD-1005	CXD-1071	CXD-1030	CXD-1051	CXD-1052	CXD-1077	CXD-1081	CXD-1091	CXD-1101
SiO2	65.03	60.94	66.15	53.70	51.19	52.87	51.28	48.49	58.65	50.71
Al2O3	12.54	11.79	11.91	13.22	16.75	13.20	14.97	14.88	11.27	13.84
TiO2	0.88	0.76	0.71	0.75	0.90	0.78	0.82	0.75	0.62	0.75
Fe2O3	3.43	2.61	3.16	2.06	1.63	1.07	1.94	1.06	5.26	2.45
FeO	2.39	2.59	1.29	2.77	3.08	3.11	3.53	4.14	1.69	3.04
MgO	2.85	2.80	1.72	3.57	3.73	4.28	3.80	4.18	2.46	4.17
CaO	3.06	6.08	3.17	7.71	6.18	7.95	6.55	7.09	4.73	7.69
Na2O	1.42	2.03	0.14	0.15	0.13	0.25	0.10	0.12	0.00	0.00
K2O	2.17	1.86	2.51	3.04	4.21	3.10	3.85	3.99	1.98	3.62
MnO	0.09	0.10	0.05	0.08	0.05	0.07	0.07	0.07	0.05	0.08
P2O5	0.19	0.18	0.10	0.17	0.18	0.17	0.16	0.16	0.09	0.13
CO2	1.89	5.88	3.57	7.96	8.26	7.50	8.07	7.76	6.79	9.24
LOI	3.90	2.26	3.61	4.64	3.27	5.62	3.73	6.23	1.56	1.94
Total	100.89	99.90	99.95	99.11	98.10	97.94	97.27	95.84	98.72	97.07

TABLE 4.40

XRF Analyses: Regional Greywackes (BEAD4)

Part 1

VAR. / ID.	AX01	AX36	AX38	AX44	AX46	AX48	AX54	AX62	AX63	AX94
SiO2	63.67	70.97	77.35	69.33	72.46	73.10	59.43	65.52	69.61	69.72
Al2O3	11.57	10.47	7.37	12.02	11.14	9.59	14.77	10.46	13.05	11.34
TiO2	0.91	0.77	0.99	0.74	0.64	1.02	1.14	0.81	1.02	0.75
Fe2O3	0.74	0.83	0.33	1.55	0.84	0.91	3.17	0.43	0.30	1.16
FeO	4.56	3.91	2.69	3.20	2.89	3.41	4.71	4.31	5.61	3.96
MgO	3.59	3.57	2.22	3.51	3.06	2.77	3.32	2.61	2.83	3.39
CaO	4.54	1.68	1.91	0.86	1.08	1.50	5.20	5.61	0.53	1.81
Na2O	3.37	2.51	2.16	3.04	2.90	2.03	3.80	2.04	2.93	2.30
K2O	0.65	1.79	0.72	2.30	2.19	1.59	0.69	1.15	1.39	2.47
MnO	0.11	0.05	0.08	0.06	0.03	0.05	0.12	0.10	0.08	0.05
P2O5	0.21	0.13	0.22	0.17	0.13	0.15	0.27	0.12	0.16	0.19
CO2	4.55	1.78	3.13	2.13	0.20	1.17	1.68	3.34	1.87	0.77
LOI	0.92	1.58	0.90	0.44	2.31	1.64	1.64	3.20	0.41	1.94
Total	99.39	100.04	100.07	99.35	99.87	98.93	99.94	99.70	99.79	99.85

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 2

VAR. / ID.	AX96	AX97	AX107	AX108	AX109	AX110	AX111	AX112	AX114	AX116
SiO2	72.39	63.82	76.97	79.96	78.81	66.01	60.42	55.88	76.93	76.61
Al2O3	10.45	13.96	8.21	7.56	8.07	12.41	14.45	14.62	7.66	9.34
TiO2	0.68	0.91	0.94	0.68	0.89	0.81	0.73	0.82	0.86	1.01
Fe2O3	1.01	1.43	0.78	0.38	0.76	1.63	0.42	3.26	1.10	0.99
FeO	2.96	5.02	3.28	3.11	3.15	3.93	5.39	4.09	3.35	3.50
MgO	2.84	3.87	1.62	1.73	1.65	4.16	5.05	5.34	1.59	1.90
CaO	1.90	1.66	2.30	1.33	1.12	2.75	3.30	6.04	0.61	1.14
Na2O	2.76	4.09	1.62	1.69	1.61	3.51	4.03	3.20	1.75	1.61
K2O	1.98	1.71	1.14	1.05	1.15	1.20	1.70	1.09	1.36	1.16
MnO	0.04	0.11	0.05	0.04	0.04	0.08	0.09	0.12	0.03	0.05
P2O5	0.14	0.23	0.14	0.11	0.13	0.15	0.21	0.16	0.14	0.13
CO2	1.59	0.74	2.02	0.94	1.45	3.01	1.97	2.97	1.24	1.63
LOI	1.06	2.34	0.88	1.07	0.73	5.90	1.77	2.31	1.23	1.01
Total	99.80	99.89	99.95	99.65	99.56	105.55	99.53	100.10	99.85	100.08

TABLE 4.41

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XRF Analyses: Regional Greywackes (BEAD4)

Part 3

VAR. / ID.	AX117	AX118	AX119	AX124	AX131	AX132	AX133	AX134	AX135	AX136
SiO2	55.65	58.46	57.58	61.63	69.25	74.34	67.57	76.02	69.61	64.65
Al2O3	15.55	15.28	16.32	15.10	12.26	10.92	13.51	10.40	11.88	11.90
TiO2	0.89	0.86	0.82	0.78	0.91	0.81	0.82	0.99	0.95	0.86
Fe2O3	2.07	2.27	1.08	1.88	1.37	0.53	0.84	1.02	1.27	0.96
FeO	5.30	4.81	5.57	4.15	4.74	3.95	4.88	3.31	4.49	5.26
MgO	4.77	4.83	4.89	4.49	2.81	2.37	3.26	1.88	3.08	4.40
CaO	5.04	5.36	4.19	3.11	0.80	0.42	0.79	0.47	0.67	2.48
Na2O	2.92	3.39	5.16	3.14	2.63	2.71	2.55	0.69	2.34	2.13
K2O	1.86	1.74	1.47	2.27	1.94	1.15	2.08	1.23	1.50	2.00
MnO	0.12	0.11	0.10	0.06	0.09	0.05	0.09	0.04	0.07	0.08
P2O5	0.19	0.18	0.19	0.17	0.15	0.12	0.15	0.18	0.14	0.24
CO2	0.99	1.32	0.56	0.44	0.55	1.99	1.96	1.37	2.06	0.24
LOI	2.40	1.18	1.85	2.44	2.42	0.29	1.06	1.11	1.29	4.26
Total	97.75	99.79	99.78	99.66	99.92	99.65	99.56	98.71	99.35	99.46

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 4

VAR. / ID.	AX140	AX141	AX149	AX150	AX151	AX156	AX157	AX158	AX159	AX164
SiO2	71.97	66.86	67.56	58.98	62.04	62.58	60.43	64.59	57.74	75.21
Al2O3	12.38	13.52	13.36	12.97	13.80	13.03	14.91	13.43	14.39	9.47
TiO2	0.81	1.03	0.96	0.93	0.81	1.15	0.80	0.70	0.89	0.99
Fe2O3	0.38	2.09	1.08	2.29	2.70	3.43	2.03	1.79	2.42	0.82
FeO	4.50	4.58	4.85	5.30	4.27	4.39	4.07	3.82	5.05	3.70
MgO	2.08	3.35	2.54	6.77	4.65	4.27	4.97	4.44	5.33	2.23
CaO	0.70	0.81	1.29	3.37	1.10	1.58	3.39	3.03	5.30	1.14
Na2O	3.04	2.90	2.84	3.25	3.84	4.20	2.61	3.80	3.26	2.63
K2O	1.37	1.42	1.74	1.47	2.15	0.81	3.05	1.48	1.52	1.19
MnO	0.05	0.07	0.07	0.14	0.08	0.11	0.10	0.09	0.12	0.06
P2O5	0.13	0.14	0.21	0.20	0.22	0.21	0.18	0.12	0.20	0.16
CO2	0.67	0.42	1.14	0.88	0.28	1.99	0.12	0.28	0.36	0.69
LOI	1.54	2.84	1.77	2.95	3.49	1.49	3.20	2.48	3.09	1.55
Total	99.62	100.03	99.41	99.50	99.43	99.24	99.86	100.05	99.67	99.84

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 5

VAR. / ID.	AX170	AX171	AX172	AX177	AX180	AX181	AX182	AX190	AX191	AX194
SiO2	65.78	67.29	65.82	69.03	57.78	58.81	63.31	59.41	61.51	63.53
Al2O3	11.10	10.95	11.06	9.30	14.76	14.65	12.13	14.62	12.38	14.00
TiO2	0.91	0.79	0.86	0.77	0.88	0.83	0.71	0.87	0.92	0.80
Fe2O3	0.65	0.79	1.73	1.10	1.52	1.37	0.56	1.72	1.10	1.15
FeO	4.64	4.32	4.39	3.52	5.50	5.81	4.76	4.99	5.50	5.20
MgO	3.74	3.19	4.13	2.85	5.18	4.97	4.02	5.57	6.37	4.17
CaO	3.56	3.57	2.58	3.27	4.69	4.01	3.91	3.70	3.64	2.16
Na2O	2.10	1.97	2.24	2.84	4.10	3.35	3.21	3.70	2.75	3.10
K2O	1.56	1.62	1.59	0.69	1.23	1.43	1.65	1.88	1.27	2.63
MnO	0.07	0.17	0.07	0.05	0.12	0.11	0.10	0.10	0.11	0.09
P2O5	0.16	0.12	0.16	0.11	0.25	0.19	0.18	0.19	0.17	0.17
CO2	4.15	4.15	3.47	4.98	0.23	0.67	1.56	0.23	0.70	1.70
LOI	1.27	1.11	1.44	0.99	2.52	3.57	3.68	2.96	3.32	1.09
Total	99.69	100.04	99.54	99.50	98.76	99.77	99.78	99.94	99.74	99.79

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 6

VAR. / ID.	AX195	AX196	AX197	AX198	AX199	AX200	AX202	AX204	AX210	AX211
SiO2	59.54	64.79	67.06	65.20	63.34	58.83	65.80	73.86	58.88	64.10
Al2O3	13.61	12.68	12.53	12.25	12.50	14.03	11.85	11.72	15.15	13.54
TiO2	0.90	0.80	0.86	0.76	0.84	0.92	1.00	0.91	0.82	0.86
Fe2O3	2.70	1.89	1.89	2.00	2.33	1.27	2.11	0.80	0.95	1.18
FeO	5.08	4.16	3.97	3.94	4.23	5.28	4.05	4.02	4.97	4.57
MgO	5.01	4.50	4.05	4.31	4.12	5.52	3.55	1.98	5.26	4.64
CaO	4.67	2.76	1.80	3.85	4.36	3.89	2.59	0.51	4.29	2.04
Na2O	3.51	3.19	4.23	3.06	2.78	2.87	1.89	2.60	4.69	3.47
K2O	0.92	1.36	0.83	1.50	1.52	1.81	1.76	1.35	1.42	1.50
MnO	0.11	0.09	0.08	0.08	0.09	0.08	0.06	0.05	0.08	0.09
P2O5	0.19	0.16	0.16	0.19	0.17	0.21	0.18	0.15	0.20	0.13
CO2	0.58	1.85	0.53	1.82	1.63	1.65	3.20	0.55	0.39	0.77
LOI	2.51	1.85	1.94	1.17	1.69	3.17	1.37	1.58	2.03	2.36
Total	99.33	100.08	99.93	100.13	99.60	99.53	99.41	100.08	99.13	99.25

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 7

VAR. / ID.	AX213	AX214	AX215	AX216	AX217	AX221	AX222	AX223	AX224	AX226
SiO2	59.41	60.92	63.28	61.33	62.76	61.28	75.14	72.21	61.76	68.85
Al2O3	15.32	14.42	13.85	15.12	14.08	13.71	9.22	10.38	12.78	12.10
TiO2	0.76	1.13	1.29	1.00	0.98	0.88	0.70	0.75	1.14	0.79
Fe2O3	1.36	2.03	2.54	2.52	1.52	1.81	0.89	1.25	3.51	0.54
FeO	5.28	5.45	4.65	3.92	4.82	4.91	3.75	4.02	4.55	4.58
MgO	5.32	4.18	4.10	4.08	3.18	4.92	3.67	3.91	4.03	2.90
CaO	1.97	2.10	1.67	2.20	2.60	3.46	0.14	1.10	2.36	1.38
Na2O	3.58	4.68	3.90	4.12	5.24	3.28	1.64	1.55	3.95	3.62
K2O	2.20	1.25	1.46	1.98	1.05	1.54	1.45	1.24	1.51	1.11
MnO	0.11	0.12	0.07	0.09	0.10	0.10	0.04	0.04	0.11	0.05
P2O5	0.17	0.24	0.17	0.20	0.22	0.17	0.10	0.11	0.32	0.17
CO2	0.42	0.95	0.13	0.47	0.17	2.30	0.10	1.80	2.01	2.60
LOI	3.14	2.28	2.90	2.36	2.58	0.83	2.44	1.71	1.47	0.72
Total	99.04	99.75	100.01	99.39	99.30	99.19	99.28	100.07	99.50	99.41

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 8

VAR. / ID.	AX229	AX235	AX236	AX238	AX271	AX272	AX274	AX275	AX276	AX277
SiO2	73.56	69.77	68.56	67.93	74.73	74.86	62.42	63.76	69.04	60.67
Al2O3	9.83	10.37	10.12	11.92	9.25	10.29	12.32	12.62	9.89	14.70
TiO2	0.85	0.84	0.68	0.82	0.98	0.89	0.88	0.69	0.82	0.87
Fe2O3	0.63	1.15	0.28	1.27	1.60	2.35	2.16	1.47	1.20	1.69
FeO	3.42	4.07	3.98	4.38	3.24	2.77	4.32	3.37	3.62	4.47
MgO	1.87	3.61	3.33	4.03	2.75	2.64	4.74	4.27	3.89	4.67
CaO	1.42	1.95	2.93	1.48	1.22	0.33	4.37	3.73	2.98	2.71
Na2O	2.26	3.19	2.22	2.68	2.04	2.25	2.31	3.62	2.17	3.20
K2O	1.56	0.56	1.37	2.16	1.13	1.27	1.68	1.43	1.38	1.32
MnO	0.03	0.06	0.05	0.07	0.08	0.05	0.08	0.06	0.06	0.08
P2O5	0.14	0.10	0.10	0.16	0.12	0.14	0.18	0.13	0.13	0.18
CO2	1.38	3.09	3.16	0.79	0.53	0.15	0.95	3.19	3.26	0.99
LOI	2.82	1.29	2.70	2.03	1.97	2.12	3.62	1.41	0.98	4.42
Total	99.77	100.05	99.48	99.72	99.64	100.11	100.03	99.75	99.42	99.97

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 9

VAR. / ID.	AX278	AX279	AX280	AX281	AX282	AX283	AX285	AX286	AX287	AX288
SiO2	64.38	58.66	75.04	75.79	73.78	75.23	73.50	63.51	76.33	70.41
Al2O3	14.06	15.35	10.44	9.72	9.70	9.55	10.79	13.20	8.39	12.47
TiO2	0.73	0.87	0.74	0.71	0.86	0.92	0.82	0.79	0.85	0.88
Fe2O3	1.73	1.86	1.63	1.39	1.69	1.58	1.82	1.96	0.95	0.73
FeO	3.56	4.19	2.61	2.45	2.87	3.33	2.88	3.56	2.81	4.32
MgO	4.04	5.17	2.45	2.07	2.38	2.85	2.69	4.77	2.08	2.57
CaO	2.94	4.08	0.68	1.14	1.81	0.74	0.86	2.92	2.04	0.63
Na2O	4.28	4.08	1.91	1.59	1.67	1.50	1.87	3.01	2.31	2.98
K2O	1.35	1.54	1.82	1.87	1.84	1.65	1.79	1.97	1.08	1.32
MnO	0.08	0.13	0.05	0.04	0.05	0.06	0.05	0.08	0.06	0.06
P2O5	0.12	0.20	0.12	0.11	0.12	0.12	0.13	0.18	0.11	0.14
CO2	0.36	0.50	0.07	0.65	1.66	2.92	0.40	0.43	2.61	0.68
LOI	2.50	2.79	2.53	2.14	1.28	-0.47	2.67	3.51	0.59	2.51
Total	100.13	99.42	100.09	99.67	99.71	99.98	100.27	99.89	100.21	99.70

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 10

VAR. / ID.	AX289	AX290	AX292	AX293	AX294	AX296	AX298	AX604	AX657	AX659
SiO2	57.75	57.69	63.60	62.25	66.66	68.28	76.99	72.29	66.42	64.68
Al2O3	14.10	13.95	13.87	14.07	11.79	13.38	9.16	9.62	11.49	12.57
TiO2	1.19	1.40	1.09	1.11	1.04	1.00	0.56	0.60	0.78	0.82
Fe2O3	1.94	1.72	1.05	1.09	1.24	1.01	0.16	0.99	1.36	1.19
FeO	5.68	6.49	5.51	5.68	4.61	5.01	3.13	2.84	4.16	4.89
MgO	6.18	6.48	3.60	3.56	2.92	2.73	1.79	2.47	3.66	4.23
CaO	3.02	3.24	1.88	2.06	2.61	0.37	1.98	3.40	3.55	3.28
Na2O	4.01	3.77	4.26	4.09	4.01	2.96	2.66	2.22	3.28	3.20
K2O	1.19	1.14	1.44	1.51	0.90	1.73	0.96	2.10	1.12	1.70
MnO	0.10	0.13	0.09	0.10	0.08	0.08	0.06	0.06	0.13	0.10
P2O5	0.15	0.17	0.22	0.33	0.16	0.15	0.09	0.15	0.15	0.16
CO2	0.31	0.62	1.11	1.26	3.25	0.85	1.84	2.48	1.10	0.78
LOI	3.48	2.32	1.51	2.50	0.69	1.63	0.86	0.79	2.52	1.76
Total	99.10	99.12	99.23	99.61	99.96	99.18	100.24	100.01	99.72	99.36

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 11

VAR. / ID.	AX781	AX782	AX783	AX784	AX785	AX789	AX790	AX791	AX796	AX797
SiO2	63.39	61.52	61.08	66.14	62.12	66.34	61.96	64.08	60.64	66.06
Al2O3	13.17	13.03	12.97	11.62	14.47	12.79	12.92	12.52	14.35	12.63
TiO2	0.79	0.92	0.91	0.84	0.74	0.78	0.97	0.78	0.89	0.81
Fe2O3	2.23	4.97	2.04	1.58	0.92	1.61	1.63	1.59	1.58	1.73
FeO	3.88	2.47	5.89	4.14	4.79	4.04	5.91	4.33	5.11	3.99
MgO	3.98	4.09	4.72	4.11	3.74	4.47	5.06	4.11	4.98	4.30
CaO	4.76	4.95	1.99	3.73	2.82	2.39	2.89	4.00	4.03	2.86
Na2O	3.07	2.30	2.52	2.96	3.23	3.04	2.97	2.70	3.35	3.96
K2O	1.69	2.09	1.93	1.51	2.41	1.96	1.27	1.62	1.74	0.92
MnO	0.09	0.14	0.08	0.09	0.09	0.08	0.09	0.09	0.10	0.10
P2O5	0.17	0.20	0.19	0.17	0.18	0.16	0.21	0.17	0.23	0.17
CO2	0.71	0.25	1.38	0.71	2.18	1.05	1.53	1.33	1.65	1.63
LOI	1.72	2.49	2.65	2.04	2.58	1.37	1.47	2.46	0.96	0.92
Total	99.65	99.42	98.35	99.64	100.27	100.08	98.88	99.78	99.61	100.08

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 12

VAR. / ID.	AX834	AX840	AX841	AX842	AX847	AX849	AX851	A 19	A 20	A 21
SiO ₂	67.48	71.44	68.87	70.96	72.88	66.84	67.63	60.79	56.36	56.14
Al ₂ O ₃	11.94	10.95	11.25	10.52	10.13	12.20	11.66	13.89	15.41	15.97
TiO ₂	0.78	0.78	0.90	0.69	0.64	0.75	0.67	1.16	1.26	1.22
Fe ₂ O ₃	1.39	1.33	1.64	0.63	0.87	2.17	0.94	2.31	2.56	2.64
FeO	3.67	3.31	3.70	3.25	3.11	2.95	3.31	5.79	7.06	6.93
MgO	3.62	3.45	3.86	3.22	2.86	4.52	3.26	3.74	5.09	4.61
CaO	2.90	1.14	1.68	2.34	2.06	1.65	2.94	3.43	2.52	2.38
Na ₂ O	3.01	2.37	2.34	2.34	2.17	3.05	2.80	3.13	2.88	3.07
K ₂ O	2.29	2.19	2.18	2.07	2.13	2.42	2.48	1.37	1.39	1.79
MnO	0.08	0.07	0.05	0.05	0.06	0.06	0.10	0.11	0.12	0.11
P ₂ O ₅	0.19	0.14	0.16	0.14	0.14	0.18	0.19	0.12	0.14	0.14
CO ₂	1.01	0.70	1.71	2.63	1.39	0.54	2.64	0.39	0.42	0.30
LOI	1.33	2.11	1.45	0.92	1.32	2.41	1.19	2.30	3.50	3.63
Total	99.69	99.98	99.79	99.76	99.76	99.74	99.81	98.53	98.71	98.93

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 13

VAR. / ID.	A 45	S 54	S 56	S 57	S 58	S 64	S 77	S 102	S 103	S 105
SiO ₂	63.65	70.48	62.22	66.64	77.02	78.00	63.51	67.50	77.20	64.22
Al ₂ O ₃	12.50	10.45	11.16	11.21	10.10	9.28	14.19	15.90	9.26	13.84
TiO ₂	1.20	0.83	0.68	0.73	0.81	0.87	0.76	0.89	0.85	0.65
Fe ₂ O ₃	2.61	1.24	1.00	0.98	0.77	0.66	1.51	2.20	0.69	-0.32
FeO	5.21	3.96	4.00	4.33	3.12	2.97	4.03	4.89	3.34	5.19
MgO	3.54	3.01	3.12	3.40	1.36	1.46	4.50	6.32	1.45	3.29
CaO	4.03	2.20	5.97	3.69	0.65	1.46	2.60	4.03	1.19	2.86
Na ₂ O	3.35	2.74	2.75	1.30	2.61	1.43	3.51	3.40	1.84	3.99
K ₂ O	1.03	1.51	1.74	1.97	1.28	1.37	2.13	2.02	1.34	1.43
MnO	0.11	0.08	0.18	0.07	0.05	0.05	0.08	0.11	0.07	0.07
P ₂ O ₅	0.12	0.15	0.21	0.14	0.22	0.15	0.16	0.23	0.12	0.14
CO ₂	0.12	0.76	0.82	2.97	0.75	1.13	0.49	0.34	0.89	1.25
LOI	2.14	2.10	5.95	2.50	1.24	1.08	2.27	2.98	1.33	2.77
Total	99.61	99.51	99.80	99.93	99.98	99.91	99.74	110.81	99.57	99.38

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 14

VAR. / ID.	S 110	S 111	S 116	E 117	S 118	S 119	E 136	E 138	E 139	E 140
SiO ₂	63.54	63.81	76.28	60.74	62.50	63.44	62.13	63.05	60.54	63.65
Al ₂ O ₃	12.78	14.69	9.52	15.26	13.98	13.31	13.57	15.28	13.87	14.23
TiO ₂	0.86	0.63	0.98	0.76	0.69	0.71	0.81	0.70	0.88	0.75
Fe ₂ O ₃	1.71	1.07	0.26	1.85	1.33	1.40	2.39	2.94	1.71	1.78
FeO	4.80	4.26	3.87	4.49	4.09	4.44	4.13	2.97	5.44	4.89
MgO	4.82	3.59	1.30	4.43	3.63	4.36	4.74	3.31	4.83	4.39
CaO	3.34	1.94	0.49	3.01	3.54	3.44	2.94	2.68	3.39	1.14
Na ₂ O	3.29	4.26	2.37	3.32	4.44	3.77	2.97	3.21	3.61	4.26
K ₂ O	1.18	1.53	1.20	2.06	0.97	1.22	1.72	2.72	1.20	0.70
MnO	0.09	0.09	0.04	0.09	0.09	0.09	0.12	0.09	0.09	0.08
P ₂ O ₅	0.18	0.12	0.11	0.16	0.14	0.16	0.14	0.14	0.19	0.17
CO ₂	5.08	0.65	0.44	0.21	2.30	0.35	1.76	0.17	1.18	1.13
LOI	2.28	2.41	2.54	3.04	1.49	2.52	2.22	2.02	1.88	2.46
Total	103.95	99.05	99.40	99.42	99.19	99.21	99.64	99.28	98.81	99.63

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 15

VAR. / ID.	S 121	S 122	S 124	S 126	S 127	S 128	A 222	A 232	A 233	A 234
SiO2	63.63	60.70	68.26	73.75	62.33	62.99	69.58	57.97	56.97	54.86
Al2O3	12.75	14.31	12.30	11.15	14.66	13.98	11.84	14.24	15.04	14.99
TiO2	0.87	0.90	0.57	0.78	0.83	0.68	0.95	1.35	1.47	1.71
Fe2O3	1.47	3.16	1.19	0.98	1.71	0.71	0.74	2.45	1.69	2.35
FeO	4.93	3.82	3.96	3.18	4.96	4.93	5.43	6.17	6.73	7.26
MgO	5.02	5.28	3.97	1.86	4.77	4.93	2.76	6.42	5.53	6.56
CaO	3.32	3.14	1.58	1.33	3.98	2.07	1.42	1.64	2.48	1.90
Na2O	3.33	3.19	3.21	3.19	3.50	3.29	2.35	3.67	3.81	3.89
K2O	1.18	1.73	1.90	1.39	1.62	1.84	1.46	1.33	1.61	1.26
MnO	0.10	0.07	0.09	0.03	0.10	0.08	0.07	0.12	0.10	0.12
P2O5	0.17	0.19	0.11	0.14	0.17	0.13	0.17	0.18	0.20	0.20
CO2	0.42	0.33	0.29	0.77	0.36	0.49	1.26	0.49	0.35	0.40
LOI	2.32	2.02	2.24	1.19	0.26	2.37	1.76	3.43	3.60	3.80
Total	99.51	98.84	99.67	99.74	99.25	98.49	99.79	99.44	99.58	99.30

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 16

VAR. / ID.	A 237	N 241	N 292	N 294	A 297	A 299	S 345	S 348	S 350	W 379
SiO2	51.78	57.54	53.32	54.52	58.90	65.35	67.90	69.46	56.34	57.67
Al2O3	14.22	11.96	14.43	14.47	11.54	13.41	11.20	8.67	14.23	12.45
TiO2	1.39	0.95	1.47	1.55	0.87	0.98	0.75	0.67	1.31	1.23
Fe2O3	1.57	1.27	3.45	3.93	0.53	2.28	0.97	0.55	6.40	1.77
FeO	7.75	6.58	5.98	5.54	3.86	3.99	4.66	2.14	2.51	6.68
MgO	8.38	4.39	6.86	7.14	2.74	3.24	3.60	2.41	5.39	7.30
CaO	3.65	5.60	2.81	3.04	8.73	1.32	2.47	4.25	1.23	4.52
Na2O	3.16	2.60	2.99	3.46	2.76	3.92	2.86	1.13	3.54	2.96
K2O	0.95	1.75	1.62	0.93	1.95	1.52	1.84	2.06	1.67	1.10
MnO	0.14	0.14	0.11	0.12	0.14	0.09	0.09	0.06	0.13	0.14
P2O5	0.17	0.37	0.20	0.17	0.19	0.19	0.16	0.14	0.17	0.16
CO2	2.24	2.70	1.71	0.10	0.95	1.08	0.93	5.22	3.54	0.45
LOI	4.17	3.54	3.92	3.82	3.49	2.20	2.19	3.17	3.54	2.70
Total	99.57	99.39	98.87	98.79	96.65	99.57	99.62	99.93	100.00	99.13

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 17

VAR. / ID.	W 380	N 400	N 401	N 413	N 426	E 452	N 453	N 454	N 456	N 460
SiO2	58.14	68.96	75.59	52.73	62.17	72.03	66.28	65.52	79.66	60.28
Al2O3	12.93	10.58	9.81	9.88	13.68	10.27	12.22	11.71	7.66	12.80
TiO2	1.15	0.83	0.79	1.07	1.17	0.82	0.67	0.74	0.58	1.16
Fe2O3	3.49	1.63	0.91	1.73	3.27	1.51	1.04	0.85	0.72	1.36
FeO	4.74	4.25	3.21	5.96	4.47	3.42	3.95	4.75	2.27	6.10
MgO	7.23	4.02	2.08	7.27	3.99	2.10	5.07	4.20	1.71	4.33
CaO	3.04	1.84	1.02	10.88	2.85	1.72	1.61	2.56	1.75	3.38
Na2O	3.22	2.74	2.15	1.96	3.98	2.52	3.83	3.46	1.99	3.55
K2O	1.38	1.50	1.66	0.47	1.09	1.37	1.13	0.76	0.85	0.83
MnO	0.12	0.09	0.04	0.12	0.11	0.07	0.06	0.14	0.05	0.13
P2O5	0.18	0.14	0.14	0.14	0.28	0.15	0.13	0.16	0.09	0.26
CO2	0.15	1.50	0.32	0.42	0.67	2.20	1.30	2.59	2.15	4.22
LOI	3.36	1.43	2.14	6.92	2.31	1.24	2.12	2.41	0.58	1.12
Total	99.13	99.51	99.86	99.55	100.04	99.42	99.41	99.85	100.06	99.52

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 18

VAR. / ID.	K 462	A 463	S 466	C 471	C 472	N 485	N 486	A 487	S 492	S 494
SiO ₂	62.22	66.01	69.69	67.41	63.27	54.51	87.62	63.98	80.40	76.33
Al ₂ O ₃	11.63	9.15	10.77	13.99	14.31	15.64	4.95	13.56	7.92	9.31
TiO ₂	0.82	0.55	0.78	0.62	1.06	1.25	0.21	0.95	0.62	0.75
Fe ₂ O ₃	0.78	1.26	0.34	0.95	2.02	2.72	0.41	1.08	0.72	0.24
FeO	5.38	2.83	4.61	3.76	4.64	7.33	1.89	5.79	2.30	3.27
MgO	3.95	2.69	3.42	3.02	3.16	6.49	1.18	3.17	1.57	1.50
CaO	4.96	6.27	2.28	0.69	1.14	0.66	0.16	2.57	1.28	1.87
Na ₂ O	1.82	0.85	2.48	4.53	5.39	2.95	0.30	2.22	2.08	2.53
K ₂ O	2.10	1.97	1.48	1.87	0.74	1.70	1.01	2.53	0.79	1.03
MnO	0.09	0.09	0.06	0.05	0.34	0.10	0.05	0.11	0.05	0.07
P ₂ O ₅	0.23	0.11	0.13	0.15	0.23	0.18	0.03	0.29	0.12	0.13
CO ₂	1.92	0.08	1.54	1.92	2.62	0.47	0.34	1.19	1.04	1.47
LOI	3.74	8.56	2.35	0.92	1.06	4.57	1.99	2.39	1.16	1.32
Total	99.64	100.43	99.93	99.88	99.98	98.57	100.14	99.83	100.05	99.82

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 19

VAR. / ID.	AK 4	AK 13	AK 17	AK 20	AK 25	AK 30	AK 33	AK 52	AK 58	AK 63
SiO2	75.81	76.80	78.47	74.52	75.84	75.50	76.06	75.85	76.38	70.40
Al2O3	8.77	9.13	8.88	9.62	9.35	10.01	9.94	9.08	9.66	9.99
TiO2	0.94	0.80	0.65	0.86	0.89	0.82	0.87	0.81	0.80	1.22
Fe2O3	2.74	1.45	1.01	1.02	1.80	1.02	1.11	1.52	1.76	1.40
FeO	2.47	3.36	2.56	3.39	3.14	3.52	3.64	3.34	2.69	4.18
MgO	2.78	2.43	1.95	2.45	2.42	2.77	2.33	2.29	2.21	2.59
CaO	1.33	0.56	0.65	1.57	0.94	0.42	0.63	0.95	0.82	2.67
Na2O	1.75	1.76	1.82	1.69	1.54	1.41	1.84	1.57	1.71	1.50
K2O	1.08	1.04	1.57	1.56	1.59	1.82	1.60	1.53	1.62	1.31
MnO	0.09	0.05	0.06	0.07	0.08	0.04	0.05	0.08	0.05	0.11
P2O5	0.12	0.12	0.12	0.12	0.14	0.13	0.17	0.13	0.12	0.15
CO2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LOI	4.67	2.30	2.26	2.77	2.12	2.45	1.88	2.42	2.14	4.06
Total	100.22	99.81	99.99	99.64	99.85	99.91	100.12	99.57	99.96	99.58

TABLE 4.41

XRF Analyses: Regional Greywackes (BEAD4)

Part 20

VAR. / ID.	AK137	AK 502	AK 674
SiO2	65.14	71.54	64.25
Al2O3	11.28	10.99	15.73
TiO2	0.78	0.80	0.73
Fe2O3	1.71	1.32	1.09
FeO	3.52	3.43	4.42
MgO	3.76	3.31	2.31
CaO	3.26	1.31	1.67
Na2O	2.52	2.56	3.78
K2O	1.59	1.94	2.72
MnO	0.08	0.06	0.11
P2O5	0.13	0.17	0.21
CO2	0.00	0.00	0.00
LOI	5.63	2.75	2.21
Total	99.38	100.18	99.23

TABLE 4.41

VAR. / ID.	AX-1	AX-2	AX-4	AX-5	AX-36	AX-37	AX-38	AX-40	AX-43	AX-44
East	33020	32773	33065	32935	35792	35865	35873	30643	30549	30514
North	64609	64746	64420	64578	66685	66837	66813	60192	60302	60330
SiO2	61.48	61.44	61.68	60.55	64.68	74.28	73.19	68.31	63.75	62.74
Al2O3	12.51	12.86	13.27	13.04	11.79	11.86	10.49	13.50	16.96	13.75
TiO2	0.99	0.93	0.90	1.03	0.92	0.95	1.29	0.81	0.79	0.95
Fe2O3	6.40	7.56	6.03	8.43	6.22	4.05	4.14	5.20	6.29	6.25
MgO	4.53	7.04	4.69	5.41	5.47	2.30	3.25	3.73	3.97	5.67
CaO	5.57	4.73	2.04	3.55	2.22	1.41	2.44	1.62	1.68	1.06
Na2O	3.25	2.12	2.22	3.19	2.22	2.30	2.22	2.40	2.18	2.29
K2O	0.75	0.72	2.18	0.98	1.90	1.29	1.02	2.35	3.56	2.45
MnO	0.13	0.11	0.07	0.12	0.08	0.08	0.12	0.08	0.12	0.08
P2O5	0.26	0.21	0.17	0.21	0.16	0.17	0.30	0.22	0.17	0.22
Total	95.87	97.72	93.25	96.51	95.66	98.69	98.46	98.22	99.47	95.46
As	0	0	0	0	4	0	0	2	0	1
Ba	246	318	570	436	472	285	395	634	816	623
Co	28	37	29	36	39	48	38	42	30	28
Cr	232	350	143	252	290	66	77	182	103	240
Cu	22	28	18	30	23	12	14	12	20	15
Ga	13	16	14	15	13	10	9	14	17	15
La	33	23	29	32	25	33	28	27	45	27
Ni	59	106	70	65	72	25	28	61	50	86
Nb	15	10	14	10	12	17	20	17	13	14
Pb	14	15	15	18	25	12	12	14	18	16
Rb	24	20	66	28	48	36	27	64	108	68
Sr	311	301	221	496	141	50	70	161	375	243
Sb	0	0	0	0	0	0	0	0	2	0
S	721	294	478	478	575	360	705	0	0	0
Th	6	4	7	7	6	6	9	12	9	7
V	130	150	96	186	119	68	80	77	99	107
Y	26	20	25	21	21	20	28	28	27	24
Zn	59	65	57	72	52	37	36	48	85	58
Zr	359	163	227	231	282	297	709	362	229	293

TABLE 4.42

VAR. / ID.	AX-46	AX-47	AX-48	AX-51	AX-54	AX-62	AX-63	AX-67	AX-68	AX-73
East	30400	30395	30395	29889	29102	29274	29101	29460	29456	29350
North	60404	60410	60424	60980	62609	62080	62545	61782	61793	61953
SiO2	69.02	67.14	68.36	66.13	60.02	62.22	65.58	63.16	63.10	62.40
Al2O3	13.33	14.51	12.21	12.10	14.02	12.50	16.02	14.90	14.26	13.47
TiO2	0.76	0.71	1.17	0.83	1.42	0.84	1.30	0.74	0.70	0.80
Fe2O3	4.88	4.87	5.60	5.88	8.66	5.74	7.54	6.83	6.44	7.38
MgO	4.88	4.64	4.77	4.72	4.49	3.22	3.83	5.43	4.76	4.55
CaO	1.23	2.24	1.85	2.02	4.87	7.19	0.65	2.53	3.02	4.73
Na2O	2.60	2.63	2.04	1.90	3.76	1.91	2.58	3.43	4.16	3.77
K2O	2.32	2.57	1.82	2.30	0.65	1.47	1.76	1.86	1.26	1.00
MnO	0.06	0.08	0.06	0.08	0.14	0.13	0.10	0.11	0.12	0.14
P2O5	0.19	0.19	0.21	0.19	0.40	0.16	0.20	0.17	0.14	0.19
Total	99.27	99.58	98.09	96.15	98.43	95.38	99.56	99.16	97.96	98.43
As	0	2	0	0	0	0	0	0	0	0
Ba	494	714	470	563	530	278	438	602	597	378
Co	45	37	45	29	36	33	35	43	33	47
Cr	171	211	489	199	169	134	140	236	182	209
Cu	11	11	10	8	27	18	25	31	25	30
Ga	14	13	10	13	19	14	17	15	15	16
La	27	35	41	39	44	29	40	22	11	20
Ni	82	70	88	74	50	62	74	80	60	54
Nb	14	13	17	14	21	16	20	9	9	10
Pb	16	13	13	13	19	12	12	19	16	19
Rb	68	75	49	63	19	47	55	48	32	27
Sr	196	320	118	167	857	106	93	333	349	345
Sb	0	0	0	0	0	0	0	0	1	0
S	0	0	0	0	52	110	478	923	916	3436
Th	8	8	10	7	13	2	11	1	4	8
V	78	76	116	97	184	98	120	127	126	149
Y	24	25	30	26	31	24	33	22	21	20
Zn	49	52	47	50	100	49	58	59	58	70
Zr	325	251	583	285	194	210	281	151	129	134

TABLE 4.42

VAR. / ID.	AX-75	AX-79	AX-80	AX-83	AX-87	AX-94	AX-95	AX-96	AX-97	AX-99
East	29385	30342	30328	30248	29977	31418	32354	31755	31855	31957
North	61893	60549	60569	60616	60867	62008	62320	61810	61930	62164
SiO2	57.56	67.73	64.67	64.87	68.42	67.17	69.31	69.46	59.10	66.77
Al2O3	15.84	14.29	15.47	14.23	12.95	13.38	12.49	12.27	13.89	13.91
TiO2	0.78	0.73	0.99	0.78	0.83	0.84	1.05	0.70	1.04	1.03
Fe2O3	7.40	4.49	5.41	5.35	5.43	6.10	6.32	4.99	7.80	6.00
MgO	5.58	3.60	4.08	4.32	3.86	4.59	3.46	4.48	5.30	4.45
CaO	3.00	2.38	0.83	2.02	2.17	2.30	2.19	2.28	1.87	1.12
Na2O	3.59	3.46	3.82	2.66	1.98	2.11	1.47	2.61	3.10	3.29
K2O	1.93	2.24	3.57	2.64	2.41	2.61	1.54	2.10	1.75	2.19
MnO	0.13	0.09	0.09	0.09	0.07	0.08	0.07	0.08	0.15	0.09
P2O5	0.21	0.26	0.24	0.21	0.17	0.22	0.16	0.17	0.23	0.21
Total	96.02	99.27	99.17	97.17	98.29	99.40	98.06	99.34	94.23	99.06
As	4	0	0	0	2	0	0	13	0	0
Ba	573	692	1094	751	487	668	303	728	764	930
Co	29	34	35	32	42	30	38	38	33	33
Cr	119	122	96	135	211	270	277	246	157	236
Cu	29	10	17	13	11	21	10	15	18	17
Ga	18	14	15	16	12	12	12	13	17	15
La	21	61	54	38	40	32	60	29	39	44
Ni	49	66	47	68	75	67	45	94	55	74
Nb	9	14	15	14	15	14	16	13	15	16
Pb	18	14	16	16	15	19	14	29	19	25
Rb	54	58	95	76	68	73	49	56	48	54
Sr	419	272	359	309	98	197	79	216	469	209
Sb	0	0	0	0	0	0	0	0	0	0
S	1097	0	0	0	0	1426	240	297	429	164
Th	7	9	10	11	14	9	13	5	7	8
V	136	69	95	82	86	108	110	83	133	99
Y	20	30	34	26	27	25	37	22	29	31
Zn	71	51	61	52	47	55	47	58	75	71
Zr	128	251	298	254	320	296	607	311	301	376

VAR. / ID.	AX-100	AX-101	AX-102	AX-103	AX-104	AX-105	AX-106	AX-107	AX-108	AX-109
East	32178	32168	32141	32133	23881	24864	24911	24895	24895	25013
North	62330	62359	62381	62403	57331	57373	57515	57565	57565	57684
SiO2	70.10	59.42	68.87	65.48	73.55	71.65	75.32	73.05	76.79	74.45
Al2O3	14.84	14.46	12.84	14.55	12.27	12.55	10.19	11.17	10.21	11.25
TiO2	0.99	1.10	0.72	0.87	0.96	0.81	0.72	0.89	0.71	0.88
Fe2O3	6.21	7.77	4.68	5.65	5.01	4.77	4.68	5.02	4.54	4.93
MgO	2.28	6.36	4.14	4.33	2.90	2.37	2.09	2.33	2.54	2.40
CaO	0.42	1.87	2.87	1.71	0.79	2.32	1.53	2.66	1.57	1.40
Na2O	2.41	2.31	2.18	3.82	2.21	2.12	1.75	1.82	1.86	1.93
K2O	1.55	2.61	2.22	1.95	1.27	1.67	1.21	1.40	1.22	1.43
MnO	0.07	0.12	0.08	0.09	0.08	0.09	0.07	0.10	0.07	0.06
P2O5	0.19	0.23	0.17	0.23	0.23	0.19	0.14	0.20	0.17	0.17
Total	99.06	96.25	98.77	98.68	99.27	98.54	97.70	98.64	99.68	98.90
As	0	0	0	0	0	0	0	0	2	0
Ba	370	871	555	643	309	339	316	264	241	360
Co	41	36	40	38	47	42	42	45	56	48
Cr	107	205	200	177	72	74	69	142	111	130
Cu	21	11	13	10	18	18	13	16	14	13
Ga	13	17	13	14	11	11	10	10	10	11
La	32	36	29	31	32	30	30	29	25	31
Ni	33	61	87	67	26	26	24	41	34	40
Nb	17	14	14	13	18	17	12	17	14	17
Pb	17	15	18	13	14	16	13	16	14	16
Rb	46	69	60	54	38	49	32	41	36	41
Sr	74	239	131	288	54	98	75	73	65	69
Sb	0	0	0	0	0	0	0	0	0	0
S	177	0	383	24	116	327	327	476	459	333
Th	6	4	3	10	7	7	5	6	8	3
V	101	138	78	93	79	77	70	77	70	76
Y	23	29	24	25	26	24	20	25	20	20
Zn	63	89	46	30	45	49	32	44	32	36
Zr	292	346	288	295	328	267	202	354	257	304

VAR. / ID.	AX-110	AX-111	AX-112	AX-113	AX-114	AX-115	AX-116	AX-117	AX-118	AX-119
East	25001	23612	23792	23809	23920	23811	23920	23867	23872	23970
North	57656	57482	57509	57430	57569	57591	57664	57694	57730	57835
SiO2	64.51	60.80	57.92	57.29	72.15	73.35	72.01	56.68	60.40	57.07
Al2O3	13.37	14.79	15.34	14.30	13.96	12.45	12.37	14.94	15.44	15.18
TiO2	0.82	0.76	0.88	0.94	0.85	0.84	1.00	0.90	0.85	0.85
Fe2O3	6.71	6.98	8.18	8.20	5.46	4.98	5.48	8.06	7.51	7.61
MgO	5.76	6.38	6.27	5.92	2.24	2.12	2.42	5.62	5.35	6.14
CaO	3.13	3.56	5.52	6.11	0.76	0.82	1.40	4.99	4.97	4.26
Na2O	2.60	3.44	3.22	3.32	1.98	1.85	2.03	2.71	3.34	3.87
K2O	1.25	1.74	1.15	0.73	1.70	1.72	1.46	1.80	1.69	1.45
MnO	0.10	0.13	0.14	0.15	0.05	0.06	0.08	0.13	0.13	0.14
P2O5	0.17	0.25	0.21	0.23	0.19	0.16	0.18	0.21	0.20	0.21
Total	98.42	98.83	98.83	97.19	99.34	98.35	98.43	96.04	99.88	96.78
As	0	4	0	0	6	2	0	4	0	4
Ba	319	426	342	282	404	404	358	477	446	399
Co	31	33	34	37	46	51	48	32	36	37
Cr	285	288	238	227	80	77	93	181	205	167
Cu	24	26	31	37	16	13	14	48	42	35
Ga	14	16	16	18	12	11	13	17	16	18
La	20	23	14	17	32	31	35	19	18	19
Ni	103	69	66	62	27	24	27	61	76	59
Nb	10	10	7	11	16	15	17	10	9	7
Pb	19	16	15	15	14	13	15	13	17	17
Rb	37	46	33	21	46	45	39	45	46	43
Sr	231	346	342	311	75	65	70	370	428	420
Sb	0	0	0	0	0	0	0	0	0	0
S	340	1441	1042	1213	1117	603	687	1909	959	528
Th	5	4	2	1	5	2	4	0	2	5
V	125	141	177	184	80	75	86	184	166	169
Y	20	21	18	19	21	21	22	19	20	17
Zn	56	70	70	67	48	38	48	70	70	67
Zr	196	136	127	134	265	253	342	134	131	121

VAR. / ID.	AX-121	AX-122	AX-123	AX-124	AX-125	AX-126	AX-127	AX-128	AX-129	AX-130
East	23638	23661	23676	23708	23799	23809	26070	25027	23846	23658
North	57469	57420	57297	57262	57129	57101	58390	57732	57031	57381
SiO2	70.28	53.63	57.45	61.92	63.46	58.48	62.93	63.14	61.01	57.06
Al2O3	15.06	14.73	15.42	14.72	14.50	17.09	13.86	13.81	15.03	13.23
TiO2	0.91	0.98	0.93	0.79	0.87	1.04	0.75	0.93	1.06	0.97
Fe2O3	4.71	8.47	8.21	6.83	6.92	8.39	5.89	6.97	8.19	8.04
MgO	1.80	6.42	6.61	5.45	5.43	6.81	5.13	5.11	6.57	6.20
CaO	1.30	5.69	3.49	2.92	1.11	0.30	2.90	2.40	1.08	3.21
Na2O	2.52	2.20	2.44	3.09	3.95	2.71	2.58	2.61	4.33	3.64
K2O	1.90	1.89	2.08	2.13	1.19	2.82	2.13	1.58	1.40	0.78
MnO	0.06	0.13	0.13	0.09	0.09	0.09	0.07	0.10	0.12	0.13
P2O5	0.22	0.24	0.18	0.17	0.15	0.17	0.16	0.16	0.22	0.22
Total	98.76	94.38	96.94	98.11	97.67	97.90	96.40	96.81	99.01	93.48
As	15	2	0	0	5	5	0	58	5	0
Ba	393	356	726	607	405	730	449	291	951	377
Co	42	35	33	35	34	29	39	30	35	32
Cr	70	225	185	181	240	279	196	295	260	290
Cu	14	40	36	42	24	38	22	29	27	32
Ga	11	18	17	17	16	19	14	14	17	15
La	34	13	20	29	21	27	26	28	30	22
Ni	22	72	59	77	67	198	99	81	130	77
Nb	17	10	7	9	9	15	9	11	14	10
Pb	9	16	18	28	15	41	21	17	18	17
Rb	48	51	56	53	30	77	53	45	27	19
Sr	81	235	324	417	258	76	183	224	442	338
Sb	0	0	1	0	0	0	0	2	0	0
S	1364	568	1457	2024	2225	23	94	1075	0	1200
Th	6	7	5	8	4	12	4	8	3	6
V	78	190	160	142	133	136	104	143	149	163
Y	22	18	18	20	19	22	19	18	22	20
Zn	41	74	67	66	57	107	44	57	74	70
Zr	288	137	121	145	149	187	156	170	206	148

TABLE 4.42

VAR. / ID.	AX-131	AX-132	AX-133	AX-134	AX-135	AX-136	AX-137	AX-138	AX-140	AX-141
East	23525	23532	23653	23490	23390	23285	23540	23160	24920	24868
North	59069	58945	58150	58460	58350	58090	58178	58300	59705	59822
SiO2	67.26	63.56	70.48	71.40	66.51	61.21	62.21	62.42	67.93	64.42
Al2O3	14.47	15.88	13.43	13.61	14.75	13.77	13.28	14.01	15.59	15.34
TiO2	0.97	0.95	0.92	1.07	1.11	0.98	0.89	0.99	0.91	1.28
Fe2O3	7.38	7.09	5.64	5.43	7.14	7.55	6.28	7.67	6.31	8.15
MgO	3.71	3.89	3.21	2.57	3.90	6.14	4.64	4.18	2.91	3.90
CaO	0.96	0.95	0.55	0.56	0.79	2.97	3.85	1.88	0.85	0.99
Na2O	2.57	2.09	2.72	2.56	2.12	1.90	1.81	2.95	2.98	2.44
K2O	2.11	2.45	1.36	1.48	1.80	2.15	1.89	2.20	1.69	1.73
MnO	0.13	0.11	0.06	0.05	0.09	0.10	0.08	0.10	0.07	0.10
P2O5	0.19	0.17	0.16	0.22	0.17	0.28	0.16	0.25	0.17	0.17
Total	99.75	97.14	98.53	98.95	98.38	97.05	95.09	96.65	99.41	98.52
As	14	3	19	2	0	0	0	1	5	0
Ba	768	566	381	381	400	632	406	1011	420	442
Co	47	27	39	43	34	27	32	31	35	45
Cr	195	115	121	146	140	167	145	158	110	170
Cu	19	25	18	17	21	30	20	27	19	25
Ga	15	17	12	12	14	16	14	17	15	17
La	41	35	29	34	37	44	38	53	37	40
Ni	64	60	47	55	63	82	67	63	47	63
Nb	14	18	16	19	18	15	16	18	16	20
Pb	23	18	13	13	13	17	16	20	19	18
Rb	47	71	39	44	52	60	53	51	50	54
Sr	186	85	156	68	84	419	145	621	153	157
Sb	0	0	0	0	0	0	0	0	0	0
S	296	204	1166	1183	514	663	624	162	854	949
Th	8	7	10	9	8	8	6	7	6	1
V	133	101	84	92	111	146	99	142	97	127
Y	25	24	23	27	26	28	25	30	25	29
Zn	86	69	66	57	65	72	58	85	66	84
Zr	244	222*	238	330	241	239	250	254	223	250

VAR. / ID.	AX-143	AX-149	AX-150	AX-151	AX-155	AX-156	AX-157	AX-158	AX-159	AX-163
East	26040	23758	30977	31080	31034	30286	30342	30379	30357	30717
North	58410	58941	62434	62290	62358	63328	62877	62754	62811	62835
SiO2	59.54	63.42	55.80	58.54	55.83	59.43	61.12	62.43	58.27	61.00
Al2O3	12.39	15.22	12.99	15.43	12.81	13.27	14.72	13.78	14.27	14.08
TiO2	0.87	1.00	1.01	1.04	0.91	1.51	0.87	0.75	0.97	0.87
Fe2O3	6.43	7.19	8.96	8.61	8.30	9.00	7.02	6.65	8.26	7.35
MgO	5.59	2.94	7.91	6.92	7.52	5.86	6.09	5.67	6.02	6.56
CaO	4.14	1.46	3.38	1.24	2.50	2.15	3.36	2.99	5.08	2.87
Na2O	2.25	2.38	2.37	2.43	2.13	3.62	2.29	3.19	3.06	2.98
K2O	1.88	2.05	1.50	2.33	1.63	0.82	2.82	1.47	1.49	1.00
MnO	0.09	0.08	0.16	0.10	0.12	0.14	0.11	0.14	0.14	0.12
P2O5	0.17	0.23	0.22	0.25	0.19	0.28	0.22	0.14	0.23	0.18
Total	93.35	95.97	94.30	96.89	91.94	96.08	98.62	97.18	97.79	97.01
As	0	5	0	8	5	0	2	0	0	0
Ba	467	476	348	654	366	907	741	518	426	379
Co	30	36	37	30	32	37	29	33	30	31
Cr	293	133	225	152	192	179	216	256	247	344
Cu	21	21	37	10	35	23	50	22	43	22
Ga	15	16	16	16	16	14	16	13	17	15
La	22	30	28	20	23	23	21	21	15	23
Ni	100	66	61	64	65	62	79	92	73	157
Nb	12	19	10	13	10	15	9	11	9	12
Pb	11	18	11	11	10	14	13	14	18	15
Rb	47	63	49	70	53	22	73	37	43	33
Sr	231	151	264	247	283	371	472	277	311	265
Sb	0	0	0	0	1	0	0	0	0	0
S	236	457	336	0	157	237	977	586	757	508
Th	3	8	4	10	11	2	5	6	3	6
V	123	115	176	141	161	176	159	132	184	120
Y	21	31	21	22	22	25	20	21	19	18
Zn	37	79	61	74	70	91	51	57	73	62
Zr	190	251	213	219	183	181	154	146	157	162

VAR. / ID.	AX-164	AX-166	AX-167	AX-168	AX-169	AX-170	AX-171	AX-172	AX-177	AX-178
East	30719	30873	30908	30342	30321	30269	30392	30384	30281	30250
North	62771	62670	62646	63041	63052	63083	63217	63258	62235	62155
SiO2	61.80	69.88	66.21	53.47	66.50	61.34	62.41	61.54	66.64	57.56
Al2O3	14.37	11.74	13.04	14.28	15.69	13.18	12.43	12.89	10.92	12.44
TiO2	0.90	1.07	0.75	1.16	1.06	1.00	0.88	1.01	0.80	0.93
Fe2O3	6.54	5.87	5.99	9.08	6.22	6.53	6.21	7.68	5.72	7.51
MgO	3.95	3.01	4.47	5.54	2.40	4.75	3.79	6.10	3.41	5.32
CaO	2.25	1.38	1.93	3.75	2.58	4.45	3.98	3.44	4.01	3.22
Na2O	3.42	2.23	2.46	2.19	2.29	1.62	1.49	1.88	2.53	3.63
K2O	1.74	1.45	2.49	2.07	1.92	1.87	1.89	1.79	0.83	0.74
MnO	0.07	0.08	0.07	0.12	0.18	0.11	0.20	0.09	0.09	0.11
P2O5	0.18	0.16	0.16	0.22	0.17	0.19	0.12	0.19	0.13	0.20
Total	95.22	96.87	97.57	91.88	99.01	95.04	93.40	96.61	95.08	91.66
As	2	0	0	0	0	0	0	0	0	0
Ba	505	419	619	1000	373	408	363	698	221	267
Co	29	35	40	29	36	32	29	32	40	35
Cr	106	150	192	243	134	233	187	195	229	178
Cu	24	12	20	45	20	18	16	22	15	26
Ga	15	13	14	17	15	13	14	14	11	15
La	33	30	26	18	29	38	32	44	24	22
Ni	42	48	76	73	46	82	67	72	54	58
Nb	14	16	13	12	16	16	17	18	11	12
Pb	7	17	18	18	12	17	18	18	17	12
Rb	56	41	76	51	57	57	60	48	28	22
Sr	246	86	231	505	118	223	158	244	141	228
Sb	0	0	0	0	1	0	0	0	0	0
S	19	40	169	1290	669	451	485	368	659	171
Th	13	6	3	5	9	6	5	5	7	7
V	107	104	101	226	112	116	96	144	106	134
Y	25	25	21	23	25	28	27	27	21	22
Zn	51	50	54	82	70	60	66	77	41	57
Zr	266	310	221	149	247	358	298	283	251	233

TABLE 4.42

VAR. / ID.	AX-179	AX-180	AX-181	AX-182	AX-185	AX-187	AX-188	AX-189	AX-190	AX-191
East	30370	29902	29618	30040	30173	30132	30091	30035	30141	30014
North	61306	62278	62177	61638	61763	61882	61937	61949	62401	62270
SiO2	66.51	57.73	57.27	61.46	61.46	70.61	61.28	63.46	57.36	56.45
Al2O3	12.07	14.34	14.27	12.51	14.22	11.53	13.54	13.96	14.41	11.82
TiO2	0.80	0.96	0.92	0.80	1.00	0.54	0.98	1.09	0.96	1.01
Fe2O3	5.32	8.13	8.48	6.52	7.99	4.96	7.20	7.85	7.86	7.97
MgO	4.75	5.91	5.85	5.06	6.11	3.82	4.97	4.92	6.63	8.08
CaO	3.14	4.72	4.08	4.90	1.94	2.74	2.43	0.87	3.82	3.91
Na2O	1.74	3.63	2.68	2.60	2.85	2.35	2.44	3.18	2.81	2.05
K2O	2.25	1.18	1.41	1.74	1.77	1.90	2.37	1.47	1.90	1.25
MnO	0.07	0.14	0.13	0.12	0.09	0.07	0.09	0.10	0.13	0.13
P2O5	0.18	0.26	0.23	0.21	0.20	0.13	0.19	0.23	0.21	0.20
Total	96.83	97.00	95.32	95.92	97.63	98.65	95.49	97.13	96.09	92.87
As	0	0	5	0	0	0	0	0	0	0
Ba	487	345	475	664	489	531	765	681	587	373
Co	43	29	36	36	34	39	36	36	34	38
Cr	204	217	257	191	187	109	164	187	308	403
Cu	8	42	34	23	13	16	11	22	38	28
Ga	12	17	18	14	15	10	15	16	17	13
La	32	20	22	30	24	20	33	30	24	22
Ni	77	66	66	66	68	46	61	56	136	121
Nb	13	9	9	11	12	10	14	14	11	11
Pb	13	19	14	13	11	16	16	18	19	16
Rb	62	36	39	47	49	47	59	40	52	32
Sr	153	335	356	312	293	192	256	166	426	211
Sb	0	0	0	0	0	0	0	0	0	0
S	0	412	418	231	0	434	0	409	382	401
Th	8	4	5	6	0	5	5	5	11	3
V	84	189	177	113	153	74	124	132	150	172
Y	21	20	23	22	24	21	25	25	21	21
Zn	45	71	74	41	56	42	50	80	71	60
Zr	261	159	143	215	225	172	242	270	166	164

TABLE 4.42

VAR. / ID.	AX-194	AX-195	AX-196	AX-197	AX-198	AX-199	AX-200	AX-201	AX-202	AX-203
East	29880	29908	29941	29972	30000	30026	30358	30187	30031	30190
North	61594	61615	61618	61616	61615	61614	62477	62500	62356	63061
SiO2	58.84	58.34	62.18	64.03	65.45	62.79	57.39	56.06	60.42	59.80
Al2O3	13.99	14.06	13.70	13.17	13.26	13.79	13.78	14.60	14.35	14.56
TiO2	0.87	0.99	0.87	0.92	0.78	0.87	0.99	1.00	1.24	1.08
Fe2O3	7.47	8.63	7.27	7.11	6.74	7.33	7.86	7.86	7.34	7.93
MgO	4.98	5.54	6.18	5.00	5.03	5.09	7.27	9.53	4.82	5.90
CaO	2.33	4.36	3.04	1.83	3.78	4.30	4.25	2.07	3.04	2.69
Na2O	2.34	3.34	2.70	3.92	2.99	2.75	2.21	2.52	1.38	2.22
K2O	2.62	1.05	1.49	0.88	1.57	1.68	1.87	1.80	2.07	1.97
MnO	0.10	0.13	0.11	0.10	0.10	0.12	0.11	0.12	0.08	0.11
P2O5	0.18	0.22	0.20	0.18	0.21	0.21	0.24	0.20	0.20	0.31
Total	93.72	96.66	97.74	97.14	99.91	98.93	95.97	95.76	94.94	96.57
As	0	0	0	0	0	0	0	0	0	0
Ba	641	370	436	309	535	417	727	906	430	693
Co	33	41	34	42	38	39	35	35	30	34
Cr	136	180	185	215	221	188	406	255	282	156
Cu	32	36	28	23	26	31	38	35	23	32
Ga	15	18	16	14	15	15	16	16	16	18
La	26	27	29	32	34	28	28	22	47	51
Ni	61	58	63	54	69	67	162	134	93	67
Nb	10	8	12	14	11	11	13	11	21	19
Pb	15	17	15	18	16	15	17	14	20	23
Rb	73	27	43	27	45	47	51	54	66	55
Sr	322	330	335	299	411	433	409	304	117	449
Sb	0	0	0	0	0	0	0	0	0	0
S	825	787	658	1136	431	311	515	295	618	593
Th	11	5	4	6	7	2	2	6	12	14
V	140	177	139	124	131	153	169	153	118	154
Y	23	21	23	24	20	23	24	19	30	30
Zn	64	70	62	62	62	64	54	54	87	79
Zr	196	188	224	285	220	211	207	158	431	273

VAR. / ID.	AX-204	AX-206	AX-210	AX-211	AX-212	AX-213	AX-214	AX-215	AX-216	AX-217
East	30172	30333	30461	30427	30341	30324	29717	29674	29643	29647
North	62900	62770	62697	62767	62837	62904	62910	62960	62902	62912
SiO2	68.05	57.85	57.72	58.48	54.66	58.44	58.97	59.09	59.37	61.57
Al2O3	15.91	14.94	15.11	12.83	14.27	14.99	14.16	14.13	15.28	14.18
TiO2	1.05	0.94	0.93	0.95	1.03	0.88	1.40	1.60	1.10	1.07
Fe2O3	6.33	8.22	7.19	7.19	9.10	8.06	8.68	8.83	7.51	7.70
MgO	2.90	6.76	6.71	6.04	7.77	7.25	5.62	5.59	5.95	4.34
CaO	0.64	2.76	4.32	2.09	4.14	2.11	2.35	1.78	2.16	2.74
Na2O	2.42	2.78	3.30	2.66	2.35	2.83	4.10	3.08	3.44	4.83
K2O	1.88	2.30	1.41	1.52	1.78	2.17	1.23	1.46	2.09	1.01
MnO	0.07	0.12	0.11	0.10	0.15	0.13	0.14	0.11	0.12	0.14
P2O5	0.20	0.20	0.23	0.17	0.26	0.18	0.33	0.22	0.26	0.30
Total	99.45	96.87	97.03	92.03	95.51	97.04	96.98	95.89	97.28	97.88
As	0	0	0	0	0	0	0	0	0	0
Ba	502	644	449	470	546	730	588	563	848	677
Co	43	35	38	35	35	33	35	37	29	41
Cr	83	216	211	373	281	165	178	244	161	148
Cu	19	14	35	22	38	10	23	30	28	25
Ga	15	17	18	16	16	17	17	17	17	17
La	32	25	25	27	19	20	30	32	36	38
Ni	29	76	113	95	74	76	61	87	63	56
Nb	18	9	10	9	10	8	17	18	16	18
Pb	12	13	18	14	20	13	13	9	19	18
Rb	53	60	42	41	52	60	33	38	58	25
Sr	88	434	375	351	462	446	531	258	604	633
Sb	0	0	0	0	0	0	2	u	0	0
S	656	20	235	958	798	931	43	187	52	128
Th	5	6	2	6	5	8	7	7	4	4
V	103	168	139	162	208	166	179	189	152	160
Y	30	24	19	21	23	19	28	29	28	31
Zn	55	60	66	69	86	59	89	72	86	84
Zr	258	151	158	200	156	127	186	197	187	177

TABLE 4.42

VAR. / ID.	AX-218	AX-219	AX-220	AX-221	AX-222	AX-223	AX-224	AX-225	AX-226	AX-227
East	30161	30125	30116	30075	30237	30252	30284	29760	29737	29821
North	61487	61541	61554	61607	63181	63225	63330	61566	61572	61550
SiO2	61.35	61.59	59.54	57.01	66.07	64.99	57.16	64.26	65.15	67.23
Al2O3	11.59	12.74	11.90	12.59	11.53	13.36	13.21	13.16	14.33	11.63
TiO2	0.89	0.85	0.80	0.94	0.88	0.96	1.57	0.83	0.90	0.77
Fe2O3	6.75	7.48	6.86	8.07	6.25	6.95	9.24	6.36	6.74	5.60
MgO	5.34	5.53	4.35	5.41	5.32	5.64	6.48	5.09	3.56	4.89
CaO	1.95	4.39	2.83	3.52	0.21	1.47	3.34	3.31	1.67	3.36
Na2O	2.03	2.52	2.91	2.14	1.17	1.28	3.01	2.31	3.47	2.08
K2O	1.84	1.59	1.47	1.61	1.64	1.60	1.44	1.84	1.43	2.10
MnO	0.09	0.12	0.09	0.13	0.05	0.07	0.17	0.08	0.07	0.07
P2O5	0.16	0.23	0.17	0.17	0.12	0.12	0.45	0.17	0.21	0.14
Total	91.99	97.04	90.92	91.59	93.24	96.44	96.07	97.41	97.53	97.87
As	0	0	0	1	3	2	0	0	0	0
Ba	567	607	475	380	600	285	457	455	377	519
Co	34	40	31	37	31	41	40	32	35	33
Cr	231	271	181	169	386	407	161	187	118	246
Cu	18	28	24	31	14	19	23	20	23	13
Ga	15	14	14	16	13	15	16	14	16	12
La	25	25	25	25	26	34	27	23	29	31
Ni	71	69	63	55	176	213	48	60	47	73
Nb	12	10	11	10	16	15	15	13	13	11
Pb	17	15	13	13	61	16	17	16	8	17
Rb	51	40	40	46	48	46	34	50	41	51
Sr	238	368	326	329	48	82	400	181	98	144
Sb	0	0	0	0	0	0	0	0	0	2
S	453	723	147	459	668	930	63	440	293	0
Th	6	6	6	5	13	8	7	6	6	4
V	120	149	115	158	102	111	198	106	108	109
Y	25	22	19	22	25	23	25	23	23	24
Zn	44	62	52	67	50	77	95	48	51	39
Zr	252	199	189	200	233	228	173	258	232	247

TABLE 4.42

VAR. / ID.	AX-229	AX-230	AX-231	AX-232	AX-233	AX-234	AX-235	AX-236	AX-237	AX-238
East	28062	28067	28099	28136	28167	28192	29552	29528	30216	30252
North	59663	59638	59616	59583	59565	59537	61627	61643	61435	61424
SiO2	71.16	69.48	65.61	55.93	63.30	61.24	66.17	67.05	67.00	64.07
Al2O3	13.19	12.92	14.37	13.02	12.91	12.99	12.02	12.53	12.33	13.58
TiO2	0.93	0.85	0.98	0.99	0.93	0.95	0.93	0.74	0.74	0.91
Fe2O3	5.38	5.49	6.20	7.54	6.95	7.32	6.78	5.60	5.62	7.05
MgO	2.60	4.11	4.06	5.04	5.57	7.09	4.67	4.15	4.50	5.64
CaO	1.65	1.89	1.87	2.69	2.50	2.54	2.43	3.58	2.46	1.69
Na2O	2.10	2.08	2.63	2.12	1.94	2.33	3.04	2.21	2.54	2.13
K2O	1.94	1.53	1.79	2.50	2.11	1.89	0.68	1.65	1.94	2.28
MnO	0.07	0.09	0.08	0.09	0.09	0.11	0.09	0.08	0.09	0.10
P2O5	0.19	0.18	0.21	0.21	0.19	0.19	0.14	0.14	0.17	0.21
Total	99.21	98.62	97.80	90.13	96.49	96.65	96.95	97.71	97.39	97.66
As	0	0	0	0	0	0	0	2	0	3
Ba	406	302	404	914	552	501	253	337	545	795
Co	38	38	35	33	34	39	40	33	35	31
Cr	107	182	115	136	236	336	317	185	225	255
Cu	19	14	21	26	21	25	17	11	16	21
Ga	13	11	14	14	14	15	12	12	13	12
La	33	28	28	30	29	29	26	23	35	28
Ni	44	77	46	53	59	86	69	56	63	72
Nb	16	14	16	13	14	13	12	10	12	12
Pb	16	13	17	13	21	13	16	9	15	13
Rb	55	45	52	64	58	53	22	51	51	55
Sr	74	58	90	376	215	286	183	142	259	238
Sb	0	0	2	0	0	0	0	0	0	0
S	421	378	337	560	639	868	594	416	514	370
Th	2	6	9	7	10	7	10	7	7	7
V	91	87	104	140	132	147	124	104	98	127
Y	27	24	25	24	25	22	21	21	22	27
Zn	46	43	66	42	56	65	47	36	51	57
Zr	284	278	259	227	288	284	293	209	249	266

TABLE 4.42

VAR. / ID.	AX-239	AX-241	AX-243	AX-244	AX-245	AX-246	AX-247	AX-248	AX-249	AX-251
East	29555	29555	29555	29555	35610	31580	31959	31959	31959	33428
North	61626	61626	61626	61626	63490	63641	61584	61584	61584	63738
SiO2	53.82	52.31	72.07	74.04	70.68	55.50	64.73	63.34	68.65	61.54
Al2O3	13.84	13.77	12.79	12.25	13.77	13.77	15.61	15.87	16.52	18.55
TiO2	0.83	3.87	0.85	0.78	0.98	0.98	0.76	0.85	0.79	0.86
Fe2O3	7.98	7.97	4.75	4.60	5.26	8.43	5.89	4.79	4.26	6.04
MgO	5.91	4.39	2.12	2.09	2.45	6.84	3.84	2.77	2.25	3.28
CaO	4.26	5.76	2.28	1.28	0.86	4.16	2.27	2.54	0.98	2.33
Na2O	3.38	4.20	2.07	1.74	2.05	2.84	3.07	2.77	3.38	1.32
K2O	1.00	0.57	1.57	1.71	1.66	1.41	1.94	2.50	2.11	4.96
MnO	0.13	0.16	0.08	0.05	0.06	0.14	0.35	0.47	0.11	0.11
P2O5	0.16	0.73	0.15	0.13	0.19	0.22	0.18	0.17	0.16	0.22
Total	91.31	93.73	98.73	98.67	97.96	94.29	98.64	96.07	99.21	99.21
As	3	0	1	0	0	4	2	0	0	0
Ba	419	161	362	399	393	484	609	521	421	1380
Co	34	27	38	48	47	31	28	35	38	24
Cr	210	21	71	74	81	297	73	100	95	64
Cu	35	27	19	13	20	39	14	31	10	26
Ga	15	16	11	11	11	16	16	17	15	19
La	16	39	30	24	32	24	36	30	37	55
Ni	67	22	24	21	28	75	24	40	28	33
Nb	9	33	18	16	17	10	15	14	14	20
Pb	20	16	11	16	16	14	23	52	11	24
Rb	28	22	43	50	50	41	52	72	58	183
Sr	385	247	85	84	59	358	227	175	197	475
Sb	0	0	0	0	2	0	0	0	0	0
S	1401	2406	500	823	946	2596	270	125	351	756
Th	6	2	9	9	6	7	8	6	8	9
V	146	328	77	72	78	180	77	105	80	89
Y	17	54	21	21	24	22	23	25	22	35
Zn	70	83	46	47	49	75	59	76	30	75
Zr	131	315	272	258	308	176	221	219	257	311

VAR. / ID.	AX-271	AX-272	AX-273	AX-274	AX-275	AX-276	AX-277	AX-278	AX-279	AX-280
East	34441	34485	34808	34235	34065	34125	33973	33974	33978	34779
North	64616	64557	63850	65062	65402	65320	65644	65615	65554	63791
SiO2	70.32	67.00	64.85	58.95	61.54	64.76	59.79	62.85	58.16	69.35
Al2O3	11.74	13.29	14.08	12.74	13.40	11.72	15.08	14.63	15.47	13.76
TiO2	1.21	1.24	0.73	0.94	0.74	0.96	1.00	0.80	0.95	0.87
Fe2O3	5.98	6.55	4.84	7.66	5.98	6.24	7.70	6.53	7.02	5.44
MgO	4.26	3.88	3.73	6.33	6.07	5.54	5.83	5.22	6.38	3.80
CaO	1.39	0.41	5.18	4.63	4.33	3.79	2.89	2.96	4.45	0.82
Na2O	1.93	2.13	1.69	1.64	3.10	1.90	2.77	3.83	3.40	1.68
K2O	1.35	1.62	2.00	1.70	1.51	1.60	1.42	1.36	1.57	2.18
MnO	0.09	0.08	0.08	0.11	0.09	0.08	0.09	0.11	0.09	0.06
P2O5	0.17	0.17	0.14	0.21	0.17	0.16	0.19	0.18	0.22	0.16
Total	98.44	96.37	97.32	94.91	96.93	96.75	96.76	98.47	97.71	98.12
As	0	0	0	0	0	2	0	0	0	0
Ba	356	367	224	388	479	413	485	498	483	397
Co	49	41	35	35	28	37	30	33	31	47
Cr	160	122	105	230	211	316	258	190	198	102
Cu	12	12	7	30	29	30	35	26	42	22
Ga	12	14	12	14	15	12	15	14	17	13
La	26	30	34	28	27	26	26	17	23	45
Ni	58	54	33	76	96	104	119	72	108	48
Nb	14	14	12	11	10	13	12	11	11	16
Pb	13	15	11	17	14	10	16	15	22	15
Rb	36	45	60	48	38	46	43	35	43	70
Sr	92	63	93	300	272	94	431	312	363	69
Sb	0	0	0	0	0	0	0	0	0	0
S	0	0	0	748	208	418	975	658	323	0
Th	5	6	8	7	5	7	6	6	1	7
V	112	109	85	162	116	112	152	127	142	82
Y	23	21	24	24	19	22	23	20	21	28
Zn	71	71	46	63	47	46	70	59	63	83
Zr	284	235	219	251	160	271	171	150	164	267

TABLE 4.42

VAR. / ID.	AX-281	AX-282	AX-283	AX-284	AX-285	AX-286	AX-287	AX-288	AX-289	AX-290
East	34493	34579	34605	34518	34477	34293	34111	27504	27495	27495
North	64170	64082	63970	64476	64351	65006	65253	61523	61590	61590
SiO2	71.03	68.22	66.97	66.02	66.38	59.27	71.90	65.60	54.68	51.06
Al2O3	13.21	12.20	13.66	13.90	13.71	13.19	10.44	14.92	13.64	12.37
TiO2	0.85	0.91	1.32	1.08	0.97	0.91	0.92	1.01	1.38	1.53
Fe2O3	4.98	5.56	6.56	6.30	6.05	6.87	4.91	6.85	9.39	10.07
MgO	3.23	3.35	4.60	3.89	3.78	6.77	3.03	3.24	8.34	8.26
CaO	1.40	2.12	1.03	0.41	1.03	3.11	2.48	0.72	3.23	3.35
Na2O	1.49	1.63	1.46	1.34	1.65	2.25	2.37	2.67	3.02	2.43
K2O	2.19	2.14	2.04	2.21	2.20	1.99	1.23	1.68	1.12	1.02
MnO	0.06	0.08	0.08	0.08	0.08	0.10	0.08	0.09	0.14	0.16
P2O5	0.16	0.16	0.17	0.16	0.16	0.19	0.16	0.17	0.18	0.17
Total	98.60	96.37	97.89	95.39	96.01	94.65	97.52	96.95	95.12	90.42
As	0	0	0	0	0	0	0	0	6	0
Ba	408	424	456	441	497	573	369	1120	380	288
Co	45	41	36	36	33	36	42	41	33	35
Cr	104	148	221	125	113	192	162	119	279	331
Cu	9	19	9	10	9	41	13	22	36	35
Ga	13	13	13	14	15	16	10	15	17	17
La	34	43	43	44	44	35	26	37	16	14
Ni	52	63	79	69	56	65	55	56	129	112
Nb	15	17	17	17	15	9	14	17	14	15
Pb	14	19	12	15	15	9	13	18	14	15
Rb	68	70	61	68	67	57	34	46	25	24
Sr	62	80	61	57	74	424	89	121	215	200
Sb	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	610	390	526	865	1652
Th	9	8	9	11	11	7	6	5	5	1
V	79	87	108	98	94	150	85	109	193	224
Y	24	31	23	23	29	23	20	29	27	26
Zn	59	63	66	85	65	58	33	75	82	77
Zr	279	334	409	329	254	207	294	268	143	155

TABLE 4.42

VAR. / ID.	AX-292	AX-293	AX-294	AX-296	AX-298	AX-299	AX-300	AX-301	AX-302	AX-304
East	27473	27431	27407	27572	27615	27642	27670	27681	27681	27697
North	61739	61734	61736	61478	61455	61449	61448	61425	61414	61382
SiO2	56.45	58.45	64.21	61.40	72.95	63.59	69.00	66.64	70.51	48.00
Al2O3	12.68	14.22	12.35	17.02	11.65	15.24	12.36	13.70	12.68	16.31
TiO2	1.46	1.40	1.33	1.38	0.61	0.94	0.71	1.04	0.75	0.95
Fe2O3	8.41	8.57	7.30	8.09	4.41	6.58	5.01	6.42	5.17	7.72
MgO	4.48	4.42	3.70	3.95	2.58	3.83	2.47	4.01	2.92	9.47
CaO	2.27	2.49	3.27	0.47	2.46	1.65	3.25	3.28	1.42	5.23
Na2O	3.04	3.33	3.94	2.19	2.92	2.80	2.20	1.97	2.62	3.09
K2O	1.27	1.54	0.81	2.20	1.12	1.81	1.39	1.58	1.54	0.97
MnO	0.13	0.14	0.12	0.12	0.11	0.12	0.12	0.09	0.07	0.13
P2O5	0.29	0.38	0.21	0.18	0.12	0.18	0.13	0.17	0.17	1.25
Total	90.48	94.94	97.24	97.00	98.93	96.74	96.64	98.90	97.85	93.12
As	0	0	3	0	0	0	0	1	1	3
Ba	441	450	358	831	332	618	296	386	679	2042
Co	29	36	31	34	45	33	34	41	35	19
Cr	191	144	209	164	110	126	128	182	125	54
Cu	25	18	23	30	15	20	13	20	16	95
Ga	16	15	15	17	10	16	11	11	13	17
La	26	30	23	40	24	37	32	40	32	166
Ni	46	50	58	75	37	56	45	69	47	17
Nb	17	14	15	20	11	15	12	16	12	36
Pb	13	7	16	16	14	12	15	14	17	29
Rb	37	42	19	59	33	44	38	45	41	27
Sr	209	210	269	94	137	208	155	114	161	2588
Sb	0	0	0	0	0	0	0	0	0	0
S	596	412	312	113	787	323	1161	738	1400	4081
Th	9	6	0	10	4	4	1	5	6	63
V	183	168	163	135	76	112	89	115	88	330
Y	31	23	27	29	15	25	20	25	20	24
Zn	67	80	64	85	56	50	53	61	54	60
Zr	180	159	173	272	156	217	191	286	195	145

TABLE 4.42

VAR. / ID.	AX-305	AX-306	AX-307	AX-308	AX-311	ZK-343	ZK-344	ZK-348	ZK-349	AX452
East	27712	27714	27721	27741	27792	30843	30826	30678	30660	22055
North	61357	61354	61338	61319	61284	59641	59703	60129	60163	55808
SiO2	64.23	64.15	65.30	61.41	64.63	68.22	61.22	62.72	68.90	56.53
Al2O3	14.39	15.11	15.51	14.41	13.48	13.08	17.83	15.08	13.92	14.71
TiO2	1.33	1.08	1.43	1.02	0.88	1.03	0.93	0.79	0.84	1.07
Fe2O3	7.58	7.17	7.66	7.32	6.17	5.96	6.62	5.68	5.70	7.84
MgO	4.11	3.97	3.39	5.33	4.89	3.27	3.82	4.18	4.06	6.60
CaO	2.58	1.95	0.75	3.62	3.96	1.01	0.59	2.27	0.85	3.66
Na2O	1.80	2.20	2.13	1.37	1.58	1.59	1.30	2.69	3.16	1.17
K2O	1.76	2.15	1.84	2.04	2.01	2.08	3.58	2.76	1.95	2.20
MnO	0.11	0.10	0.09	0.09	0.08	0.07	0.07	0.12	0.08	0.17
P2O5	0.17	0.16	0.21	0.17	0.17	0.18	0.15	0.21	0.22	0.18
Total	98.06	98.04	98.31	96.78	97.85	96.49	96.11	96.50	99.68	94.13
As	1	3	4	0	0	1	2	0	0	1
Ba	386	561	467	396	415	460	558	927	587	339
Co	37	32	30	27	31	35	31	36	41	24
Cr	227	176	202	194	156	130	113	104	187	319
Cu	23	21	24	23	19	9	13	17	15	28
Ga	14	16	14	14	12	13	19	16	13	14
La	33	34	26	41	29	38	39	40	37	19
Ni	72	86	65	73	63	45	61	50	64	126
Nb	17	18	18	16	16	16	16	14	11	13
Pb	13	9	12	15	18	12	14	17	17	13
Rb	48	56	48	58	55	63	113	76	51	47
Sr	98	104	91	186	102	69	68	321	168	166
Sb	0	0	0	0	0	0	0	0	0	4
S	504	306	644	571	552	0	0	0	0	0
Th	6	6	9	10	5	5	8	4	5	10
V	141	120	145	114	99	90	101	90	89	156
Y	28	25	27	23	24	33	29	25	23	21
Zn	67	56	52	64	60	61	79	55	53	68
Zr	322	246	361	292	272	350	248	238	257	208

TABLE 4.42

VAR. / ID.	AX973	AX974	AX975	AX976	AX977	AX979	AX980	AX981	AX982	DTIA-2
East	22192	22517	22291	22591	22771	22322	22326	22294	22303	26260
North	58050	58096	58122	57854	57707	58180	58207	58145	57842	58030
SiO2	61.62	61.09	62.67	63.31	61.01	63.57	64.93	55.84	59.87	66.53
Al2O3	12.71	13.13	13.45	13.95	12.28	14.53	14.47	10.59	11.58	13.48
TiO2	1.13	1.00	1.32	1.04	1.04	1.12	1.07	1.14	0.85	0.97
Fe2O3	7.11	7.66	7.69	6.84	6.91	7.18	6.86	9.57	6.51	6.26
MgO	4.63	5.28	5.29	3.43	5.82	4.13	3.69	7.33	3.93	5.80
CaO	2.92	2.30	2.62	1.58	4.49	1.07	0.58	6.19	7.60	0.87
Na2O	1.70	2.84	1.62	2.60	1.30	2.61	2.34	2.27	2.74	2.15
K2O	1.65	1.91	2.04	2.46	2.12	2.03	1.75	1.67	1.92	2.36
MnO	0.09	0.11	0.10	0.11	0.09	0.10	0.10	0.17	0.20	0.08
P2O5	0.15	0.28	0.17	0.17	0.17	0.17	0.17	0.42	0.33	0.19
Total	93.71	95.60	96.97	95.49	95.23	96.51	95.96	95.19	95.53	98.69
As	0	0	0	0	2	0	0	0	0	0
Ba	354	827	469	869	412	745	428	701	909	570
Co	17	21	14	20	18	19	19	35	17	39
Cr	237	186	299	150	224	159	155	451	158	330
Cu	19	19	18	17	16	22	16	34	18	18
Ga	14	17	15	17	13	17	15	14	16	12
La	33	44	27	41	26	36	29	30	53	32
Ni	89	69	102	61	70	68	60	134	56	104
Nb	18	16	17	17	16	18	16	12	12	14
Pb	12	14	13	17	8	11	14	17	13	16
Rb	46	47	54	55	54	51	42	37	43	66
Sr	91	540	85	331	108	223	140	354	959	137
Sb	3	1	0	0	5	2	0	0	2	0
S	476	282	480	168	396	457	187	480	343	606
Th	10	10	11	8	11	7	6	1	8	5
V	112	149	120	108	109	111	108	238	113	106
Y	27	25	28	28	25	28	27	28	24	26
Zn	67	77	72	72	64	58	68	94	60	48
Zr	306	235	328	262	280	256	293	208	207	280

TABLE 4.42

VAR. / ID.	DTIA-3	DTIA-5	DTIA-27	DTIA-39	DTIA-41	DTIA-42	DTIA-47	DTIA-48	DTIA-103	DTIA-104
East	26260	26130	25630	25572	25507	25533	25623	25729	25454	25452
North	58030	58240	57889	58063	58077	58126	58238	58457	58667	58668
SiO2	68.30	53.36	58.29	60.21	59.06	60.20	69.14	56.59	59.57	59.02
Al2O3	11.58	12.19	13.27	12.21	13.30	12.41	10.37	13.89	16.31	14.40
TiO2	0.82	1.03	0.97	0.78	0.84	1.24	0.82	1.02	0.89	0.81
Fe2O3	6.15	8.47	8.33	6.01	6.44	7.93	4.22	7.51	5.71	7.24
MgO	4.52	5.94	4.91	5.18	5.24	5.77	2.06	5.80	3.90	5.57
CaO	2.11	6.19	5.01	4.91	4.93	3.57	5.40	2.94	0.89	1.01
Na2O	1.58	1.77	2.39	2.30	2.48	2.25	1.64	2.18	3.09	2.47
K2O	2.19	2.04	1.72	2.05	1.61	1.42	1.49	1.50	1.93	1.38
MnO	0.08	0.22	0.13	0.10	0.26	0.09	0.16	0.11	0.06	0.08
P2O5	0.17	0.26	0.23	0.16	0.16	0.16	0.19	0.17	0.16	0.14
Total	97.50	91.47	95.25	93.91	94.32	95.04	95.49	91.71	92.51	92.12
As	2	0	0	0	0	0	0	0	19	17
Ba	515	698	436	511	337	387	317	325	385	353
Co	33	31	38	30	35	31	34	31	28	24
Cr	399	152	167	302	228	481	97	265	217	204
Cu	18	34	29	21	24	26	11	23	27	24
Ga	12	16	15	12	13	14	9	15	17	15
La	36	33	29	28	25	23	31	29	27	30
Ni	84	52	52	98	85	92	34	116	66	74
Nb	13	9	9	11	9	10	15	12	9	10
Pb	13	14	18	16	14	18	13	16	6	10
Rb	62	53	49	52	51	42	42	45	65	45
Sr	116	420	291	268	273	193	102	225	124	126
Sb	0	0	0	0	0	0	1	0	0	0
S	1225	337	379	426	0	377	159	249	308	1754
Th	7	6	6	4	5	4	4	4	5	8
V	103	211	191	114	128	184	73	131	136	130
Y	26	22	23	22	21	19	23	21	22	20
Zn	34	81	75	47	59	59	33	61	131	80
Zr	273	195	223	188	161	191	291	200	153	141

TABLE 4.42

VAR. / ID.	DTIA-131	DTIA-133	DTIA-211	DTIA-212	DTIA-292	S-4	S-6	S-250	S-251	S-252
East	25246	24832	25980	26118	25449	26140	26080	24916	23802	23577
North	59144	58841	59318	60347	57908	58230	58350	57446	57473	57527
SiO2	75.32	64.20	54.39	64.31	58.53	59.15	57.00	64.02	76.17	58.98
Al2O3	10.05	17.86	11.95	15.72	14.52	12.61	10.93	13.04	10.38	16.19
TiO2	0.83	0.63	0.97	1.45	0.86	0.91	0.97	0.69	0.59	0.88
Fe2O3	4.64	5.78	8.41	7.45	6.84	7.51	7.08	6.71	4.17	7.83
MgO	1.96	3.50	6.33	3.60	5.53	5.38	5.02	5.14	1.81	4.61
CaO	0.74	0.27	3.34	1.59	5.13	3.57	4.39	3.50	1.93	3.75
Na2O	2.42	1.82	2.99	2.14	1.76	2.10	1.97	2.05	1.41	2.67
K2O	1.56	3.39	1.14	1.81	2.26	1.92	1.28	1.86	1.21	2.93
MnO	0.05	0.08	0.16	0.10	0.22	0.12	0.10	0.10	0.07	0.13
P2O5	0.11	0.07	0.22	0.21	0.17	0.20	0.14	0.14	0.13	0.17
Total	97.68	97.60	89.90	98.38	95.82	93.47	88.88	97.25	97.87	98.14
As	4	3	0	4	1	0	0	3	2	0
Ba	439	641	462	367	399	561	323	347	254	1295
Co	56	44	31	32	31	40	25	28	49	34
Cr	71	107	302	220	233	192	422	266	62	155
Cu	18	47	35	20	27	27	20	21	12	52
Ga	10	19	17	14	15	13	14	13	8	16
La	24	26	26	36	24	31	23	23	23	25
Ni	22	34	72	69	100	68	109	105	21	64
Nb	13	14	9	19	11	11	10	11	12	10
Pb	13	20	15	13	13	14	16	14	12	20
Rb	40	86	31	50	70	56	37	54	36	74
Sr	71	130	321	109	179	377	194	183	65	532
Sb	0	1	0	0	0	0	0	0	0	0
S	1254	16078	439	1102	139	320	371	0	1106	3114
Th	8	6	4	8	4	7	6	5	1	6
V	86	122	182	135	122	154	148	105	60	169
Y	21	24	22	31	24	22	22	20	16	22
Zn	47	88	68	69	65	59	54	58	34	74
Zr	186	122	155	332	182	206	215	170	158	138

TABLE 4.42

VAR. / ID.	S-70109	S-70110	S-70111	S-70112	S-70113	S-70114	S-70115	S-70116	S-70117	S-70118
East	36389	36391	36393	36393	36452	36452	35990	36004	36037	36037
North	66236	66232	66221	66222	66164	66164	66801	66783	66744	66743
SiO2	63.73	67.33	71.60	72.64	69.84	70.79	65.91	58.74	61.76	52.31
Al2O3	16.93	13.49	11.43	10.83	11.81	12.24	14.30	14.20	17.81	11.23
TiO2	1.04	0.88	0.66	0.58	1.12	1.07	1.03	1.22	0.41	0.55
Fe2O3	6.78	6.04	3.86	4.14	6.39	6.66	5.85	7.92	3.31	6.01
MgO	3.67	4.29	3.62	3.20	3.30	3.51	4.41	5.22	2.65	5.82
CaO	0.65	2.25	2.76	4.03	1.19	1.65	0.48	0.30	5.30	13.56
Na2O	1.62	2.52	2.26	2.58	1.95	1.95	2.01	2.47	3.15	0.11
K2O	3.67	2.07	1.84	1.75	1.61	0.96	2.20	2.23	2.57	1.28
MnO	0.04	0.05	0.05	0.06	0.07	0.17	0.08	0.17	0.09	0.16
P2O5	0.14	0.16	0.14	0.14	0.19	0.18	0.22	0.22	0.14	0.19
Total	98.27	99.08	98.22	99.95	97.47	99.18	96.49	92.69	97.19	91.22
As	0	0	2	5	0	0	0	0	5	38
Ba	574	323	386	341	477	275	638	954	342	201
Co	36	43	48	57	52	39	35	34	16	18
Cr	152	138	154	141	151	204	292	205	45	121
Cu	44	25	14	13	84	10	15	12	13	13
Ga	15	13	11	12	10	12	12	13	16	8
La	37	33	40	34	28	47	35	29	33	17
Ni	59	41	29	29	51	64	104	66	10	48
Nb	16	14	12	13	14	14	13	10	10	9
Pb	18	15	14	15	15	14	11	15	13	16
Rb	122	70	62	66	45	29	58	52	71	33
Sr	92	118	154	167	109	115	68	201	281	375
Sb	0	0	0	2	0	0	0	1	9	3
S	0	0	0	0	0	0	0	0	243	943
Th	10	6	7	11	8	1	6	7	10	6
V	124	92	73	73	115	121	113	141	43	61
Y	35	26	31	34	25	36	27	22	16	21
Zn	81	57	59	50	60	49	44	62	72	51
Zr	265	242	286	275	329	239	279	218	158	234

TABLE 4.42

VAR. / ID.	S-70119	S-70120	S-70121	S-70122	S-70123	S-70124	S-70125	S-70126	S-70127	S-70128
East	35992	36004	36079	36036	36036	36080	36110	36128	36140	36231
North	66798	66782	66700	66745	66745	66699	66664	66643	66629	66522
SiO2	64.01	56.26	65.33	65.71	65.30	70.91	60.46	64.16	66.38	56.41
Al2O3	14.89	13.50	15.59	12.98	12.75	18.82	15.95	13.65	13.80	17.57
TiO2	1.03	1.35	1.02	0.70	0.69	0.95	1.10	0.96	0.96	1.02
Fe2O3	6.87	8.39	6.93	5.25	5.19	6.53	6.64	6.30	5.91	7.29
MgO	3.63	6.02	2.99	5.07	4.93	0.56	1.56	4.83	4.59	4.91
CaO	0.40	0.46	0.14	3.87	3.86	0.26	0.20	1.07	0.26	1.45
Na2O	2.81	2.66	1.46	1.80	1.83	0.00	2.06	2.28	2.16	2.02
K2O	2.09	1.83	2.38	1.40	1.40	2.99	2.52	2.16	2.11	4.66
MnO	0.08	0.12	0.07	0.09	0.09	0.18	0.05	0.08	0.06	0.05
P2O5	0.22	0.21	0.19	0.20	0.20	0.23	0.21	0.19	0.21	0.19
Total	96.03	90.80	96.10	97.07	96.24	101.43	90.75	95.68	96.44	95.57
As	2	0	6	0	0	51	3	0	0	19
Ba	655	757	545	251	242	635	657	740	736	944
Co	43	32	40	53	51	61	32	31	38	32
Cr	180	199	287	194	187	210	242	195	233	139
Cu	14	17	9	18	17	17	7	7	19	49
Ga	13	14	14	9	8	13	13	13	12	22
La	26	36	30	24	23	48	42	40	34	51
Ni	90	74	215	74	75	240	153	65	94	81
Nb	14	11	13	10	9	14	13	15	14	21
Pb	12	14	11	15	16	11	16	12	22	65
Rb	54	44	64	42	40	80	62	58	55	153
Sr	96	221	58	80	79	27	83	131	87	119
Sb	2	0	0	2	0	3	0	0	0	5
S	0	0	0	798	764	0	0	0	0	2684
Th	6	2	7	7	7	8	4	5	7	15
V	109	157	113	89	87	100	115	104	104	127
Y	25	33	38	23	23	73	26	29	34	32
Zn	54	80	40	97	94	24	28	47	67	214
Zr	286	227	291	171	175	353	286	272	283	238

TABLE 4.42

VAR. / ID.	S-70129	S-70130	S-70131	S-70132	S-70133	S-70134	S-70135	S-70136	S-70137	S-70138
East	36267	36271	36865	36861	36720	36715	36711	36708	36697	36640
North	66465	66464	65875	65879	65991	65995	66001	66003	66012	66046
SiO2	52.89	53.71	69.43	70.11	66.03	69.68	68.64	69.96	68.97	69.88
Al2O3	14.52	14.14	18.72	17.20	12.09	12.68	11.75	13.81	12.21	12.54
TiO2	1.31	1.24	1.01	0.88	0.76	1.05	0.64	0.99	0.87	1.02
Fe2O3	9.55	7.77	3.82	4.51	4.51	5.95	3.75	6.05	5.59	6.04
MgO	6.34	8.45	1.53	1.82	3.33	3.84	3.11	3.58	5.04	3.96
CaO	7.31	7.92	1.42	1.72	6.59	1.30	6.76	1.33	1.62	1.41
Na2O	2.78	2.71	0.07	0.72	1.51	1.97	1.37	2.14	2.13	2.10
K2O	1.09	0.90	2.36	2.65	2.10	1.29	1.88	1.65	2.45	1.43
MnO	0.18	0.15	0.51	0.08	0.08	0.10	0.07	0.07	0.05	0.09
P2O5	0.39	0.28	0.16	0.16	0.13	0.17	0.13	0.19	0.20	0.19
Total	96.36	97.27	99.03	99.85	97.13	98.03	98.10	99.77	99.13	98.66
As	42	31	4	0	3	0	2	0	1	0
Ba	365	604	374	360	279	273	440	331	680	383
Co	53	43	36	44	27	44	31	75	37	39
Cr	128	239	138	118	173	148	142	117	236	143
Cu	40	18	38	41	9	10	10	9	15	12
Ga	18	16	13	12	11	11	10	12	11	11
La	17	22	47	38	39	30	32	33	33	37
Ni	66	113	75	44	29	53	22	49	85	55
Nb	8	7	15	14	12	11	12	15	14	13
Pb	12	14	13	21	13	12	12	12	17	14
Rb	28	23	71	82	61	33	54	50	65	39
Sr	464	554	98	56	90	53	100	67	144	100
Sb	0	16	0	0	0	0	0	0	2	0
S	233	287	0	0	0	0	4	0	0	0
Th	1	0	9	4	11	5	7	7	9	4
V	189	211	97	79	78	105	67	91	99	104
Y	25	24	28	26	29	25	26	37	26	29
Zn	84	65	30	27	47	57	50	81	44	58
Zr	89	63	309	274	386	250	325	261	284	278

TABLE 4.42

VAR. / ID.	S-70139	S-70140	S-70141	S-70142	S-70143	S-70145	S-70146	S-70147	S-70148	S-70149
East	36639	36634	36619	36610	36605	36593	36497	36476	36474	36472
North	66046	66049	66056	66060	66062	66069	66132	66142	66143	66144
SiO2	68.96	69.18	65.51	71.81	70.69	68.94	68.56	64.82	68.78	69.67
Al2O3	12.92	13.31	15.45	12.48	12.82	14.89	21.95	17.08	12.57	13.45
TiO2	1.26	1.22	0.92	1.02	1.16	1.12	1.31	1.29	1.26	1.22
Fe2O3	6.20	6.37	6.14	5.48	5.74	6.36	5.36	7.32	6.47	6.16
MgO	4.00	4.07	4.70	3.28	3.42	3.07	0.38	3.41	4.07	3.71
CaO	1.36	1.16	0.23	1.15	1.11	0.37	0.05	0.37	1.59	1.06
Na2O	2.23	2.43	2.05	1.97	1.74	2.03	0.00	2.02	1.93	2.16
K2O	1.44	1.44	2.42	1.46	1.69	1.68	1.74	2.08	1.40	1.68
MnO	0.10	0.10	0.06	0.09	0.10	0.08	0.04	0.09	0.09	0.08
P2O5	0.20	0.19	0.22	0.18	0.20	0.22	0.05	0.24	0.20	0.19
Total	98.67	99.47	97.70	98.92	98.67	98.76	99.44	98.72	98.36	99.38
As	0	0	0	0	2	0	0	0	0	0
Ba	367	390	713	394	410	419	470	476	374	417
Co	39	48	37	47	38	37	18	40	50	51
Cr	148	145	174	137	155	107	121	115	174	153
Cu	50	15	10	8	6	15	19	22	64	13
Ga	12	12	13	12	13	13	13	16	11	12
La	60	34	30	51	40	24	36	27	81	22
Ni	57	60	88	63	50	45	18	53	61	57
Nb	16	14	14	14	14	16	17	18	14	16
Pb	16	16	10	14	10	14	16	18	10	14
Rb	40	40	64	43	45	51	47	65	38	48
Sr	105	106	78	93	83	66	40	68	129	112
Sb	0	0	0	0	0	0	0	0	0	1
S	0	0	0	0	0	0	0	0	0	0
Th	6	5	14	5	7	6	10	8	6	9
V	113	118	98	99	98	104	106	110	129	114
Y	45	29	30	57	33	27	17	28	70	26
Zn	61	62	42	56	56	65	11	81	61	54
Zr	311	271	244	311	376	343	227	337	327	299

TABLE 4.42

VAR. / ID.	S-70150	S-70151	S-70152	S-70154	A1	A2	A6	A7	A9	A12
East	36461	36453	36414	36619	26302	26303	26282	26282	26285	26293
North	66157	66163	66191	66056	60544	60549	60535	60529	60524	60517
SiO2	71.67	68.91	77.78	75.10	58.75	60.25	60.83	60.29	58.40	61.56
Al2O3	11.80	13.14	8.30	10.74	10.67	10.93	10.97	10.48	12.43	9.96
TiO2	1.04	1.07	0.56	0.77	1.30	1.40	1.30	1.02	1.00	1.33
Fe2O3	5.92	6.09	3.80	4.89	9.56	9.18	9.21	9.33	7.47	8.51
MgO	3.36	3.52	3.97	2.55	5.15	4.66	4.77	4.48	3.77	3.97
CaO	1.37	1.54	1.90	1.22	4.34	4.90	5.16	4.04	6.61	5.70
Na2O	2.33	2.03	1.13	1.97	2.62	2.76	2.85	2.95	1.24	2.47
K2O	1.08	1.86	1.35	0.81	0.96	1.00	0.92	0.87	2.74	1.01
MnO	0.08	0.07	0.07	0.08	0.15	0.15	0.15	0.15	0.11	0.14
P2O5	0.18	0.22	0.10	0.12	0.14	0.14	0.14	0.12	0.27	0.14
Total	98.83	98.45	98.96	98.25	93.64	95.37	96.30	93.73	94.04	94.79
As	0	0	3	0	2	0	2	1	1	2
Ba	383	464	266	248	295	267	251	272	526	269
Co	58	50	76	55	24	22	23	24	24	32
Cr	130	119	152	129	181	169	176	170	189	158
Cu	10	11	7	6	27	25	26	22	31	28
Ga	11	12	7	9	16	15	15	15	14	15
La	29	31	36	34	8	14	9	16	51	10
Ni	57	47	19	55	53	49	55	42	70	45
Nb	15	15	11	11	8	11	8	8	19	9
Pb	14	14	11	11	10	17	11	10	16	12
Rb	33	50	46	24	23	22	22	21	81	22
Sr	125	118	77	98	196	209	230	248	279	220
Sb	0	0	0	0	0	3	0	0	0	0
S	0	0	0	0	14	357	541	249	1107	1529
Th	5	6	7	5	3	4	5	8	14	9
V	105	108	51	95	202	214	210	173	153	195
Y	29	30	29	28	27	29	27	25	29	28
Zn	63	55	28	40	74	75	77	70	72	64
Zr	284	282	373	141	111	127	120	105	313	128

TABLE 4.42

VAR. / ID.	A13	A14	A15	A17	A18	A19	A20	A21	A22	A23
East	26294	26298	26303	26279	26278	26277	26276	26277	26279	26281
North	60512	60508	60503	60549	60554	60558	60567	60571	60574	60576
SiO2	61.24	62.55	60.66	59.73	59.34	58.50	55.27	54.42	58.73	57.85
Al2O3	11.33	9.47	10.73	13.49	12.09	13.16	14.59	15.42	12.58	12.12
TiO2	1.26	1.31	1.22	1.19	1.25	1.24	1.43	1.37	1.36	1.46
Fe2O3	8.83	8.93	8.93	7.82	9.70	9.48	11.42	10.68	9.88	9.79
MgO	5.35	4.18	4.89	4.69	4.64	5.16	6.80	5.83	5.37	6.51
CaO	4.19	4.63	4.20	3.82	3.19	3.62	2.83	2.58	3.65	3.13
Na2O	2.70	2.31	2.60	1.78	3.00	2.78	2.33	2.32	2.70	2.67
K2O	1.08	1.21	1.12	2.01	1.15	1.51	1.55	1.99	1.20	0.74
MnO	0.15	0.16	0.15	0.10	0.14	0.15	0.14	0.14	0.17	0.16
P2O5	0.14	0.13	0.13	0.17	0.14	0.15	0.16	0.16	0.15	0.15
Total	96.27	94.88	94.63	94.80	94.64	95.75	96.52	94.91	95.79	94.58
As	0	0	0	2	0	0	3	3	2	0
Ba	279	278	278	375	378	417	307	426	339	254
Co	22	25	26	21	23	26	28	31	28	26
Cr	154	158	159	187	156	152	162	184	264	179
Cu	23	24	21	28	29	29	44	42	29	26
Ga	15	14	15	15	14	16	17	18	15	17
La	13	12	13	30	18	12	21	24	20	11
Ni	44	42	47	68	49	55	62	70	55	50
Nb	11	11	9	15	9	12	11	13	11	11
Pb	10	12	9	13	12	15	17	21	10	13
Rb	25	26	27	61	29	37	44	63	30	19
Sr	243	190	192	126	216	248	182	197	232	210
Sb	0	0	0	0	0	0	0	0	0	0
S	689	517	637	916	1021	1058	3993	5555	1671	899
Th	6	6	9	10	3	1	6	7	4	4
V	193	178	178	140	174	172	209	196	191	207
Y	27	26	27	31	27	30	34	32	29	30
Zn	73	63	74	77	74	76	96	103	76	78
Zr	123	115	127	241	129	142	152	162	139	152

TABLE 4.42

VAR. / ID.	A24	A26	A33	A35	A36	A43	A45	A46	A49	A51
East	26282	26286	26305	26397	26398	26387	26387	26386	26396	26357
North	60581	60589	60617	60615	60612	60705	60714	60718	60728	60734
SiO2	60.90	62.40	59.41	62.57	60.08	63.34	61.08	62.28	59.81	57.28
Al2O3	12.07	9.89	10.99	11.37	11.19	9.25	11.01	11.02	10.49	12.56
TiO2	1.38	1.28	1.36	1.14	1.29	1.51	1.28	1.26	1.31	1.27
Fe2O3	9.38	9.23	9.30	8.69	8.64	9.40	9.48	8.78	9.48	9.57
MgO	5.03	4.38	5.01	4.05	4.73	3.75	4.77	4.62	5.01	6.26
CaO	3.84	4.88	4.36	3.87	4.62	5.21	4.54	4.49	3.54	3.79
Na2O	2.79	2.66	2.79	3.17	2.87	2.45	2.85	2.89	2.77	2.75
K2O	1.02	1.14	0.92	1.15	0.91	1.00	1.03	0.99	1.02	1.09
MnO	0.14	0.16	0.15	0.13	0.13	0.16	0.15	0.14	0.16	0.14
P2O5	0.16	0.13	0.15	0.14	0.14	0.13	0.15	0.14	0.14	0.15
Total	96.71	96.15	94.44	96.28	94.60	96.20	96.34	96.61	93.73	94.86
As	3	1	0	0	0	0	1	0	0	3
Ba	278	287	273	297	256	276	263	269	274	254
Co	27	21	25	23	23	22	29	22	22	27
Cr	168	144	174	131	163	153	168	159	149	188
Cu	27	22	25	26	26	20	27	23	23	24
Ga	16	14	16	14	14	15	14	16	13	16
La	18	12	13	7	14	15	0	5	13	13
Ni	49	41	47	45	49	37	48	44	44	63
Nb	10	10	12	9	10	9	10	9	9	9
Pb	10	8	12	12	15	12	10	14	9	12
Rb	23	27	21	26	22	23	24	25	22	25
Sr	192	201	214	185	186	195	212	183	169	175
Sb	0	0	0	0	0	0	0	0	0	0
S	2163	728	1156	0	144	1493	118	864	0	1468
Th	5	3	5	2	4	7	5	3	6	3
V	198	194	212	164	198	216	195	201	192	187
Y	29	25	30	26	27	28	30	29	30	30
Zn	77	66	75	67	71	67	72	69	63	79
Zr	136	118	146	110	130	119	127	123	123	136

TABLE 4.42

VAR. / ID.	S54	S56	S57	S58	S59	S60	S62	S64	S65	S67
East	27886	27873	27869	27858	27851	27844	27825	27811	27801	27774
North	60031	60042	60048	60056	60057	60063	60069	60075	60082	60093
SiO2	60.08	67.88	61.45	71.45	69.71	70.73	71.78	69.22	73.68	62.90
Al2O3	11.18	9.64	13.15	11.85	11.28	10.63	10.92	10.14	9.19	11.85
TiO2	0.90	0.89	0.83	0.91	1.00	0.96	0.90	1.37	0.91	0.95
Fe2O3	6.39	6.59	6.36	4.84	5.14	4.93	4.55	6.53	3.88	7.82
MgO	4.25	4.03	4.73	1.88	2.29	2.10	2.23	2.74	1.92	5.72
CaO	8.45	3.07	4.80	0.85	1.10	1.74	1.97	1.94	2.78	1.76
Na2O	2.26	2.32	0.99	2.31	1.90	2.01	2.12	2.06	2.31	2.25
K2O	2.01	1.72	2.50	1.61	1.77	1.68	1.71	1.22	1.13	1.22
MnO	0.24	0.09	0.08	0.08	0.07	0.07	0.06	0.08	0.06	0.12
P2O5	0.26	0.17	0.17	0.26	0.20	0.20	0.17	0.42	0.27	0.16
Total	96.02	96.40	95.06	96.04	94.46	95.05	96.41	95.72	96.13	94.75
As	3	4	4	0	0	1	0	0	1	3
Ba	406	437	369	350	394	368	354	295	254	334
Co	17	11	15	13	17	13	12	17	12	22
Cr	184	183	142	81	93	82	80	86	72	334
Cu	23	12	26	13	13	13	11	13	11	20
Ga	13	12	13	11	12	10	10	11	9	13
La	27	27	18	38	30	28	31	51	31	32
Ni	56	44	71	30	28	25	25	39	23	105
Nb	12	11	15	18	18	17	18	21	16	11
Pb	8	41	8	13	16	9	14	15	10	18
Rb	52	41	69	47	49	47	47	33	31	36
Sr	177	154	124	68	71	89	91	87	107	164
Sb	0	0	0	0	0	0	2	0	2	0
S	495	701	1633	47	0	0	18	7	126	114
Th	8	10	10	14	9	10	10	16	11	10
V	114	115	93	79	77	75	68	94	68	123
Y	20	22	21	27	24	24	22	33	27	25
Zn	34	66	48	51	48	45	41	58	37	57
Zr	174	233	210	281	297	302	263	511	355	213

TABLE 4.42

VAR. / ID.	S70	S75	S77	S85	S88	S93	S95	S96	S97	S99
East	27734	27661	27628	27634	27620	27610	27599	27592	27585	27580
North	60105	60123	60125	60299	60324	60345	60356	60363	60368	60371
SiO2	61.02	59.74	59.95	57.73	62.20	69.28	58.21	55.84	65.64	61.88
Al2O3	14.88	12.85	12.25	12.43	13.98	11.32	14.74	14.41	9.82	12.64
TiO2	1.04	0.85	0.88	1.14	0.85	0.94	1.17	0.89	0.86	0.99
Fe2O3	8.36	6.70	7.43	8.18	6.91	5.26	8.07	7.54	7.30	6.89
MgO	4.26	6.13	7.12	7.18	3.57	2.76	6.67	7.46	5.59	4.20
CaO	0.87	2.74	2.38	4.73	3.08	1.53	2.78	3.05	4.31	4.45
Na2O	1.51	2.62	2.35	2.39	1.36	2.41	1.98	2.53	2.19	2.42
K2O	2.67	2.15	2.08	1.93	2.22	1.37	2.85	2.28	0.86	2.01
MnO	0.11	0.10	0.10	0.13	0.09	0.07	0.11	0.13	0.12	0.16
P2O5	0.17	0.17	0.19	0.24	0.17	0.24	0.22	0.19	0.16	0.20
Total	94.89	94.05	94.73	96.08	94.43	95.18	96.80	94.32	96.85	95.84
As	3	1	1	0	2	2	2	4	0	0
Ba	495	770	778	616	460	292	749	643	331	548
Co	24	26	25	27	18	14	23	23	18	24
Cr	143	286	304	322	85	101	257	175	297	240
Cu	24	27	25	33	20	15	36	33	19	31
Ga	17	16	15	16	15	11	16	15	12	14
La	31	19	22	25	29	27	26	23	19	25
Ni	92	154	158	143	64	31	118	113	89	100
Nb	17	10	12	11	17	18	13	11	10	12
Pb	19	22	15	14	12	24	17	10	16	12
Rb	77	55	53	49	62	39	74	69	20	54
Sr	77	389	309	455	87	129	370	367	157	311
Sb	0	0	2	0	2	0	0	0	0	0
S	342	197	272	166	446	89	917	300	339	162
Th	12	4	11	8	17	11	10	6	4	7
V	113	117	125	151	93	83	157	130	121	134
Y	24	19	20	21	19	26	21	19	15	23
Zn	81	64	66	68	72	75	66	63	58	43
Zr	220	159	167	187	201	314	167	149	131	193

VAR. / ID.	S100	S101	S102	S103	S104	S105	S107	S108	S110	S111
East	27641	27630	27622	27651	27653	27664	27680	27673	27686	27566
North	60256	60260	60261	60253	60245	60239	60220	60227	60201	60349
SiO2	61.58	69.64	56.89	69.54	58.40	57.70	71.16	75.91	58.73	60.22
Al2O3	11.32	12.31	12.04	10.93	12.67	12.89	11.56	10.18	11.59	12.85
TiO2	0.87	0.90	0.90	0.92	0.94	1.00	1.08	0.89	0.89	0.93
Fe2O3	7.04	5.20	7.34	4.96	7.38	8.04	5.59	4.76	7.08	7.93
MgO	6.51	2.64	7.99	1.99	8.01	7.25	2.16	2.21	5.42	7.10
CaO	2.94	0.89	3.95	1.70	2.81	3.82	0.83	1.38	6.04	3.39
Na2O	2.45	1.93	2.29	1.70	2.66	2.39	1.59	2.04	2.21	2.47
K2O	1.65	1.79	1.78	1.77	1.52	1.74	1.78	1.16	1.47	1.80
MnO	0.10	0.06	0.13	0.08	0.10	0.12	0.08	0.07	0.14	0.14
P2O5	0.19	0.19	0.21	0.16	0.21	0.19	0.19	0.19	0.19	0.16
Total	94.65	95.55	93.52	93.75	94.70	95.14	96.02	98.79	93.76	96.99
As	3	0	0	3	0	0	2	0	2	0
Ba	619	385	871	376	649	744	374	274	309	605
Co	21	13	27	11	27	27	12	11	21	21
Cr	308	84	306	92	329	395	92	80	355	321
Cu	28	14	33	14	30	30	12	15	27	25
Ga	13	12	16	10	15	16	11	10	14	14
La	23	30	22	18	19	27	27	19	21	23
Ni	141	39	149	28	148	157	26	26	138	97
Nb	11	17	10	17	13	11	18	15	11	10
Pb	18	12	15	10	18	14	10	11	8	14
Rb	40	47	44	45	39	43	44	32	41	45
Sr	310	73	447	75	403	357	57	83	223	286
Sb	0	0	0	0	0	0	0	0	0	0
S	393	217	291	187	307	463	366	141	266	414
Th	8	14	6	12	13	8	9	7	5	11
V	121	76	142	81	143	147	83	61	137	145
Y	17	23	18	22	21	23	23	21	19	21
Zn	63	56	77	50	69	109	44	38	53	68
Zr	149	227	158	255	176	192	334	268	166	163

VAR. / ID.	S113	S114	S115	S116	E117	S118	S119	S120	S121	S122
East	27548	27542	27532	27526	27442	27452	27456	27455	27466	27462
North	60359	60365	60366	60372	60520	60512	60503	60491	60483	60474
SiO2	58.55	61.06	60.78	62.10	59.85	60.34	61.82	60.44	60.41	63.09
Al2O3	12.00	14.05	12.79	14.10	12.50	12.55	12.02	12.49	12.01	12.91
TiO2	1.03	0.96	0.67	0.80	0.81	0.75	0.82	0.82	1.01	0.77
Fe2O3	8.16	7.61	6.01	6.86	7.18	6.38	7.16	7.17	8.01	6.32
MgO	6.24	5.11	5.04	4.08	6.72	4.53	5.76	5.51	6.55	4.53
CaO	4.26	2.47	3.66	2.78	2.39	4.13	3.74	3.92	3.81	3.11
Na2O	2.60	2.81	3.54	2.51	2.67	4.02	3.36	3.96	2.60	3.63
K2O	1.37	1.98	1.38	2.80	1.86	0.95	1.24	1.05	1.28	1.56
MnO	0.14	0.12	0.10	0.11	0.12	0.11	0.12	0.12	0.13	0.10
P2O5	0.19	0.16	0.15	0.15	0.15	0.16	0.17	0.19	0.21	0.16
Total	94.54	96.33	94.12	96.29	94.25	93.92	96.21	95.67	96.02	96.18
As	0	0	0	2	0	0	0	0	0	0
Ba	502	578	497	741	676	389	405	389	365	463
Co	23	20	12	20	18	21	24	24	26	20
Cr	269	227	151	151	231	208	260	209	294	173
Cu	30	23	20	29	25	25	24	24	26	19
Ga	15	16	14	16	14	15	13	16	15	13
La	24	21	15	20	23	18	16	19	17	23
Ni	104	92	58	61	89	72	86	73	87	72
Nb	12	10	8	9	9	9	10	9	11	9
Pb	15	16	14	15	14	15	13	12	13	16
Rb	32	49	35	79	49	26	29	24	30	36
Sr	422	332	198	312	333	428	226	221	181	220
Sb	0	0	0	0	0	0	0	0	0	2
S	316	614	557	2389	792	886	903	711	1251	940
Th	7	9	9	10	11	9	8	7	15	7
V	145	127	105	121	128	125	123	131	156	112
Y	21	18	18	22	20	21	21	18	21	20
Zn	68	70	52	74	67	60	69	63	66	56
Zr	159	148	129	137	137	150	141	140	188	142

VAR. / ID.	S123	S124	S125	S126	S127	S128	S129	S130	S131	S133
East	27476	27462	27460	27454	27465	27471	27480	27487	27493	27509
North	60469	60447	60434	60422	60418	60410	60402	60393	60388	60378
SiO2	59.82	65.17	64.58	69.31	58.69	58.30	60.64	62.42	60.58	61.97
Al2O3	13.64	11.14	10.57	11.81	13.09	13.46	12.69	12.19	13.43	11.58
TiO2	0.83	0.71	0.92	0.84	1.00	0.89	0.87	0.90	0.97	0.77
Fe2O3	7.61	6.75	7.59	5.25	8.28	7.52	7.26	7.04	8.09	6.70
MgO	5.57	5.81	4.86	2.48	6.56	5.44	5.91	6.15	6.00	4.66
CaO	1.75	1.96	2.87	1.60	4.44	3.24	2.56	3.48	3.09	4.25
Na2O	3.04	2.54	2.41	2.67	2.70	2.49	3.00	2.64	3.42	3.20
K2O	1.37	1.85	1.52	1.77	1.60	2.16	1.28	1.58	0.84	1.52
MnO	0.10	0.12	0.12	0.06	0.13	0.11	0.10	0.11	0.13	0.11
P2O5	0.16	0.13	0.15	0.19	0.21	0.18	0.15	0.17	0.18	0.14
Total	93.89	96.18	95.59	95.98	96.70	93.79	94.46	96.68	96.73	94.90
As	1	0	0	0	0	0	2	0	0	0
Ba	443	555	507	366	469	685	442	618	283	472
Co	20	18	20	13	25	29	16	22	23	21
Cr	153	258	416	132	250	239	294	225	352	200
Cu	26	16	20	16	33	31	22	23	27	21
Ga	15	13	13	11	13	18	14	13	16	15
La	17	23	24	28	17	19	24	20	22	12
Ni	74	73	66	42	78	94	95	95	92	76
Nb	11	9	8	15	9	10	8	11	11	10
Pb	13	14	12	14	14	15	13	13	13	12
Rb	37	46	37	46	38	58	31	38	23	35
Sr	266	262	317	128	302	453	302	367	318	233
Sb	2	1	0	0	0	0	4	5	0	0
S	1702	930	1003	1975	682	1495	813	322	647	340
Th	7	9	15	6	8	7	7	8	3	6
V	114	119	165	87	168	139	135	118	130	110
Y	23	18	21	21	21	23	21	20	21	19
Zn	63	70	72	49	71	70	54	63	74	53
Zr	146	117	197	222	150	153	145	158	152	130

TABLE 4.42

VAR. / ID.	S134	E135	E136	E138	E139	E140	E142	E146	E148	E150
East	27517	27468	27459	27434	27424	27415	27397	27395	27392	27423
North	60375	60533	60541	60541	60548	60554	60585	60621	60644	60662
SiO2	62.21	62.66	59.84	69.03	59.59	61.08	69.57	65.52	65.68	65.37
Al2O3	11.43	13.66	14.54	11.65	12.21	13.22	11.17	10.84	11.86	13.11
TiO2	0.79	0.84	1.01	1.20	1.20	1.16	1.03	0.93	1.11	1.19
Fe2O3	7.18	7.02	8.45	5.10	9.27	9.34	5.71	6.50	6.96	7.70
MgO	5.09	4.72	5.44	2.05	5.67	5.51	2.33	3.96	4.24	3.79
CaO	2.39	2.47	1.45	0.61	3.89	1.62	1.09	3.16	2.88	1.65
Na2O	2.82	3.38	2.51	2.09	2.96	3.38	2.11	1.60	1.74	1.65
K2O	1.63	1.69	2.44	1.63	1.31	0.87	2.01	2.04	2.12	1.90
MnO	0.11	0.10	0.10	0.08	0.14	0.12	0.08	0.08	0.10	0.09
P2O5	0.14	0.14	0.18	0.15	0.22	0.19	0.16	0.13	0.15	0.16
Total	93.79	96.68	95.96	93.59	96.46	96.49	95.26	94.76	96.64	96.61
As	0	0	2	0	1	0	4	0	2	3
Ba	483	608	677	396	435	257	494	429	525	318
Co	17	16	32	12	23	24	15	15	17	14
Cr	234	154	204	90	257	253	114	184	192	186
Cu	20	21	30	13	32	27	14	16	17	16
Ga	13	13	18	11	14	15	12	14	14	14
La	28	18	24	32	26	19	23	28	36	33
Ni	74	73	87	22	83	80	27	71	71	74
Nb	10	9	12	16	10	9	17	15	17	17
Pb	13	13	17	12	14	13	13	17	14	11
Rb	39	43	60	41	28	24	54	59	57	53
Sr	256	347	383	56	191	302	111	94	98	66
Sb	0	0	2	0	3	0	0	0	0	2
S	872	847	2528	1191	824	857	1268	535	525	741
Th	9	6	12	8	8	10	11	12	15	11
V	117	112	139	98	181	149	100	100	104	123
Y	19	20	22	22	21	18	23	27	26	27
Zn	59	64	73	31	77	67	57	63	64	67
Zr	142	119	162	282	165	139	276	257	283	292

TABLE 4.42

-2506-

VAR. / ID.	E151	E152	E153	E155	E156	E157	E159	E160	E161	E162
East	27423	27421	27421	27441	27452	27437	27419	27317	27314	27308
North	60672	60681	60689	60709	60726	60731	60743	60715	60725	60735
SiO2	65.23	64.94	64.00	70.45	64.89	65.17	72.27	67.16	69.68	68.66
Al2O3	11.74	13.00	13.83	10.69	12.31	11.63	10.41	10.60	10.44	10.46
TiO2	1.29	0.93	0.95	1.10	1.03	1.38	0.88	1.05	0.99	1.02
Fe2O3	7.70	6.72	6.62	6.09	6.89	7.47	5.07	6.76	6.80	7.05
MgO	4.19	3.64	4.16	3.19	3.50	3.67	2.22	3.42	3.28	3.11
CaO	1.92	2.14	2.80	1.16	1.19	1.19	1.64	1.61	1.48	1.32
Na2O	1.92	1.77	1.92	2.13	2.22	2.03	2.41	1.91	1.98	1.89
K2O	1.98	2.46	2.36	1.23	1.44	1.53	1.47	1.17	1.26	1.41
MnO	0.10	0.10	0.08	0.08	0.10	0.09	0.07	0.09	0.09	0.10
P2O5	0.16	0.14	0.16	0.16	0.17	0.19	0.15	0.16	0.17	0.15
Total	96.23	95.84	96.88	96.28	93.74	94.35	96.59	93.93	96.17	95.17
As	0	0	1	0	3	0	0	2	2	0
Ba	466	468	480	332	367	399	335	305	379	327
Co	15	18	15	16	19	20	14	20	17	16
Cr	160	117	134	152	135	201	97	175	156	157
Cu	19	12	20	16	22	22	14	24	17	18
Ga	14	15	14	12	14	13	11	12	12	12
La	27	31	28	30	34	39	28	26	26	29
Ni	62	63	70	48	60	62	37	53	52	56
Nb	17	16	18	15	15	18	14	14	13	14
Pb	12	12	20	13	9	13	9	9	13	14
Rb	55	74	71	32	39	40	39	31	31	35
Sr	92	87	114	93	116	100	102	111	119	116
Sb	0	0	0	0	1	0	0	0	0	0
S	649	515	869	704	399	715	859	977	553	374
Th	8	12	10	9	15	12	7	7	11	7
V	119	88	99	113	115	140	83	122	119	107
Y	25	23	25	24	26	30	23	25	24	24
Zn	54	54	66	48	65	61	39	63	60	59
Zr	252	213	223	278	214	370	226	275	250	225

VAR. / ID.	E163	E164	E165	E166	E168	E171	E172	E173	E174	E175
East	27303	27296	27284	27280	27260	27246	27263	27272	27286	27287
North	60746	60752	60759	60769	60791	60819	60854	60867	60844	60833
SiO2	67.43	65.60	70.10	65.51	69.47	67.17	63.43	63.18	64.32	67.18
Al2O3	12.72	11.56	10.08	12.77	11.76	11.73	13.93	11.37	11.16	12.19
TiO2	1.04	1.44	1.00	1.23	0.99	1.30	1.35	1.12	1.24	1.00
Fe2O3	6.95	8.16	6.53	7.85	6.24	7.30	8.58	7.78	7.92	6.33
MgO	3.26	3.07	2.78	3.68	2.77	3.10	3.90	4.14	3.27	2.73
CaO	1.26	1.46	0.65	0.82	1.01	0.79	0.59	2.35	2.02	1.06
Na2O	2.17	1.93	1.97	2.02	2.11	2.05	0.79	2.51	1.86	1.96
K2O	1.75	1.70	1.44	1.71	1.60	1.70	1.91	1.41	1.56	1.91
MnO	0.09	0.11	0.08	0.10	0.09	0.10	0.10	0.13	0.11	0.08
P2O5	0.19	0.23	0.13	0.17	0.16	0.18	0.19	0.27	0.18	0.15
Total	96.86	95.26	94.76	95.86	96.20	95.42	94.77	94.26	93.64	94.59
As	0	2	2	3	2	3	2	2	0	1
Ba	430	421	335	419	368	416	419	440	376	429
Co	20	16	13	18	15	15	19	25	18	14
Cr	133	247	141	158	116	136	143	154	156	104
Cu	22	23	16	23	21	22	28	22	20	15
Ga	14	14	11	14	13	13	.16	14	12	13
La	32	37	25	45	37	48	43	31	28	27
Ni	58	58	52	56	43	54	73	48	58	42
Nb	17	19	14	16	16	16	19	16	17	16
Pb	14	21	5	11	8	10	10	7	5	10
Rb	47	44	37	45	41	43	50	34	39	47
Sr	138	139	91	111	96	105	93	197	119	85
Sb	0	0	1	0	0	0	0	0	0	3
S	585	865	334	544	421	88	315	862	578	594
Th	5	13	12	12	8	11	9	11	8	12
V	113	146	108	116	96	121	127	124	133	99
Y	26	30	24	29	24	33	30	27	27	27
Zn	72	69	47	64	50	55	70	60	60	59
Zr	237	410	203	251	222	252	251	207	344	223

VAR. / ID.	E176	E177	E178	A181	A185	A186	A187	A188	A189	A190
East	27281	27267	26508	26461	26446	26437	26432	26427	26423	26420
North	60821	60782	60406	60436	60471	60480	60492	60501	60511	60519
SiO2	65.49	68.57	63.06	62.77	59.34	62.27	64.50	64.20	62.81	61.93
Al2O3	11.92	10.22	11.75	15.00	14.71	12.02	12.33	13.41	11.66	10.69
TiO2	1.34	1.00	0.90	1.11	0.90	1.31	1.01	0.90	1.22	1.25
Fe2O3	8.37	6.74	7.35	7.81	5.25	8.38	7.17	6.75	8.94	7.33
MgO	3.06	3.36	4.54	2.91	1.76	4.91	3.99	4.18	6.00	5.46
CaO	0.91	1.02	2.87	1.12	4.95	2.04	2.64	1.22	2.47	4.11
Na2O	2.03	1.84	3.40	1.81	3.84	1.67	1.66	1.86	1.53	1.22
K2O	1.84	1.26	1.94	2.90	2.66	1.83	2.04	2.37	1.87	2.27
MnO	0.11	0.09	0.12	0.23	0.11	0.11	0.07	0.07	0.13	0.17
P2O5	0.19	0.15	0.26	0.17	0.20	0.19	0.16	0.17	0.24	0.19
Total	95.26	94.25	96.19	95.83	93.72	94.73	95.57	94.86	96.87	94.62
As	0	3	3	12	3	2	3	15	5	7
Ba	402	297	1023	664	650	380	402	415	391	415
Co	27	15	18	18	12	17	26	18	17	21
Cr	152	177	183	196	301	196	169	132	186	308
Cu	23	18	19	23	14	21	17	22	20	17
Ga	15	11	15	15	18	14	14	13	14	14
La	41	29	33	32	28	35	27	37	42	35
Ni	59	50	61	65	18	72	74	72	69	103
Nb	17	14	16	17	12	19	16	16	17	16
Pb	16	7	23	11	16	14	12	7	11	10
Rb	46	36	40	75	72	49	56	61	46	60
Sr	110	84	658	95	517	83	113	63	83	98
Sb	0	0	0	22	8	0	0	0	0	0
S	191	648	153	53	0	273	202	313	496	461
Th	12	10	9	9	9	14	11	10	13	13
V	121	111	122	103	103	127	106	94	133	123
Y	36	24	25	26	22	25	22	22	26	30
Zn	62	57	67	70	53	67	66	59	63	51
Zr	252	248	234	229	181	323	261	197	265	444

TABLE 4.42

VAR. / ID.	A191	A192	A193	A195	A197	A198	A199	A200	A201	A202
East	26418	26412	26407	26396	26386	26381	26383	26384	26385	26387
North	60527	60538	60547	60564	60580	60587	60685	60677	60668	60659
SiO2	63.17	60.47	59.63	58.93	62.42	62.05	58.66	66.33	61.80	61.56
Al2O3	13.49	12.76	10.30	11.03	10.72	9.54	10.22	9.07	9.55	10.24
TiO2	0.90	1.38	0.75	1.51	1.15	1.25	1.50	0.88	1.30	1.39
Fe2O3	6.93	8.31	5.73	10.97	8.64	9.28	10.14	7.88	8.71	8.43
MgO	4.39	5.65	3.57	5.14	5.03	4.60	4.50	3.87	3.98	3.91
CaO	1.23	2.49	12.52	3.78	3.96	3.58	5.09	2.26	4.86	4.40
Na2O	1.61	1.42	1.01	2.92	2.84	2.49	2.91	2.77	2.44	2.72
K2O	2.29	2.25	2.41	1.02	1.18	1.16	0.86	1.33	1.18	1.08
MnO	0.06	0.12	0.11	0.18	0.16	0.14	0.15	0.12	0.15	0.13
P2O5	0.16	0.18	0.15	0.15	0.14	0.13	0.15	0.11	0.14	0.14
Total	94.23	95.03	96.18	95.63	96.24	94.22	94.18	94.62	94.11	94.00
As	3	5	2	3	0	1	1	0	0	2
Ba	405	429	284	262	276	262	241	329	322	291
Co	14	25	13	26	29	23	27	24	19	20
Cr	124	230	122	183	149	141	162	1117	171	165
Cu	20	22	16	28	26	16	23	16	21	23
Ga	15	15	11	17	14	14	17	13	12	15
La	29	39	24	14	16	10	10	13	7	15
Ni	65	87	62	49	49	38	49	52	47	42
Nb	17	20	14	9	9	8	10	8	9	12
Pb	12	7	13	10	12	11	7	9	9	11
Rb	66	62	58	24	27	29	19	26	27	25
Sr	56	73	198	216	199	159	206	173	194	217
St	2	0	0	0	0	0	0	0	0	1
S	341	607	452	640	790	444	387	0	519	747
Th	13	12	9	9	6	7	7	7	4	7
V	92	132	76	203	172	189	210	128	190	197
Y	24	28	20	30	27	28	31	25	28	29
Zn	48	57	50	87	106	57	70	55	66	62
Zr	190	389	178	153	126	111	147	103	137	143

TABLE 4.42

VAR. / ID.	A203	A204	A205	A207	A208	A209	A210	A211	A212	A214
East	26385	26385	26386	26371	26370	26372	26374	26377	26378	26380
North	60649	60641	60631	60743	60752	60760	60768	60776	60784	60810
SiO2	58.72	60.27	61.37	60.62	60.11	59.87	59.78	59.59	60.51	60.50
Al2O3	10.35	10.66	10.83	9.87	11.30	10.14	11.66	9.86	10.75	11.77
TiO2	1.51	1.55	1.45	1.34	1.30	1.33	1.28	1.47	1.33	1.33
Fe2O3	10.08	9.67	9.50	9.51	9.64	9.59	9.27	9.99	9.81	10.10
MgO	5.16	4.66	5.03	4.86	5.26	4.46	5.45	5.03	5.20	5.99
CaO	4.87	4.25	4.63	6.18	4.77	5.04	4.31	6.47	3.19	3.12
Na2O	2.66	2.60	2.74	2.63	2.96	2.66	2.82	2.33	2.79	2.75
K2O	0.84	0.99	0.79	0.51	0.90	0.96	0.85	0.79	0.81	0.66
MnO	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.16	0.16	0.16
P2O5	0.15	0.16	0.16	0.14	0.14	0.14	0.17	0.17	0.13	0.14
Total	94.51	94.97	96.66	95.82	96.53	94.34	95.73	95.86	94.68	96.52
As	2	2	0	2	1	1	0	1	3	0
Ba	259	265	223	244	232	246	238	208	228	214
Co	31	20	24	24	28	23	25	20	23	23
Cr	196	186	186	243	202	195	189	210	162	172
Cu	27	23	23	20	25	19	27	23	22	25
Ga	14	15	14	14	15	15	14	13	15	16
La	13	14	14	10	20	14	12	12	11	17
Ni	57	47	52	63	62	57	58	50	44	47
Nb	9	11	11	10	10	9	9	11	8	10
Pb	9	11	13	10	9	10	14	10	5	6
Rb	19	22	18	12	20	22	18	19	18	16
Sr	233	214	229	189	186	194	244	222	180	202
Sb	4	0	0	0	0	0	0	0	0	0
S	465	535	660	1364	915	1283	1367	2087	217	1313
Th	4	6	2	6	6	3	8	4	3	1
V	217	203	207	196	194	181	189	214	192	205
Y	27	29	31	28	27	28	29	30	29	29
Zn	73	83	74	66	73	68	70	80	40	76
Zr	128	189	147	113	118	134	128	129	107	130

TABLE 4.42

VAR. / ID.	A215	A216	A217	A218	A219	A221	A222	A225	A227	A228
East	26376	26361	26353	26345	26327	26314	26302	26273	26257	26247
North	60822	60824	60851	60870	60891	60909	60916	60963	60980	60988
SiO2	60.30	66.77	60.14	63.75	63.57	64.88	64.63	63.86	62.58	65.37
Al2O3	11.19	12.45	10.88	10.31	15.01	11.88	12.59	11.77	9.37	12.51
TiO2	1.36	1.03	1.28	1.22	1.36	1.29	1.14	0.99	1.50	1.03
Fe2O3	9.08	6.82	9.90	8.18	7.82	7.51	7.51	6.57	9.48	6.99
MgO	5.51	3.51	4.74	4.01	3.48	3.44	3.37	3.33	3.88	3.36
CaO	3.63	1.28	4.62	3.84	0.78	0.86	1.90	6.49	4.48	1.19
Na2O	2.51	1.95	2.85	3.01	2.22	1.92	1.75	1.70	2.56	2.58
K2O	0.49	1.63	0.96	0.93	2.04	1.62	1.73	1.91	0.95	1.77
MnO	0.13	0.09	0.17	0.14	0.10	0.10	0.10	0.09	0.17	0.09
P2O5	0.14	0.17	0.14	0.14	0.20	0.16	0.17	0.15	0.13	0.16
Total	94.34	95.70	95.68	95.53	96.58	93.66	94.89	96.86	95.10	95.05
As	1	3	0	2	1	2	2	3	3	1
Ba	173	428	249	256	459	380	374	336	271	406
Co	22	16	28	17	17	16	19	22	30	17
Cr	192	155	171	149	162	178	158	209	256	149
Cu	21	19	24	19	24	17	23	20	22	14
Ga	14	14	15	14	15	13	14	14	13	15
La	15	32	6	11	31	35	29	25	15	36
Ni	55	60	51	43	69	67	67	91	42	58
Nb	10	18	8	9	20	17	15	16	10	16
Pb	11	10	11	9	4	9	10	10	9	6
Rb	12	47	21	21	49	41	47	48	20	46
Sr	162	110	173	164	95	94	104	115	178	135
Sb	0	0	0	0	0	0	0	0	0	0
S	1997	399	0	0	631	746	889	516	364	179
Th	4	8	0	6	8	12	8	11	7	8
V	198	111	185	166	126	127	117	104	203	107
Y	29	26	28	26	29	29	26	24	28	25
Zn	71	53	75	69	60	55	55	57	72	53
Zr	151	232	118	129	302	284	234	219	132	224

VAR. / ID.	A229	A232	A233	A234	N237	N238	N239	N241	N242	N250
East	26237	26226	26210	26200	26719	26720	26722	26721	26721	26752
North	60991	61065	61059	61065	61272	61261	61247	61228	61219	61079
SiO2	64.58	55.23	54.87	52.71	50.07	52.57	63.71	57.78	62.50	62.73
Al2O3	13.53	12.31	13.18	12.47	10.94	12.15	13.00	10.08	14.70	13.43
TiO2	1.18	1.78	1.72	2.22	1.78	1.93	1.12	1.21	1.35	1.27
Fe2O3	7.48	11.45	10.27	12.50	11.90	12.68	7.30	9.61	7.95	7.32
MgO	3.48	8.34	6.81	8.18	10.93	8.33	3.04	5.14	3.83	3.36
CaO	0.70	2.27	2.98	2.48	5.33	3.14	1.44	7.03	0.75	1.51
Na2O	2.29	2.70	2.89	2.68	1.94	2.22	2.03	2.33	2.12	1.77
K2O	2.11	1.31	1.66	1.27	0.87	1.68	1.90	1.75	1.92	1.97
MnO	0.11	0.16	0.15	0.17	0.18	0.16	0.16	0.16	0.10	0.14
P2O5	0.17	0.20	0.22	0.22	0.17	0.20	0.17	0.43	0.18	0.17
Total	95.63	95.75	94.75	94.90	94.11	95.06	93.87	95.52	95.40	93.67
As	3	2	3	3	0	5	2	4	2	5
Ba	455	343	352	303	157	252	405	523	413	463
Co	16	29	28	33	31	39	21	28	17	20
Cr	537	293	269	374	853	535	156	335	209	238
Cu	23	38	41	44	87	36	17	33	23	22
Ga	16	16	17	17	15	17	16	15	15	15
La	29	16	17	20	26	6	24	25	48	34
Ni	67	131	107	126	336	226	70	92	73	79
Nb	18	15	17	16	8	10	18	14	20	19
Pb	11	9	12	9	6	11	11	9	10	10
Rb	54	26	36	24	16	39	51	34	53	55
Sr	100	149	204	184	138	138	73	404	81	113
Sb	0	0	0	0	0	0	0	0	0	8
S	184	932	2173	1745	1186	2282	61	218	516	256
Th	12	5	6	5	4	5	12	7	10	8
V	114	215	213	275	246	250	109	193	140	134
Y	28	28	30	27	23	20	26	28	27	28
Zn	64	76	107	79	70	57	53	58	95	62
Zr	266	145	176	152	100	131	257	170	302	319

TABLE 4.42

VAR. / ID.	N251	N252	N253	N255	N256	N257	N258	N259	N260	N261
East	26758	26760	26764	26802	26799	26795	26793	26792	26779	26775
North	61087	61097	61106	61182	61174	61168	61161	61155	61134	61127
SiO2	64.78	64.41	66.99	65.09	64.24	65.16	67.40	67.58	74.45	72.44
Al2O3	13.06	12.36	12.66	13.16	13.81	13.14	13.00	13.24	9.91	10.36
TiO2	1.21	1.23	1.06	1.41	1.23	1.10	1.01	0.81	0.72	0.86
Fe2O3	7.60	7.57	6.45	8.29	7.63	6.63	6.47	6.05	4.83	5.53
MgO	3.03	3.30	2.63	3.77	2.78	3.02	3.26	3.03	2.18	2.24
CaO	0.86	1.04	2.10	0.88	1.12	1.23	1.01	0.93	0.56	0.36
Na2O	2.07	1.70	1.71	2.18	2.27	2.74	2.30	3.31	2.47	2.56
K2O	2.09	1.86	1.71	1.87	2.13	1.94	1.83	1.53	1.18	1.37
MnO	0.09	0.11	0.11	0.12	0.10	0.09	0.08	0.09	0.09	0.07
P2O5	0.18	0.15	0.17	0.18	0.18	0.18	0.15	0.16	0.15	0.18
Total	94.97	93.73	95.59	96.95	95.49	95.23	96.51	96.73	96.54	95.97
As	2	10	3	2	2	0	2	3	5	5
Ba	471	398	381	400	450	414	387	345	325	341
Co	21	20	13	20	18	17	19	17	11	12
Cr	151	197	149	204	135	152	135	135	115	138
Cu	24	19	18	21	24	19	16	17	13	12
Ga	15	14	12	15	14	14	13	14	9	10
La	32	34	28	29	37	33	27	30	26	26
Ni	68	71	57	69	61	55	55	56	44	42
Nb	18	18	16	18	19	18	15	14	12	14
Pb	12	11	11	8	9	15	7	8	11	9
Rb	55	52	46	47	54	50	47	43	33	34
Sr	100	83	110	90	109	164	92	157	95	117
Sb	0	3	3	0	1	0	0	0	0	5
S	28	259	867	118	223	1297	221	937	184	160
Th	11	11	8	14	8	8	9	8	8	12
V	115	125	104	133	113	113	113	91	82	95
Y	25	26	21	27	29	25	21	21	20	23
Zn	72	63	56	60	56	64	50	53	44	38
Zr	236	271	259	329	282	250	201	203	154	196

TABLE 4.42

VAR. / ID.	N262	N263	N265	N267	N268	N269	N270	N274	K280	K284
East	26770	26768	26860	26849	26842	26839	26832	26936	26887	26882
North	61119	61113	61084	61070	61065	61057	61051	60984	60944	60912
SiO2	63.47	62.88	65.15	62.80	63.14	65.16	66.67	64.26	63.85	58.78
Al2O3	14.73	14.60	13.64	12.50	13.09	12.13	13.34	12.31	13.84	11.52
TiO2	1.18	1.39	1.16	1.21	1.23	1.12	1.22	0.97	0.90	1.61
Fe2O3	7.27	7.81	7.64	7.59	7.75	7.34	6.98	7.45	7.04	9.73
MgO	2.98	3.23	2.64	4.18	3.60	3.15	2.75	4.57	3.83	5.30
CaO	1.21	0.94	0.98	1.28	1.66	1.71	0.65	3.26	2.39	3.37
Na2O	1.97	2.03	1.97	2.21	2.23	2.04	2.20	1.52	1.77	2.80
K2O	2.08	2.06	2.11	1.76	1.77	1.76	1.74	2.26	2.44	0.81
MnO	0.10	0.10	0.10	0.11	0.11	0.09	0.08	0.12	0.11	0.13
P2O5	0.17	0.18	0.16	0.21	0.22	0.18	0.18	0.16	0.18	0.16
Total	95.16	95.22	95.55	93.85	94.80	94.68	95.81	96.88	96.35	94.21
As	9	2	1	0	2	2	0	1	3	2
Ba	463	460	455	487	417	382	384	349	369	188
Co	17	22	27	19	16	20	17	19	16	25
Cr	157	181	196	214	140	169	137	154	121	179
Cu	21	23	17	20	20	18	22	15	16	25
Ga	15	15	15	13	15	13	14	14	13	16
La	33	44	27	36	41	27	38	26	32	19
Ni	71	70	68	63	61	63	60	72	67	50
Nb	20	20	16	17	17	16	19	16	15	10
Pb	7	8	14	8	8	8	8	9	8	11
Rb	61	56	51	45	43	45	46	59	63	20
Sr	92	99	114	120	147	103	90	79	77	196
Sb	7	0	0	0	0	0	0	0	3	0
S	223	189	193	317	434	554	459	295	276	1166
Th	9	12	7	12	10	6	14	10	12	4
V	117	131	116	123	131	117	115	98	85	211
Y	27	30	22	27	27	25	26	25	25	31
Zn	61	70	66	59	68	53	51	52	41	69
Zr	264	355	235	251	209	226	265	219	181	162

VAR. / ID.	N292	N294	A297	A299	A300	A301	A302	A303	A304	A305
East	26243	26251	26147	26141	26306	26302	26387	26394	26402	26412
North	61192	61139	61119	61142	60594	60483	60363	60358	60349	60351
SiO2	53.60	53.64	55.11	63.96	62.34	58.69	63.91	63.75	65.13	56.34
Al2O3	12.46	11.36	12.82	11.53	9.79	11.10	12.24	13.57	12.50	19.16
TiO2	2.03	1.75	1.80	1.46	1.19	1.41	0.91	1.04	1.17	1.31
Fe2O3	12.06	12.32	10.95	8.50	8.41	10.21	7.13	7.27	7.59	9.74
MgO	8.17	8.55	6.43	4.14	4.08	4.91	4.36	4.54	4.47	3.67
CaO	4.14	3.69	1.82	2.04	5.88	5.05	2.71	2.13	1.98	0.33
Na2O	2.07	2.72	2.73	3.16	2.65	2.83	1.76	1.67	1.62	1.61
K2O	1.70	0.94	1.82	1.60	1.17	0.92	1.89	2.29	1.86	2.99
MnO	0.18	0.17	0.18	0.13	0.14	0.16	0.10	0.10	0.11	0.09
P2O5	0.21	0.20	0.19	0.23	0.13	0.16	0.17	0.18	0.18	0.16
Total	96.62	95.34	93.85	96.75	95.78	95.44	95.18	96.54	96.61	95.40
As	6	2	0	0	2	2	0	0	2	8
Ba	311	191	289	390	271	257	371	438	400	673
Co	35	31	32	23	25	23	18	18	18	22
Cr	720	385	265	182	163	164	140	178	240	175
Cu	35	34	29	20	23	23	18	21	20	33
Ga	16	16	16	14	13	16	13	16	14	21
La	15	16	21	23	10	13	32	28	29	41
Ni	225	112	104	61	38	53	62	76	91	68
Nb	12	12	14	14	8	10	16	17	17	20
Pb	8	5	16	11	11	11	15	16	12	11
Rb	39	20	43	42	26	22	53	63	50	87
Sr	168	204	150	262	175	261	153	119	92	81
Sb	0	0	0	0	0	1	0	0	0	7
S	4398	1526	2228	0	640	493	317	661	450	2145
Th	2	5	0	9	3	5	14	10	11	16
V	232	246	233	159	180	200	97	110	114	153
Y	22	25	24	23	27	32	24	23	24	31
Zn	53	95	56	56	72	87	65	70	67	94
Zr	127	120	143	158	113	137	237	226	293	205

VAR. / ID.	A306	A307	N308	A309	A310	A311	A313	A314	A315	K317
East	26425	26434	26443	26482	26489	26528	26505	26456	26368	26898
North	60347	60346	60344	60329	60326	60266	60228	60309	60821	60903
SiO2	61.70	63.83	62.29	60.24	62.68	68.41	66.61	64.26	62.32	65.01
Al2O3	13.24	10.91	16.09	11.34	10.35	12.04	11.09	10.24	13.29	12.65
TiO2	1.55	0.95	1.27	1.32	0.99	1.09	1.32	0.87	1.13	0.85
Fe2O3	8.57	7.30	8.15	8.99	7.47	6.93	7.89	7.76	7.45	6.41
MgO	3.65	4.17	3.33	5.85	5.69	2.88	3.68	4.82	3.24	4.44
CaO	1.47	3.11	0.93	2.38	3.26	0.90	0.86	4.27	2.22	3.40
Na2O	2.03	2.86	2.02	2.10	2.00	2.08	2.12	2.52	1.89	1.58
K2O	1.77	1.75	2.47	1.16	1.29	1.64	1.40	1.54	1.94	2.43
MnO	0.13	0.13	0.08	0.12	0.08	0.11	0.12	0.14	0.10	0.08
P2O5	0.22	0.27	0.21	0.41	0.17	0.17	0.17	0.37	0.19	0.15
Total	94.33	95.28	96.84	93.91	93.98	96.25	95.26	96.79	93.77	97.00
As	2	3	1	2	0	4	1	1	3	0
Ba	341	1484	509	371	309	373	322	758	401	410
Co	17	17	22	18	20	21	16	24	18	18
Cr	186	216	156	251	288	124	195	216	140	142
Cu	9	26	32	26	18	17	12	25	26	16
Ga	15	13	17	14	13	14	13	13	15	13
La	36	38	34	38	26	25	32	42	40	27
Ni	73	63	66	80	68	53	61	61	61	73
Nb	21	14	20	16	12	16	16	13	20	15
Pb	5	12	15	12	12	7	10	15	12	14
Rb	48	37	69	29	37	41	39	34	53	66
Sr	84	1027	121	314	214	77	89	441	123	202
Sb	0	0	0	2	0	1	0	0	0	0
S	566	683	705	491	454	321	520	1087	397	378
Th	8	10	9	12	9	7	8	8	12	9
V	132	139	130	171	127	105	134	137	115	94
Y	29	27	27	24	23	26	29	25	28	23
Zn	61	44	99	87	54	52	51	67	75	65
Zr	323	251	231	264	258	208	321	197	263	206

VAR. / ID.	K318	K321	K322	K323	K325	K327	K328	K330	K331	A334
East	26908	26947	26963	27000	27009	26990	26986	27123	27200	26284
North	60899	60881	60878	60893	60879	60861	60852	60880	60874	60899
SiO2	59.28	61.59	63.34	57.42	64.34	59.45	61.66	64.44	63.85	68.88
Al2O3	9.83	14.74	12.98	14.86	12.76	13.86	13.28	12.75	13.16	11.40
TiO2	1.10	1.11	1.33	1.24	1.04	1.21	1.00	1.00	1.45	1.05
Fe2O3	6.98	8.17	7.72	8.57	6.98	8.26	7.01	6.69	8.43	6.41
MgO	5.82	4.30	4.55	5.71	3.96	5.11	4.76	3.93	3.84	2.57
CaO	7.56	2.96	1.18	1.38	1.33	2.06	2.80	3.04	0.65	0.58
Na2O	1.43	0.94	1.77	1.51	1.77	1.51	1.60	1.71	1.96	2.06
K2O	2.13	2.49	2.12	2.95	1.97	2.73	2.49	2.02	1.80	1.50
MnO	0.26	0.09	0.07	0.08	0.09	0.11	0.08	0.08	0.10	0.10
P2O5	0.19	0.18	0.21	0.28	0.19	0.23	0.16	0.17	0.21	0.15
Total	94.58	96.57	95.27	94.00	94.43	94.53	94.84	95.83	95.45	94.70
As	2	3	2	6	0	4	1	2	4	2
Ba	325	394	433	889	416	550	446	369	439	339
Co	14	18	19	18	17	19	16	16	18	16
Cr	233	161	220	137	167	162	152	177	174	141
Cu	14	22	22	36	18	29	18	18	20	16
Ga	13	16	15	17	14	16	14	14	15	12
La	33	35	34	58	33	53	30	37	36	27
Ni	63	76	79	67	71	73	73	72	75	58
Nb	16	17	19	20	14	19	17	17	19	13
Pb	39	9	12	9	13	11	12	12	10	7
Rb	55	66	59	75	54	73	69	57	48	41
Sr	79	105	80	161	84	115	98	107	87	78
Sb	0	2	0	0	0	0	0	0	2	0
S	401	466	567	1113	518	1108	327	914	357	494
Th	13	14	11	13	14	19	9	7	8	12
V	114	112	134	148	111	135	102	100	127	104
Y	26	25	26	30	24	29	25	24	26	19
Zn	41	40	66	83	60	58	67	63	63	39
Zr	306	259	340	258	250	275	242	266	303	252

TABLE 4.42

VAR. / ID.	A335	A336	A337	K337	A338	A340	D344	S345	S348	S350
East	26268	26264	26254	26254	26246	26244	26136	27903	27942	27987
North	60832	60809	60796	60796	60789	60765	60410	60009	59977	59946
SiO2	68.14	65.36	65.71	63.76	65.85	57.55	59.20	66.29	56.81	67.49
Al2O3	11.63	12.24	12.05	10.74	12.86	11.06	11.35	9.97	10.60	12.06
TiO2	0.91	1.06	1.13	1.14	1.09	1.53	1.24	0.86	1.02	0.84
Fe2O3	6.66	7.21	7.47	7.59	6.75	10.33	9.54	7.15	5.37	3.54
MgO	3.15	2.70	3.21	5.01	3.20	6.20	4.90	4.55	3.38	2.89
CaO	1.15	1.09	1.21	2.68	0.81	3.23	3.36	3.29	12.27	5.84
Na2O	1.87	2.25	2.12	1.69	2.08	2.65	3.47	2.41	2.16	1.18
K2O	1.27	1.55	1.51	1.94	1.46	0.89	1.08	1.94	2.30	2.85
MnO	0.09	0.09	0.09	0.09	0.08	0.15	0.15	0.12	0.17	0.07
P2O5	0.15	0.18	0.17	0.17	0.17	0.15	0.13	0.17	0.21	0.17
Total	95.02	93.73	94.67	94.81	94.35	93.74	94.42	96.75	94.29	96.93
As	2	2	3	3	2	2	7	4	4	3
Ba	306	345	360	602	355	178	310	660	494	311
Co	15	15	12	19	26	33	29	16	17	17
Cr	135	110	162	205	134	183	169	218	193	452
Cu	19	20	23	17	24	23	25	19	21	10
Ga	11	12	14	15	14	15	15	12	12	11
La	34	37	29	30	35	7	6	30	28	23
Ni	55	51	59	72	61	52	47	51	59	132
Nb	16	17	16	16	17	10	9	11	12	14
Pb	7	9	7	18	10	6	6	11	9	11
Rb	35	42	40	51	41	21	24	41	56	63
Sr	93	114	110	215	96	148	211	322	209	84
Sb	1	0	0	2	0	0	0	0	0	0
S	446	2254	699	451	0	1077	408	498	665	124
Th	6	9	9	6	15	0	8	6	8	9
V	95	102	117	123	110	222	183	124	129	92
Y	22	28	29	26	28	32	28	20	28	22
Zn	56	46	61	70	67	61	71	57	50	39
Zr	233	229	267	298	260	144	123	196	333	328

VAR. / ID.	S351	S352	S354	S355	S356	S359	S360	S361	A369	A370
East	27991	26993	27796	27754	27629	28023	28025	28025	26541	26543
North	59937	60315	60081	60092	60142	59903	59883	59849	60782	60794
SiO2	66.83	59.13	74.81	65.50	61.08	67.45	61.06	61.55	61.56	64.55
Al2O3	8.49	12.32	7.18	9.56	12.19	9.62	13.06	13.52	10.10	10.55
TiO2	0.91	1.03	1.18	0.82	0.90	1.14	0.88	1.01	1.51	1.37
Fe2O3	5.66	9.03	3.83	4.39	7.63	6.16	7.84	7.40	9.32	8.17
MgO	5.91	6.44	1.59	2.03	6.37	3.65	5.10	4.91	4.11	3.38
CaO	5.31	2.00	2.52	8.88	2.65	4.74	4.69	1.79	5.16	4.09
Na2O	1.17	3.71	2.09	1.91	2.85	2.34	1.68	3.01	2.77	3.16
K2O	1.97	0.66	0.78	1.47	1.69	1.24	2.24	1.96	0.92	1.13
MnO	0.08	0.10	0.08	0.24	0.10	0.10	0.12	0.09	0.15	0.13
P2O5	0.15	0.18	0.17	0.17	0.18	0.25	0.19	0.20	0.14	0.13
Total	96.48	94.60	94.23	94.97	95.64	96.69	96.86	95.44	95.74	96.66
As	2	1	1	0	1	4	3	2	2	0
Ba	299	334	181	269	701	251	323	664	286	308
Co	18	20	7	9	23	15	20	19	23	24
Cr	687	235	74	76	301	166	145	124	163	139
Cu	10	22	9	12	24	15	22	17	21	25
Ga	9	15	8	9	16	12	13	15	14	14
La	21	21	27	25	19	25	22	22	8	14
Ni	155	81	18	23	149	47	75	51	40	42
Nb	12	9	16	16	10	15	13	15	10	9
Pb	9	12	7	12	15	11	10	8	11	13
Rb	47	18	21	36	40	33	59	52	23	24
Sr	76	272	95	134	360	132	138	239	279	244
Sb	0	0	0	0	0	0	1	0	0	0
S	22	994	222	0	294	347	399	279	1568	1605
Th	12	10	10	9	9	10	8	11	6	5
V	99	149	67	69	118	97	95	104	224	191
Y	22	18	21	23	18	28	23	29	28	28
Zn	34	62	30	36	65	46	53	47	68	59
Zr	341	145	373	228	158	376	228	270	133	130

VAR. / ID.	K373	A374	ZK377	A377	A378	W379	K379	W380	K380	W382
East	26651	26438	30216	26394	26370	24969	30275	25050	30288	25100
North	60742	60811	60638	60866	60815	60358	60602	60280	60593	60230
SiO2	62.01	60.83	65.46	68.43	58.80	55.25	64.82	57.41	65.82	64.91
Al2O3	14.73	11.57	9.57	12.40	12.88	10.14	10.04	10.36	10.33	12.80
TiO2	0.97	1.31	0.70	1.00	1.22	1.31	0.73	1.30	0.96	1.17
Fe2O3	6.85	9.69	4.69	6.27	9.83	9.83	5.06	10.47	7.33	7.78
MgO	3.63	5.05	3.59	2.45	5.05	8.95	4.20	9.28	4.21	3.59
CaO	3.49	3.62	7.26	0.42	3.60	5.03	6.98	3.77	3.44	0.74
Na2O	1.35	3.08	2.08	2.75	2.97	2.30	2.15	2.30	1.86	3.03
K2O	2.47	0.71	2.45	1.48	1.32	1.04	2.46	1.28	1.55	1.66
MnO	0.10	0.15	0.09	0.08	0.14	0.17	0.12	0.16	0.43	0.12
P2O5	0.16	0.16	0.18	0.15	0.13	0.18	0.23	0.22	0.20	0.18
Total	95.76	96.17	96.07	95.43	95.94	94.20	96.79	96.55	96.13	95.98
As	4	2	16	8	2	1	0	0	2	2
Ba	419	234	568	383	383	302	527	541	400	479
Co	15	21	12	17	23	30	17	29	18	17
Cr	156	166	196	122	148	560	246	478	235	153
Cu	22	25	15	18	27	29	15	31	16	18
Ga	15	16	12	13	17	14	10	14	12	16
La	33	11	27	34	17	12	33	24	28	38
Ni	77	41	74	51	44	213	75	190	84	64
Nb	17	10	12	16	10	10	12	8	13	15
Pb	14	9	112	11	11	9	18	11	8	11
Rb	69	16	61	41	29	23	64	29	39	42
Sr	124	260	237	111	277	386	205	310	192	193
Sb	4	0	0	2	2	0	2	0	0	0
S	565	1265	205	211	1898	765	0	1584	124	201
Th	11	1	10	11	5	6	5	7	13	10
V	108	183	78	98	171	210	88	206	106	118
Y	24	29	22	25	29	23	24	24	21	25
Zn	49	74	35	61	78	66	44	69	52	43
Zr	245	129	249	195	137	112	273	123	254	211

TABLE 4.42

VAR. / ID.	W383	W384	W385	W386	W387	W388	W389	E391	A393	K394
East	25130	25100	25110	25190	25460	25580	25430	26960	26524	26455
North	60199	60120	60080	59970	59840	59800	59590	60701	60419	60485
SiO2	63.65	58.85	61.61	62.60	69.54	67.18	65.28	62.82	63.12	63.02
Al2O3	14.26	10.47	15.87	13.94	12.50	9.73	12.24	11.16	12.10	14.75
TiO2	0.92	0.83	1.21	1.24	0.87	0.88	1.09	0.85	0.81	1.10
Fe2O3	6.77	5.65	7.71	7.57	5.73	7.01	6.91	7.16	6.41	8.12
MgO	3.03	6.23	3.50	3.15	2.09	4.06	2.80	3.73	3.50	4.05
CaO	0.37	9.95	0.55	0.47	0.25	2.50	1.13	3.19	2.92	0.53
Na2O	3.95	1.40	2.57	2.28	2.46	2.03	2.20	4.02	3.47	1.71
K2O	1.84	2.49	3.30	2.11	1.68	2.48	1.82	0.74	2.08	2.75
MnO	0.09	0.09	0.11	0.10	0.08	0.12	0.10	0.14	0.11	0.06
P2O5	0.16	0.13	0.20	0.18	0.17	0.31	0.17	0.23	0.26	0.16
Total	95.04	96.09	96.63	93.64	95.37	96.30	93.74	94.04	94.78	96.25
As	1	7	0	2	25	3	2	3	2	5
Ba	681	391	1054	489	402	566	447	414	1036	510
Co	13	15	15	13	12	20	13	16	19	20
Cr	90	147	126	172	86	197	104	159	162	125
Cu	5	14	6	26	27	25	17	19	20	23
Ga	17	13	19	17	13	14	14	16	14	17
La	19	22	52	36	25	39	28	36	38	37
Ni	43	70	57	68	33	62	29	54	57	75
Nb	14	13	19	21	18	15	18	14	15	18
Pb	9	10	12	12	125	19	9	23	21	15
Rb	45	58	79	63	48	55	46	20	47	79
Sr	469	138	343	98	73	409	117	750	774	74
Sb	0	3	0	0	2	0	0	0	0	0
S	176	194	340	231	989	703	317	243	259	0
Th	7	10	12	11	7	8	8	10	5	10
V	90	81	120	132	71	112	106	110	111	103
Y	19	18	24	33	24	30	31	27	28	28
Zn	39	41	43	83	329	71	51	59	67	81
Zr	205	183	228	258	198	223	272	209	227	220

TABLE 4.42

VAR. / ID.	K395	A396	N397	L399	N400	N401	N402	N403	E404	E407
East	26560	26478	26778	28320	28406	28404	28394	27953	27330	27340
North	60503	60447	61141	60960	60453	60487	60502	60832	60568	60558
SiO2	65.30	60.98	71.02	61.58	64.50	70.58	71.59	68.24	67.03	62.66
Al2O3	12.66	13.07	12.46	11.88	8.90	10.40	9.92	10.55	12.09	11.55
TiO2	0.84	1.10	0.84	0.77	1.12	0.89	0.84	0.98	1.00	1.46
Fe2O3	6.54	8.29	4.66	6.96	8.00	5.36	4.80	7.34	7.14	9.17
MgO	3.81	4.87	2.20	7.20	5.28	2.95	2.62	3.25	3.71	4.77
CaO	1.21	1.03	0.84	1.14	2.92	1.35	2.67	1.27	0.81	1.25
Na2O	2.09	1.95	1.99	3.34	2.11	1.96	1.90	1.69	1.73	2.66
K2O	2.17	2.93	1.71	1.68	1.53	2.03	1.90	1.39	2.03	0.81
MnO	0.09	0.12	0.08	0.10	0.15	0.06	0.08	0.08	0.10	0.11
P2O5	0.17	0.28	0.13	0.15	0.17	0.17	0.20	0.12	0.15	0.14
Total	94.88	94.62	95.93	94.80	94.68	95.75	96.52	94.91	95.79	94.58
As	5	9	13	2	3	1	0	3	16	0
Ba	463	1402	340	511	512	408	369	297	421	250
Co	14	17	10	16	17	12	13	15	24	20
Cr	133	103	139	180	239	116	141	176	173	181
Cu	18	30	16	19	15	9	6	16	7	23
Ga	14	15	14	14	13	11	10	11	16	14
La	27	57	25	21	24	26	36	21	30	21
Ni	59	52	44	72	55	46	43	49	68	52
Nb	16	18	14	7	11	17	15	14	17	12
Pb	12	18	7	10	15	8	8	8	9	15
Rb	59	67	50	41	33	53	48	39	57	26
Sr	87	250	90	224	173	70	79	60	61	124
Sb	2	2	0	0	1	3	0	0	0	0
S	3027	978	285	774	794	0	0	537	589	1880
Th	7	14	8	6	2	6	11	7	8	5
V	88	146	88	114	136	76	75	102	105	191
Y	26	30	24	21	24	27	28	23	29	30
Zn	58	74	35	52	50	45	45	58	51	53
Zr	227	227	208	136	215	256	273	235	255	160

TABLE 4.42

VAR. / ID.	E408	E409	N410	N413	N426	N430	N431	N433	A434	A439
East	27335	27359	26792	26743	26675	26723	26722	26612	26167	26168
North	60503	60498	61152	61374	61289	61233	61232	61272	60989	60734
SiO2	60.71	59.94	64.47	52.65	59.29	56.96	55.48	65.01	63.10	60.73
Al2O3	11.66	12.88	13.73	7.93	11.43	13.12	10.40	11.68	12.41	11.09
TiO2	1.00	0.89	0.95	1.18	1.39	1.66	1.32	1.11	1.04	1.21
Fe2O3	8.84	7.75	6.62	8.60	9.00	10.70	8.95	7.68	7.27	8.69
MgO	5.45	5.55	3.49	9.35	4.90	6.53	7.70	3.91	3.42	5.42
CaO	4.33	4.17	0.64	14.43	3.56	2.66	9.25	2.24	1.60	3.55
Na2O	2.96	3.19	2.49	1.45	3.54	2.86	2.30	2.94	3.08	2.59
K2O	1.42	1.45	1.83	0.36	1.02	1.34	0.55	1.71	1.52	1.27
MnO	0.15	0.13	0.08	0.15	0.14	0.16	0.19	0.11	0.10	0.17
P2O5	0.20	0.21	0.14	0.15	0.34	0.21	0.18	0.24	0.19	0.14
Total	96.72	96.16	94.44	96.25	94.61	96.20	96.32	96.63	93.73	94.86
As	2	2	3	0	0	5	3	0	4	2
Ba	443	548	348	140	425	319	173	554	451	307
Co	23	23	16	30	23	26	29	22	12	18
Cr	211	215	126	903	155	262	425	178	162	156
Cu	31	35	20	37	31	36	26	28	19	25
Ga	15	15	14	11	16	16	14	14	15	16
La	21	20	26	15	30	22	19	26	27	26
Ni	79	73	65	372	57	112	156	64	59	44
Nb	10	9	16	10	14	14	9	16	17	10
Pb	12	15	10	8	12	11	9	17	7	7
Rb	30	33	49	12	21	30	17	48	42	29
Sr	172	234	73	100	331	185	236	392	378	187
Sb	0	0	1	0	0	3	0	0	0	0
S	1107	774	969	747	0	2701	1452	0	616	1881
Th	6	8	9	0	10	2	4	9	3	5
V	164	148	99	168	175	196	183	144	108	186
Y	23	22	24	23	27	28	23	29	27	32
Zn	64	59	50	49	84	67	56	70	55	74
Zr	149	144	212	108	164	141	124	179	245	136

VAR. / ID.	A440	A441	A443	A444	A445	N447	S448	S449	S450	E452
East	26080	26079	26122	26130	26124	26519	28049	26910	26935	26964
North	60661	60669	60975	60967	60957	61153	59614	60360	60340	60694
SiO2	56.99	67.72	62.11	60.46	65.19	66.62	62.12	60.46	66.67	68.79
Al2O3	13.71	10.11	14.52	14.28	13.12	11.39	10.01	15.02	11.10	10.45
TiO2	1.31	0.93	1.17	1.22	1.14	0.92	0.95	1.23	1.16	0.91
Fe2O3	11.29	7.40	7.89	8.48	7.69	7.04	6.34	8.76	7.46	6.05
MgO	5.32	3.50	3.59	3.88	3.24	3.38	4.75	3.41	4.37	2.74
CaO	2.62	2.52	0.94	1.25	0.50	0.70	6.81	0.64	0.62	2.79
Na2O	2.55	2.76	2.13	2.30	2.40	2.50	2.25	1.93	1.83	2.39
K2O	1.80	1.21	2.42	2.31	2.18	1.97	1.32	2.30	1.26	1.69
MnO	0.28	0.11	0.09	0.10	0.10	0.09	0.13	0.10	0.10	0.10
P2O5	0.16	0.13	0.19	0.18	0.17	0.16	0.20	0.18	0.16	0.18
Total	96.03	96.39	95.05	94.46	95.73	94.77	94.88	94.03	94.73	96.09
As	4	0	6	4	3	10	3	4	2	0
Ba	356	233	564	510	470	577	268	512	293	400
Co	29	14	22	19	15	14	15	20	19	12
Cr	163	148	185	176	138	149	238	136	260	118
Cu	38	20	26	21	19	19	16	29	15	12
Ga	18	12	17	17	16	13	12	16	14	12
La	23	12	49	27	22	24	25	38	31	27
Ni	60	45	85	76	70	63	85	54	66	44
Nb	14	11	19	20	19	15	15	20	17	16
Pb	11	12	9	17	11	15	10	11	11	14
Rb	50	25	68	60	57	58	37	63	39	38
Sr	199	160	124	134	125	196	128	94	55	149
Sb	1	0	0	0	0	0	0	0	5	5
S	2531	1347	1063	426	329	39	1294	1604	961	3833
Th	3	4	9	9	8	6	6	8	5	7
V	192	132	132	119	110	108	107	119	133	93
Y	36	28	34	32	27	25	31	5	28	22
Zn	92	47	65	81	56	72	53	81	58	73
Zr	155	133	251	245	212	224	329	268	346	184

VAR. / ID.	N453	N454	N456	N459	N460	K462	A463	S464	S466	C469
East	28354	28364	28387	26507	26452	26622	26399	28076	28089	26060
North	60563	60539	60529	61161	61157	60849	60561	59812	59813	60939
SiO2	62.92	63.36	73.38	67.28	58.27	59.10	63.06	61.81	64.55	55.59
Al2O3	10.27	11.55	8.18	13.03	10.57	10.87	11.02	13.30	10.92	11.68
TiO2	0.79	0.92	0.67	1.18	1.49	0.92	0.62	0.87	0.93	1.38
Fe2O3	6.71	7.50	4.10	7.17	10.34	7.52	4.66	5.72	6.36	10.18
MgC	7.49	5.81	2.24	3.12	5.26	5.14	2.83	2.90	4.80	7.60
CaO	2.14	3.65	2.52	0.58	5.55	7.00	7.75	4.87	3.13	4.50
Na2O	2.72	2.71	1.76	2.32	3.08	1.47	0.78	1.62	2.08	2.91
K2O	1.14	0.96	1.27	1.92	0.82	2.25	2.57	2.39	1.71	0.95
MnO	0.10	0.16	0.09	0.09	0.19	0.13	0.11	0.09	0.08	0.17
P2O5	0.14	0.16	0.11	0.17	0.25	0.26	0.13	0.16	0.16	0.19
Total	94.42	96.78	94.32	96.86	95.82	94.66	93.53	93.73	94.72	95.15
As	1	2	3	7	6	2	15	3	3	2
Ba	578	225	257	439	362	667	273	334	378	282
Co	27	20	10	13	27	17	12	15	17	28
Cr	312	300	80	133	174	150	117	178	236	313
Cu	13	20	9	19	28	28	14	14	18	34
Ga	14	14	9	16	14	15	11	13	12	15
La	18	17	23	41	20	35	26	21	29	11
Ni	150	162	31	60	66	56	56	79	71	131
Nb	10	11	12	18	17	16	13	15	14	15
Pb	9	10	10	18	8	19	13	10	10	12
Rb	29	30	34	47	22	56	66	60	47	20
Sr	266	130	83	92	304	428	90	211	132	204
Sb	0	0	2	9	0	0	6	1	2	0
S	128	124	0	0	136	409	600	748	672	1957
Th	5	8	4	8	7	12	2	10	6	0
V	109	110	59	121	187	138	71	97	110	215
Y	18	21	17	32	31	29	22	25	24	27
Zn	68	57	33	158	70	70	45	31	41	78
Zr	152	193	170	247	208	233	192	282	252	127

TABLE 4.42

VAR. / ID.	C470	C471	C472	C473	C474	N476	N478	N480	N481	N485
East	26070	26050	26017	26001	26003	26710	26721	26720	26683	26851
North	60921	60914	60980	61014	60991	61258	61253	61262	61237	61429
SiO2	65.68	62.76	61.68	62.93	62.13	50.07	60.19	52.94	64.43	54.85
Al2O3	13.51	12.94	12.89	11.27	11.50	11.36	13.11	11.75	12.30	14.42
TiO2	0.84	0.77	1.55	1.56	1.63	1.80	1.36	1.45	1.19	1.54
Fe2O3	6.28	6.16	8.97	8.41	9.78	13.19	9.62	11.06	7.30	12.27
MgO	3.42	4.36	4.28	3.92	4.67	11.07	4.70	8.55	3.14	7.80
CaO	1.02	0.82	1.44	1.69	1.71	3.24	3.05	4.40	1.56	0.85
Na2O	3.32	3.87	4.72	3.11	3.56	2.05	2.55	2.28	2.21	2.35
K2O	1.69	1.81	0.68	1.31	0.96	0.97	1.32	1.47	1.51	1.81
MnO	0.08	0.09	0.50	0.12	0.16	0.17	0.14	0.15	0.09	0.13
P2O5	0.17	0.18	0.29	0.20	0.21	0.19	0.25	0.20	0.18	0.20
Total	96.01	93.76	97.00	94.52	96.31	94.11	96.29	94.25	93.91	96.22
As	2	3	0	3	0	4	4	2	3	7
Ba	665	930	279	370	227	237	325	337	467	308
Co	12	17	24	21	22	35	18	28	17	39
Cr	126	137	155	216	215	905	176	457	189	222
Cu	18	14	15	18	13	46	26	40	19	53
Ga	14	15	16	14	16	17	16	15	14	20
La	32	30	42	25	23	18	24	14	39	4
Ni	54	50	50	80	79	288	75	224	67	170
Nb	16	14	17	17	14	11	15	11	20	14
Pb	17	7	14	10	8	9	17	14	11	20
Rb	47	39	17	31	25	24	41	37	45	52
Sr	304	402	361	203	237	184	249	159	82	126
Sb	0	0	0	0	0	4	0	0	0	0
S	303	108	0	295	34	2009	5216	2394	277	5519
Th	8	8	10	8	5	3	2	4	8	5
V	93	94	215	164	182	258	143	215	120	204
Y	27	25	26	20	30	31	27	20	28	22
Zn	59	44	71	54	70	70	68	56	77	75
Zr	196	160	180	167	160	121	155	119	256	148

TABLE 4.42

VAR. / ID.	N486	N487	A488	S491	S492	S494	S496	S497	S498	S499
East	26782	26391	26391	28060	28068	28078	28092	28094	28109	28095
North	61141	60818	60818	60358	60243	60322	60301	60300	60166	60116
SiO2	87.98	60.40	64.92	59.95	73.00	72.13	72.56	77.05	63.52	66.85
Al2O3	3.97	13.88	11.21	12.78	8.23	9.99	6.07	7.76	13.49	6.82
TiO2	0.26	1.06	1.06	0.95	0.73	0.85	0.66	1.14	0.81	0.73
Fe2O3	3.10	8.35	8.23	7.82	4.25	4.64	3.63	4.06	7.10	4.86
MgO	1.47	4.05	3.80	7.56	2.40	2.02	1.63	1.70	4.19	5.09
CaO	0.21	3.05	2.69	2.26	2.08	2.55	8.16	1.02	2.71	6.59
Na2O	0.10	1.63	2.78	2.49	1.83	2.33	1.69	2.12	2.36	1.12
K2O	0.94	2.79	1.05	2.11	1.14	1.38	0.93	0.94	2.28	1.55
MnO	0.08	0.12	0.13	0.11	0.09	0.10	0.13	0.05	0.08	0.07
P2O5	0.05	0.31	0.14	0.16	0.13	0.17	0.12	0.15	0.16	0.12
Total	98.16	95.64	96.01	96.19	93.88	96.16	95.58	95.99	96.70	93.80
As	17	3	2	2	3	2	4	1	2	2
Ba	180	809	268	570	261	299	185	240	411	276
Co	10	15	16	18	9	10	10	8	15	13
Cr	39	127	148	342	82	80	71	68	103	448
Cu	9	35	21	25	10	13	11	9	20	10
Ga	8	15	14	14	9	10	8	8	15	9
La	15	44	22	21	18	31	20	30	32	21
Ni	23	48	42	147	35	24	25	18	56	115
Nb	6	18	11	11	14	17	13	16	14	13
Pb	5	17	12	8	10	11	8	10	13	8
Rb	39	65	27	50	31	36	24	25	59	39
Sr	26	281	180	258	66	81	142	56	111	119
Sb	1	0	0	0	3	1	0	0	2	1
S	0	1883	1469	316	84	0	2343	355	256	0
Th	1	11	0	5	8	6	6	0	7	4
V	28	141	147	128	61	70	57	69	93	77
Y	11	32	29	21	18	26	27	20	26	22
Zn	28	77	61	48	42	45	29	32	64	26
Zr	47	236	155	162	202	221	150	318	196	255

TABLE 4.42

VAR. / ID.	E503	W506	W507	L515	L520	L522	L527	L528	S529	S531
East	27646	26858	28308	28928	28986	29310	28543	28494	28029	28019
North	60739	61360	60427	60932	60848	61019	60759	60828	60208	60216
SiO2	64.97	62.58	72.32	62.83	64.58	64.83	60.49	58.14	69.59	62.68
Al2O3	12.39	14.34	13.09	10.38	8.86	12.02	11.33	11.61	7.04	11.84
TiO2	1.05	1.42	0.86	1.11	1.13	0.99	0.80	1.17	0.89	0.92
Fe2O3	6.92	9.76	3.18	8.31	7.47	7.53	7.71	8.57	3.72	7.66
MgO	3.61	2.23	1.17	5.42	5.19	5.10	7.22	6.99	1.73	5.71
CaO	1.86	2.60	1.97	2.43	3.09	1.53	3.98	2.47	10.10	3.34
Na2O	1.72	1.69	2.02	2.53	1.92	2.93	2.57	2.48	2.09	2.37
K2O	1.74	1.72	1.88	1.57	1.28	1.48	1.53	1.83	0.90	1.66
MnO	0.07	0.17	0.06	0.12	0.12	0.10	0.13	0.14	0.12	0.15
P2O5	0.15	0.17	0.18	0.19	0.14	0.17	0.19	0.18	0.27	0.15
Total	94.48	96.68	96.73	94.89	93.78	96.68	95.95	93.58	96.45	96.48
As	2	1	0	5	2	0	15	2	2	2
Ba	356	305	933	588	380	343	520	729	444	339
Co	15	41	13	18	13	13	21	24	10	21
Cr	153	247	121	296	271	211	270	365	93	293
Cu	20	14	93	20	13	6	24	30	11	17
Ga	14	12	12	13	11	13	16	15	8	14
La	24	15	31	31	16	26	18	16	25	21
Ni	53	173	43	57	44	61	140	133	24	111
Nb	15	12	15	13	11	12	10	11	13	12
Pb	11	9	9	12	8	10	25	6	10	13
Rb	50	47	51	34	29	37	38	41	24	40
Sr	69	88	51	205	135	105	353	507	200	136
Sb	4	0	0	0	3	0	3	0	0	2
S	1361	0	43	270	489	0	251	190	1113	212
Th	6	5	7	9	10	7	4	4	6	4
V	111	141	77	156	137	117	115	163	78	116
Y	29	25	24	26	19	27	20	24	32	23
Zn	64	87	25	58	31	50	61	41	34	52
Zr	254	185	253	280	215	248	143	171	349	184

VAR. / ID.	S532	S533	A535	A536	N540	N542	N543	L548	L554	L559
East	28010	28003	26295	26295	26720	26727	26718	28683	28683	28626
North	60227	60234	60515	60515	61289	61294	61273	61372	61372	61360
SiO2	69.27	69.76	54.30	56.99	62.49	51.30	55.54	57.33	54.17	54.95
Al2O3	11.53	10.45	14.93	11.73	18.46	10.13	10.81	11.57	11.59	13.52
TiO2	0.89	1.05	0.48	0.80	0.59	2.12	1.42	1.17	0.93	1.14
Fe2O3	5.15	5.14	11.88	10.83	3.72	13.10	10.20	10.34	8.82	9.73
MgO	2.30	2.06	3.98	3.82	3.00	11.97	9.17	5.99	5.43	6.84
CaO	1.74	2.20	5.63	6.83	1.29	3.18	3.42	5.41	8.80	3.15
Na2O	2.15	2.00	1.46	3.35	0.81	2.01	2.38	3.38	2.27	2.55
K2O	1.91	1.78	2.74	0.84	5.32	0.54	0.97	0.69	1.33	2.13
MnO	0.10	0.08	0.31	0.26	0.31	0.17	0.14	0.17	0.16	0.15
P2O5	0.22	0.24	0.04	0.11	0.22	0.25	0.15	0.23	0.21	0.20
Total	95.26	94.76	95.75	95.56	96.21	94.77	94.20	96.28	93.71	94.36
As	0	0	0	0	2	2	2	0	4	2
Ba	378	380	457	196	1201	308	346	398	362	722
Co	9	9	30	27	17	44	26	22	25	26
Cr	81	82	47	44	6	338	361	378	312	234
Cu	15	14	40	54	8	42	30	36	40	30
Ga	11	11	14	17	15	17	14	17	16	15
La	31	33	0	0	48	12	14	16	21	16
Ni	31	26	5	10	6	203	211	56	58	66
Nb	17	17	3	3	18	15	9	10	9	8
Pb	14	12	4	7	9	7	5	14	21	8
Rb	46	41	82	27	147	13	20	19	39	47
Sr	75	88	132	173	78	149	128	351	378	362
Sb	2	0	4	0	0	2	0	0	0	0
S	0	0	0	243	0	0	1749	2005	1889	753
Th	9	6	0	0	21	4	4	7	4	9
V	73	80	236	259	49	268	218	208	191	187
Y	25	27	15	31	40	25	23	24	21	21
Zn	47	44	74	94	64	91	56	71	92	53
Zr	254	319	21	48	326	141	107	155	151	127

VAR. / ID.	L562	L566	L572	W580	W581	W582	L584	L585	L586	L587
East	28626	28626	28777	24340	24340	24340	28484	28487	28507	28508
North	61360	61360	61324	59920	59880	59810	60647	60658	60680	60679
SiO2	55.44	56.30	56.08	66.13	63.04	66.00	60.68	60.53	62.82	70.72
Al2O3	13.20	12.47	13.06	12.87	10.31	12.38	10.93	11.88	18.64	11.35
TiO2	0.90	0.88	0.90	1.06	1.20	1.02	1.22	1.16	1.12	1.22
Fe2O3	8.73	8.68	7.50	7.05	9.29	7.11	8.99	9.09	5.46	5.59
MgO	5.69	5.99	5.34	3.35	4.36	3.05	7.07	7.62	3.91	2.20
CaO	8.07	5.34	8.71	0.49	3.96	1.03	1.66	1.14	0.24	0.39
Na2O	2.86	2.81	2.18	2.61	3.16	2.41	2.41	2.38	2.00	1.75
K2O	1.34	1.12	2.03	1.60	1.28	2.00	1.48	1.76	1.90	1.90
MnO	0.17	0.15	0.16	0.10	0.14	0.10	0.13	0.11	0.03	0.08
P2O5	0.19	0.19	0.21	0.15	0.12	0.16	0.18	0.19	0.07	0.22
Total	96.59	93.93	96.17	95.41	96.86	95.26	94.75	95.86	96.19	95.42
As	11	2	5	5	0	3	3	4	4	0
Ba	451	412	484	457	306	553	458	450	380	360
Co	24	19	16	17	15	16	24	24	15	10
Cr	174	247	202	159	145	169	476	375	390	94
Cu	25	21	34	20	20	17	2	9	330	5
Ga	16	16	16	14	14	14	14	14	18	13
La	18	14	16	41	14	26	21	11	32	30
Ni	52	55	51	60	31	55	162	165	137	34
Nb	8	8	9	17	8	15	10	11	12	18
Pb	10	12	18	8	12	13	9	10	24	9
Rb	39	32	49	47	27	48	33	36	51	42
Sr	423	380	283	146	253	186	224	188	91	54
Sb	0	0	2	0	4	1	3	0	4	0
S	387	2275	1492	0	1502	35	0	0	981	0
Th	3	4	7	7	0	7	7	5	8	6
V	153	155	159	110	178	106	147	124	134	85
Y	17	20	25	30	28	27	21	24	21	29
Zn	65	68	107	55	83	63	55	67	72	45
Zr	122	124	121	264	112	224	179	165	201	433

VAR. / ID.	L589	L590	N591	N592	N593	N594	N595	N597	N598	W599
East	28489	28468	26722	26721	26721	26722	26721	26721	24350	24340
North	60673	60534	61239	61250	61249	61252	61253	61251	59960	59850
SiO2	69.21	70.08	56.38	62.43	65.15	61.99	67.40	55.24	64.83	61.97
Al2O3	10.57	9.44	12.46	13.90	12.22	13.63	12.07	20.06	12.93	10.49
TiO2	0.87	0.87	1.54	1.30	1.07	1.12	1.27	1.24	0.77	1.09
Fe2O3	4.60	5.30	10.02	8.20	7.28	7.75	7.05	8.82	6.03	8.68
MgO	1.90	2.70	5.90	3.09	2.79	3.06	2.80	3.10	2.40	4.08
CaO	3.49	1.96	3.29	1.20	2.13	2.26	1.24	1.58	1.56	3.54
Na2O	1.66	1.81	2.62	2.34	2.53	1.79	2.72	1.23	3.12	3.32
K2O	2.22	1.85	1.12	1.85	1.78	2.34	1.32	4.26	1.82	1.32
MnO	0.09	0.08	0.13	0.12	0.14	0.16	0.09	0.13	0.08	0.13
P2O5	0.15	0.15	0.19	0.19	0.17	0.16	0.23	0.17	0.17	0.11
Total	94.76	94.24	93.65	94.62	95.26	94.26	96.19	95.83	93.71	94.73
As	0	1	4	2	4	5	2	17	4	0
Ba	362	380	230	396	414	465	540	706	381	339
Co	12	9	19	17	17	17	16	22	13	17
Cr	73	107	260	173	121	121	157	152	102	137
Cu	4	6	30	22	20	24	20	45	18	18
Ga	12	9	16	16	14	17	13	24	14	16
La	25	31	18	31	31	29	34	36	21	13
Ni	26	36	106	71	59	67	64	88	43	31
Nb	15	14	16	20	18	17	22	21	13	7
Pb	6	7	10	6	9	11	12	18	18	11
Rb	47	43	28	50	49	63	41	118	48	30
Sr	68	76	170	89	101	105	124	104	369	256
Sb	0	0	0	1	3	1	0	6	0	0
S	0	0	2872	236	170	1079	3688	1089	339	1152
Th	5	5	4	9	6	6	6	8	9	2
V	69	78	184	116	106	110	114	156	89	154
Y	20	24	30	30	30	27	34	34	23	29
Zn	31	38	84	71	54	80	61	117	53	63
Zr	207	247	150	286	258	199	314	191	162	111

TABLE 4.42

VAR. / ID.	N602	W603	W604	W606	W607	W608	W609	N610	N611	N612
East	23430	23350	24850	22030	22770	20490	20490	26682	26670	26672
North	59350	59470	60280	58660	59330	57560	57520	61238	61202	61207
SiO2	63.80	61.25	54.12	62.76	52.18	64.95	63.76	57.47	65.56	63.36
Al2O3	13.27	10.70	10.33	9.48	6.54	8.96	10.92	12.44	13.30	12.26
TiO2	1.42	1.19	1.85	1.15	1.07	1.21	0.74	1.65	1.12	1.19
Fe2O3	9.07	7.79	13.20	8.08	7.12	7.46	7.27	9.99	7.59	8.13
MgO	3.43	6.38	11.83	6.69	6.96	6.78	3.96	6.45	3.11	4.16
CaO	0.41	2.61	2.01	2.34	17.48	1.63	3.39	3.79	0.75	0.88
Na2O	1.93	2.82	1.88	2.53	1.69	2.60	3.06	2.81	2.30	2.11
K2O	1.96	1.85	1.32	1.32	0.94	1.22	2.73	0.69	2.23	1.85
MnO	0.09	0.11	0.18	0.12	0.13	0.10	0.14	0.14	0.10	0.10
P2O5	0.19	0.15	0.16	0.14	0.13	0.13	0.20	0.19	0.17	0.19
Total	95.57	94.85	96.88	94.61	94.24	95.04	96.17	95.62	96.23	94.23
As	8	1	1	2	0	0	2	16	4	4
Ba	434	342	239	234	205	348	1397	172	472	521
Co	16	19	31	16	24	13	15	27	16	18
Cr	217	402	485	314	730	368	99	285	118	191
Cu	21	17	33	24	20	11	18	28	20	21
Ga	17	13	16	11	11	11	12	16	16	15
La	33	17	13	14	17	18	24	15	51	30
Ni	72	160	196	147	218	150	37	114	76	74
Nb	20	13	9	11	10	10	9	15	19	18
Pb	10	13	6	9	7	7	11	33	13	14
Rb	51	37	28	29	22	21	50	21	59	48
Sr	80	97	122	57	124	71	754	173	98	99
Sb	2	0	2	1	0	0	0	2	2	0
S	409	0	267	0	93	0	374	338	578	0
Th	13	4	3	1	3	3	10	1	10	5
V	137	139	252	123	160	131	126	171	100	126
Y	34	26	24	25	25	23	22	27	36	32
Zn	77	64	79	56	56	46	50	90	65	65
Zr	356	152	122	140	144	150	114	152	219	288

VAR. / ID.	N615	N616	S617	S618	N619	S622	S623	S624	A629	AX604
East	27712	27681	27622	27622	26646	27622	27785	27783	26295	31413
North	60227	60217	60261	60261	61315	60261	60122	60117	60515	62010
SiO2	58.96	72.34	70.69	58.83	60.34	72.25	72.80	72.41	67.95	50.47
Al2O3	10.30	10.00	10.36	11.09	12.02	9.86	10.55	10.69	8.41	10.54
TiO2	0.92	0.95	0.81	0.96	1.28	0.83	0.95	0.82	0.64	2.11
Fe2O3	8.07	5.13	5.23	8.19	8.87	5.44	5.35	4.57	5.07	13.11
MgO	6.36	1.79	2.04	6.84	4.70	2.08	2.13	2.10	3.12	5.24
CaO	5.33	0.85	1.25	3.63	1.94	0.89	1.03	1.37	4.90	9.69
Na2O	2.56	1.72	1.66	2.24	3.07	1.50	1.90	1.93	1.70	3.04
K2O	1.36	1.63	1.83	1.89	1.92	1.90	1.72	1.64	2.31	0.78
MnO	0.12	0.08	0.07	0.14	0.14	0.07	0.08	0.06	0.09	0.33
P2O5	0.21	0.15	0.17	0.20	0.23	0.14	0.17	0.21	0.15	0.41
Total	94.19	94.64	94.11	94.01	94.51	94.96	96.68	95.80	94.34	95.72
As	0	3	3	4	0	2	0	0	0	0
Ba	537	355	361	805	482	316	374	325	508	185
Co	26	11	12	25	18	10	11	9	10	38
Cr	386	80	82	277	148	167	80	74	238	93
Cu	29	10	14	28	18	12	13	14	14	43
Ga	15	10	11	15	17	11	11	10	11	20
La	21	29	24	26	18	30	24	32	28	18
Ni	168	24	26	133	74	27	25	26	62	29
Nb	10	15	16	10	16	15	18	17	12	11
Pb	14	11	10	10	13	13	12	13	17	7
Rb	30	38	44	41	44	47	41	51	56	30
Sr	395	58	67	420	326	68	56	59	197	264
Sb	0	0	0	0	3	0	0	2	0	0
S	293	286	236	126	0	288	0	0	866	1208
Th	9	9	4	9	5	3	8	11	6	5
V	143	70	69	129	132	69	73	68	74	313
Y	21	20	23	21	30	23	26	28	23	38
Zn	62	41	52	65	73	45	51	47	37	97
Zr	193	281	251	166	180	216	235	250	216	149

VAR. / ID.	AX657	AX659	AX753	AX755	AX781	AX782	AX783	AX784	AX785	AX789
East	31025	30709	31319	31214	30517	30517	30640	30674	30712	30689
North	62448	62228	63546	63080	61869	61869	62200	62034	61983	62085
SiO2	63.70	61.78	70.76	63.75	61.35	60.67	60.07	62.58	60.24	64.66
Al2O3	9.41	10.52	11.66	9.66	11.37	11.12	11.74	9.58	13.30	11.08
TiO2	0.85	0.93	0.94	0.95	0.88	0.97	1.27	0.84	0.94	0.87
Fe2O3	7.59	8.24	5.62	7.24	7.75	8.64	10.89	7.30	7.63	7.51
MgO	4.55	4.76	2.07	4.75	4.14	3.93	5.33	4.55	3.76	5.09
CaO	5.55	3.88	1.26	4.20	5.53	5.38	2.73	4.56	3.66	2.92
Na2O	2.69	2.41	2.16	1.84	2.35	1.88	2.03	2.28	2.28	2.30
K2O	1.18	1.80	1.80	1.69	1.96	2.51	2.18	1.63	2.76	2.14
MnO	0.20	0.15	0.09	0.10	0.13	0.20	0.13	0.14	0.13	0.11
P2O5	0.16	0.19	0.19	0.16	0.21	0.22	0.20	0.20	0.20	0.18
Total	95.88	94.66	96.55	94.34	95.67	95.52	96.57	93.66	94.90	96.86
As	0	0	2	3	3	2	1	2	5	6
Ba	360	547	391	401	367	466	1035	462	411	574
Co	17	18	9	13	20	23	26	19	21	18
Cr	310	179	79	275	161	181	248	260	165	215
Cu	15	20	13	15	25	24	7	20	26	19
Ga	13	13	12	14	15	14	14	13	14	14
La	27	26	25	24	26	24	21	22	24	31
Ni	59	63	28	51	51	47	68	66	68	63
Nb	10	11	17	13	13	10	9	11	12	12
Pb	16	14	11	16	8	9	10	10	11	12
Rb	29	43	46	41	53	65	58	42	75	52
Sr	260	315	75	169	483	319	236	269	184	285
Sb	1	0	0	0	0	2	0	2	7	0
S	624	0	171	296	353	431	731	548	1061	343
Th	4	10	7	4	5	9	4	9	10	8
V	117	140	74	123	128	168	191	137	116	120
Y	21	26	23	21	24	26	19	24	24	26
Zn	54	53	48	47	58	68	48	56	58	56
Zr	202	204	233	275	212	194	189	255	185	214

VAR. / ID.	AX790	AX791	AX796	AX797	AX800	AX802	AX803	AX805	AX834	AX835
East	30692	30809	30727	30662	30452	30557	30528	30534	30905	30363
North	62154	62012	61757	62143	62280	62187	62112	62025	61633	61897
SiO2	60.03	61.60	58.15	62.53	66.22	61.43	58.66	59.53	65.01	63.04
Al2O3	10.20	10.52	10.73	9.98	9.06	11.20	10.87	12.06	9.67	10.51
TiO2	1.11	0.89	1.08	0.87	0.97	0.79	1.02	1.00	0.92	0.94
Fe2O3	9.84	7.80	9.01	7.56	7.05	7.11	9.13	8.78	7.11	7.93
MgO	5.36	4.69	5.09	5.10	4.12	4.36	5.54	5.70	4.63	4.62
CaO	3.69	5.19	4.69	3.65	3.89	5.56	5.61	4.02	3.63	3.07
Na2O	2.14	2.08	2.69	2.99	2.10	2.03	2.54	2.33	2.28	3.26
K2O	1.41	1.92	1.75	0.93	1.88	2.27	1.35	1.89	2.19	1.00
MnO	0.14	0.14	0.15	0.12	0.11	0.14	0.15	0.12	0.10	0.20
P2O5	0.21	0.20	0.20	0.18	0.15	0.19	0.19	0.21	0.20	0.19
Total	94.13	95.03	93.54	93.91	95.55	95.08	95.06	95.64	95.74	94.76
As	3	3	3	2	3	2	6	3	1	3
Ba	449	383	550	351	422	526	388	474	546	360
Co	21	16	27	16	12	18	23	23	19	16
Cr	270	251	186	228	206	186	181	200	237	158
Cu	22	20	36	18	13	21	26	30	14	17
Ga	15	14	15	13	12	15	16	16	12	14
La	22	30	27	21	25	21	25	27	25	20
Ni	55	69	67	56	42	68	47	64	76	51
Nb	12	11	10	11	11	11	10	11	12	11
Pb	11	10	10	13	9	11	29	9	15	9
Rb	39	49	45	26	43	60	32	49	57	29
Sr	341	345	474	350	147	484	376	309	214	417
Sb	3	0	0	0	5	0	0	0	0	0
S	1113	373	119	565	165	243	313	263	166	540
Th	7	5	2	7	4	6	4	6	5	7
V	179	127	156	124	116	120	162	163	108	113
Y	25	23	25	24	22	25	27	25	26	24
Zn	71	57	63	50	46	58	86	57	49	35
Zr	217	208	195	232	236	192	187	188	258	217

VAR. / ID.	AX840	AX841	AX842	AX844	AX847	AX849	AX851	AX852	AX857	AX858
East	30661	30569	30720	31777	30853	30614	30710	30382	30196	30196
North	61572	61674	61565	63041	61404	61342	61483	62677	62954	63013
SiO2	66.33	64.33	66.71	63.99	67.92	63.21	63.44	62.12	67.11	64.20
Al2O3	10.36	10.14	9.82	9.12	9.66	10.38	10.24	10.09	11.11	10.73
TiO2	1.03	1.06	0.78	0.93	0.76	0.93	0.83	0.83	1.16	1.10
Fe2O3	6.58	7.22	5.48	6.59	5.72	7.26	5.66	7.98	7.03	7.34
MgO	4.53	4.85	4.41	4.18	4.23	6.16	4.29	5.08	2.53	4.25
CaO	1.62	2.25	3.44	5.19	2.88	2.25	4.18	4.52	1.01	4.17
Na2O	1.78	1.69	1.86	2.09	1.66	2.42	2.13	2.49	1.90	1.50
K2O	2.42	2.32	2.33	1.47	2.44	2.49	2.63	1.56	1.62	2.03
MnO	0.09	0.09	0.09	0.10	0.09	0.10	0.09	0.17	0.10	0.11
P2O5	0.16	0.18	0.16	0.20	0.17	0.19	0.19	0.14	0.15	0.17
Total	94.90	94.13	95.08	93.86	95.53	95.39	93.68	94.98	93.72	95.60
As	2	1	1	0	2	2	2	0	0	5
Ba	495	530	448	331	453	627	589	445	368	358
Co	17	21	13	12	14	20	14	16	10	17
Cr	261	327	192	289	230	286	142	351	107	187
Cu	14	15	14	14	15	15	15	17	14	19
Ga	13	13	14	12	12	14	13	13	13	15
La	24	23	24	34	24	35	29	19	28	35
Ni	75	71	71	55	86	88	58	83	28	71
Nb	14	15	14	14	14	15	16	9	17	17
Pb	17	17	10	14	14	12	16	12	12	11
Rb	64	66	61	35	64	58	71	36	40	54
Sr	128	134	126	200	131	229	251	196	77	106
Sb	0	4	0	4	1	0	0	0	2	0
S	305	932	284	310	253	0	410	448	628	546
Th	8	10	7	6	12	8	9	6	7	9
V	105	118	84	107	76	102	92	132	109	110
Y	27	29	25	25	26	30	30	24	27	28
Zn	49	66	34	46	42	67	70	53	51	62
Zr	349	366	253	321	269	275	276	162	294	295

VAR. / ID.	AX861	AX864	AX865	AX866	AX868	AX873	AK1	AK2	AK3	AK4
East	30578	30263	30181	30223	30528	30515	34215	34238	34068	34441
North	61862	63255	63032	63199	61791	63108	65071	65060	65403	64615
SiO2	61.86	64.18	63.51	59.12	63.98	57.38	60.33	58.67	61.17	69.29
Al2O3	11.16	12.95	11.48	11.71	11.26	12.60	10.72	10.85	11.62	9.17
TiO2	0.99	1.26	0.97	1.34	1.08	0.93	0.88	1.04	0.99	1.13
Fe2O3	8.75	8.00	7.01	9.05	7.77	8.24	7.73	8.46	7.46	6.30
MgO	5.93	3.43	4.00	5.84	4.48	5.70	5.01	5.18	5.68	3.87
CaO	3.92	0.95	4.32	2.96	3.12	5.86	5.95	5.79	2.78	1.73
Na2O	2.23	2.55	1.67	3.40	2.43	2.95	2.20	1.83	2.84	1.52
K2O	1.75	1.88	1.99	2.60	1.41	1.24	2.36	1.66	2.00	1.43
MnO	0.14	0.11	0.10	0.16	0.22	0.13	0.15	0.14	0.10	0.10
P2O5	0.22	0.19	0.19	0.34	0.20	0.18	0.21	0.22	0.17	0.14
Total	96.95	95.50	95.24	96.52	95.95	95.21	95.54	93.84	94.81	94.68
As	4	0	4	0	23	5	2	3	0	3
Ba	460	419	340	696	282	387	599	413	768	356
Co	22	19	18	25	20	23	17	25	19	17
Cr	184	159	167	143	252	221	152	218	231	186
Cu	22	20	17	23	7	28	25	34	39	19
Ga	16	14	14	16	15	16	14	16	14	9
La	26	36	35	36	29	12	25	29	22	19
Ni	58	70	75	47	67	82	58	68	95	62
Nb	11	21	15	13	13	11	12	11	11	13
Pb	10	16	9	12	10	11	13	11	12	10
Rb	40	48	51	46	36	29	59	45	48	36
Sr	410	95	174	328	211	228	351	454	290	100
Sb	2	0	1	0	2	0	0	0	0	0
S	0	320	362	0	475	677	347	514	0	0
Th	5	10	7	7	7	4	8	6	7	4
V	145	124	101	181	133	142	122	184	129	112
Y	26	33	26	28	25	22	25	27	22	23
Zn	58	84	59	75	46	69	52	67	49	60
Zr	192	253	235	165	279	132	203	207	182	236

TABLE 4.42

VAR. / ID.	AK13	AK17	AK20	AK25	AK30	AK33	AK52	AK58	AK63	AK83
East	34368	34380	34398	34323	34461	34383	34677	34782	34491	34242
North	63941	63927	63948	63871	64382	64628	63730	63795	63516	65096
SiO2	69.00	73.52	69.27	68.36	68.27	69.33	68.26	69.90	65.43	60.62
Al2O3	11.40	9.83	10.28	10.18	12.42	10.65	9.80	11.39	10.72	10.00
TiO2	1.00	0.79	0.98	1.02	1.01	1.07	1.06	0.93	1.55	1.22
Fe2O3	6.31	5.06	6.09	6.06	6.22	6.46	6.23	5.95	7.36	9.05
MgO	3.90	2.95	3.68	3.67	4.33	3.14	3.48	3.37	3.52	5.15
CaO	0.81	0.97	2.23	1.32	0.54	0.72	1.38	1.17	3.79	5.28
Na2O	1.66	1.61	1.57	1.36	1.24	1.56	1.34	1.59	1.29	2.38
K2O	1.52	1.94	1.99	1.99	2.36	2.11	2.05	2.22	1.82	1.40
MnO	0.08	0.08	0.11	0.10	0.08	0.09	0.10	0.08	0.13	0.14
P2O5	0.15	0.13	0.15	0.15	0.15	0.20	0.15	0.15	0.18	0.20
Total	95.83	96.88	96.35	94.21	96.62	95.33	93.85	96.75	95.79	95.44
As	2	2	2	4	0	3	0	0	5	2
Ba	302	405	396	385	425	467	371	376	318	411
Co	17	12	15	15	11	20	13	14	15	19
Cr	134	107	157	165	139	157	148	124	271	367
Cu	11	6	6	10	23	14	8	6	12	27
Ga	12	11	13	12	13	12	12	12	13	14
La	27	34	46	24	34	34	26	25	33	29
Ni	51	45	53	54	69	56	53	47	51	71
Nb	16	14	16	14	16	16	14	16	18	13
Pb	10	9	11	9	14	14	13	12	11	12
Rb	40	54	54	54	64	54	55	62	49	38
Sr	53	59	67	58	50	67	63	64	82	210
Sb	0	0	0	2	0	0	2	0	0	0
S	0	0	0	0	0	0	0	0	0	532
Th	5	3	9	6	6	8	9	7	7	6
V	91	68	79	86	82	91	88	71	133	179
Y	29	28	39	24	35	30	26	26	39	29
Zn	65	71	68	69	61	54	72	77	74	68
Zr	297	208	338	300	290	273	310	295	542	381

VAR. / ID.	AK88	AK223	AK336	AK390	AK391	AK397	AK454	AK502	AK509	AK551
East	34256	34335	33650	33587	33548	33683	33712	33817	33952	33800
North	65057	64793	65289	65038	65107	65085	64806	64645	64788	64588
SiO2	58.82	66.15	61.26	59.35	69.95	69.43	61.88	65.22	64.26	67.66
Al2O3	12.41	11.02	11.97	10.98	10.08	11.03	12.42	10.34	11.13	9.82
TiO2	0.96	1.00	0.95	1.14	0.90	1.03	0.96	0.96	0.99	0.91
Fe2O3	8.39	6.40	7.93	9.30	5.23	6.00	8.10	6.61	6.76	6.35
MgO	4.62	5.93	5.73	6.09	2.34	2.61	6.17	4.55	4.44	4.51
CaO	5.47	0.95	3.82	3.87	1.82	1.20	2.37	1.96	1.56	2.16
Na2O	2.14	1.96	3.02	2.66	2.06	2.04	2.88	1.80	2.10	2.35
K2O	2.04	2.87	1.62	1.70	1.68	1.67	1.76	2.18	2.48	2.24
MnO	0.11	0.07	0.14	0.14	0.08	0.08	0.09	0.09	0.08	0.09
P2O5	0.22	0.20	0.16	0.19	0.18	0.18	0.19	0.19	0.18	0.19
Total	95.18	96.55	96.60	95.42	94.32	95.27	96.82	93.90	93.98	96.28
As	0	8	2	0	3	2	0	2	2	4
Ba	395	861	625	484	359	396	495	705	1107	723
Co	26	20	20	22	15	13	20	20	17	13
Cr	120	168	290	235	102	97	143	277	195	234
Cu	32	23	20	29	13	12	28	15	15	17
Ga	16	11	14	15	12	12	14	11	13	13
La	22	35	20	26	26	21	27	31	33	32
Ni	51	78	80	63	38	34	68	76	72	75
Nb	11	14	10	12	17	17	12	15	13	14
Pb	13	58	13	17	10	10	16	15	17	16
Rb	61	69	40	46	44	41	45	57	64	53
Sr	734	135	266	456	74	74	339	126	161	235
Sb	2	0	0	0	0	0	0	0	3	0
S	319	0	547	421	0	493	250	234	75	161
Th	6	9	10	8	8	8	5	12	10	10
V	157	91	142	175	79	89	121	112	108	97
Y	25	29	24	26	28	24	24	27	27	27
Zn	67	49	60	71	52	50	58	48	52	50
Zr	170	255	182	254	270	243	192	313	306	298

VAR. / ID.	AK674	AK734	AK735	AK739	AK741	AK742	AK778	AK779	DTIA135
East	33973	34803	34791	34790	34757	34759	33470	34975	25245
North	64218	62840	62831	62782	62770	26760	65320	62790	59152
SiO2	61.67	59.51	60.52	57.41	61.20	60.67	59.88	57.49	80.32
Al2O3	14.28	11.67	9.63	9.40	10.70	11.57	12.35	10.16	5.59
TiO2	0.90	0.81	0.76	1.03	1.12	0.79	0.84	1.02	0.62
Fe2O3	7.32	5.55	5.20	6.09	6.63	5.68	7.48	6.49	3.86
MgO	2.95	4.33	4.11	4.47	4.49	4.19	5.23	4.78	1.36
CaO	1.89	10.57	9.77	14.84	6.79	9.48	2.80	11.42	0.91
Na2O	2.88	1.67	1.59	1.63	1.68	1.76	3.32	1.47	1.64
K2O	3.02	2.42	1.92	1.82	1.69	2.18	1.82	2.16	0.98
MnO	0.16	0.07	0.08	0.11	0.07	0.08	0.11	0.09	0.07
P2O5	0.19	0.17	0.16	0.20	0.20	0.17	0.17	0.21	0.08
Total	95.26	96.77	93.74	97.00	94.57	96.57	94.00	95.29	95.43
As	4	2	0	0	4	3	3	6	2
Ba	1342	220	209	222	193	233	409	276	255
Co	16	16	14	16	13	14	17	19	12
Cr	88	130	164	283	211	120	170	243	91
Cu	18	12	14	25	21	17	28	20	13
Ga	16	13	12	12	12	13	16	13	8
La	39	29	25	28	30	28	18	30	20
Ni	47	49	45	47	43	51	71	58	35
Nb	16	15	13	14	15	12	8	16	9
Pb	21	10	12	13	36	11	15	11	13
Rb	74	68	58	52	50	64	44	64	33
Sr	396	158	160	189	118	146	264	179	128
Sb	0	2	0	1	0	2	0	0	1
S	106	0	0	0	0	0	587	0	2316
Th	9	13	6	11	11	8	9	14	2
V	92	81	87	108	110	83	117	113	69
Y	30	28	29	32	32	31	24	33	20
Zn	69	63	51	62	58	57	60	64	64
Zr	239	205	239	344	329	203	153	437	143

TABLE 4.43

Marchburn Formation : Geochemistry and Petrography.

VAR. / ID.	A232	A234	N237	N238	N241	W380	C469	C472	C474	N478
East	26226	26200	26719	26720	26721	25050	26060	26017	26003	26721
North	61065	61065	61272	61261	61228	60280	60939	60980	60991	61253
SiO ₂	55.23	52.71	50.07	52.57	57.78	57.41	55.59	61.68	62.13	60.19
Al ₂ O ₃	12.31	12.47	10.94	12.15	10.08	10.36	11.68	12.89	11.50	13.11
TiO ₂	1.78	2.22	1.78	1.93	1.21	1.30	1.38	1.55	1.63	1.36
Fe ₂ O ₃	11.45	12.50	11.90	12.68	9.61	10.47	10.18	8.97	9.78	9.62
MgO	8.34	8.18	10.93	8.33	5.14	9.28	7.60	4.28	4.67	4.70
CaO	2.27	2.48	5.33	3.14	7.03	3.77	4.50	1.44	1.71	3.05
Na ₂ O	2.70	2.68	1.94	2.22	2.33	2.30	2.91	4.72	3.56	2.55
K ₂ O	1.31	1.27	0.87	1.68	1.75	1.28	0.95	0.68	0.96	1.32
MnO	0.16	0.17	0.18	0.16	0.16	0.16	0.17	0.50	0.16	0.14
P ₂ O ₅	0.20	0.22	0.17	0.20	0.43	0.22	0.19	0.29	0.21	0.25
Total	95.75	94.90	94.11	95.06	95.52	96.55	95.15	97.00	96.31	96.29
As	2	3	0	5	4	0	2	0	0	4
Ba	343	303	157	252	523	541	282	279	227	325
Co	29	33	31	39	28	29	28	24	22	18
Cr	293	374	853	535	335	478	313	155	215	176
Cu	38	44	87	36	33	31	34	15	13	26
Ga	16	17	15	17	15	14	15	16	16	16
La	16	20	26	6	25	24	11	42	23	24
Ni	131	126	336	226	92	190	131	50	79	75
Nb	15	16	8	10	14	8	15	17	14	15
Pb	9	9	6	11	9	11	12	14	8	17
Rb	26	24	16	39	34	29	20	17	25	41
Sr	149	184	138	138	404	310	204	361	237	249
Sb	0	0	0	0	0	0	0	0	0	0
S	932	1745	1186	2282	218	1584	1957	0	34	5216
Th	5	5	4	5	7	7	0	10	5	2
V	215	275	246	250	193	206	215	215	182	143
Y	28	27	23	20	28	24	27	26	30	27
Zn	76	79	70	57	58	69	78	71	70	68
Zr	145	152	100	131	170	123	127	180	160	155
Quartz	222	169	68	61	57	169	54	46	166	116
Feldspar	287	446	430	410	423	363	464	654	460	552
Basic	129	97	176	174	99	222	100	30	30	2
Acid	18	4	12	51	24	28	12	30	64	34
Metamorphic	59	27	19	27	9	12	4	0	2	0
Sedimentary	13	8	15	32	88	49	8	0	10	34
Ferromagnesian	0	13	1	0	1	58	52	0	0	0
Matrix	272	236	279	245	299	99	306	240	268	262

TABLE 4.44

Afton Formation : Geochemistry and Petrography.

VAR. / ID.	E146	E148	E150	E155	E157	E159	E160	E162	E164	E166
East	27395	27392	27423	27441	27437	27419	27317	27308	27296	27280
North	60621	60644	60662	60709	60731	60743	60715	60735	60752	60769
SiO ₂	65.52	65.68	65.37	70.45	65.17	72.27	67.16	68.66	65.60	65.51
Al ₂ O ₃	10.84	11.86	13.11	10.69	11.63	10.41	10.60	10.46	11.56	12.77
TiO ₂	0.93	1.11	1.19	1.10	1.38	0.88	1.05	1.02	1.44	1.23
Fe ₂ O ₃	6.50	6.96	7.70	6.09	7.47	5.07	6.76	7.05	8.16	7.85
MgO	3.96	4.24	3.79	3.19	3.67	2.22	3.42	3.11	3.07	3.68
CaO	3.16	2.88	1.65	1.16	1.19	1.64	1.61	1.32	1.46	0.82
Na ₂ O	1.60	1.74	1.65	2.13	2.03	2.41	1.91	1.89	1.93	2.02
K ₂ O	2.04	2.12	1.90	1.23	1.53	1.47	1.17	1.41	1.70	1.71
MnO	0.08	0.10	0.09	0.08	0.09	0.07	0.09	0.10	0.11	0.10
P ₂ O ₅	0.13	0.15	0.16	0.16	0.19	0.15	0.16	0.15	0.23	0.17
Total	94.76	96.84	95.61	96.28	94.35	96.59	93.93	95.17	95.26	95.86
As	0	2	3	0	0	0	2	0	2	3
Ba	429	525	318	332	399	335	305	327	421	419
Co	15	17	14	16	20	14	20	16	16	18
Cr	184	192	186	152	201	97	175	157	247	158
Cu	16	17	16	16	22	14	24	18	23	23
Ga	14	14	14	12	13	11	12	12	14	14
La	28	36	33	30	39	28	26	29	37	45
Ni	71	71	74	48	62	37	53	56	58	56
Nb	15	17	17	15	18	14	14	14	19	16
Pb	17	14	11	13	13	9	9	14	21	11
Rb	59	57	53	32	40	39	31	35	44	45
Sr	94	98	66	93	100	102	111	116	139	111
Sb	0	0	2	0	0	0	0	0	0	0
S	535	525	741	704	715	859	977	374	865	544
Th	12	15	11	9	12	7	7	7	13	12
V	100	104	123	113	140	83	122	107	146	116
Y	27	26	27	24	30	23	25	24	30	29
Zn	63	64	67	48	61	39	63	59	69	64
Zr	257	283	292	278	370	226	275	225	410	251
Quartz	481	458	470	532	556	584	505	499	533	441
Feldspar	122	127	145	45	132	56	143	58	90	76
Basic	63	96	39	70	90	26	82	58	133	43
Acid	9	11	7	8	7	7	7	0	0	4
Metamorphic	52	21	47	24	12	11	83	35	10	25
Sedimentary	18	27	8	65	3	8	25	6	13	4
Ferromagnesian	0	0	0	6	0	2	10	4	14	0
Matrix	255	260	284	250	200	306	145	340	207	407

TABLE 4.44

Afton Formation : Geochemistry and Petrography

Part 2

VAR. / ID.	E173	E174	E176	E177	A186	A188	A216	A219	A221	A228
East	27272	27286	27281	27267	26437	26427	26361	26327	26314	26247
North	60867	60844	60821	60782	60480	60501	60824	60891	60909	60988
SiO2	63.18	64.32	65.49	68.57	62.27	64.20	66.77	63.57	64.88	65.37
Al2O3	11.37	11.16	11.92	10.22	12.02	13.41	12.45	15.01	11.88	12.51
TiO2	1.12	1.24	1.34	1.00	1.31	0.90	1.03	1.36	1.29	1.03
Fe2O3	7.78	7.92	8.37	6.74	8.38	6.75	6.82	7.82	7.51	6.99
MgO	4.14	3.27	3.06	3.36	4.91	4.18	3.51	3.48	3.44	3.36
CaO	2.35	2.02	0.91	1.02	2.04	1.22	1.28	0.78	0.86	1.19
Na2O	2.51	1.86	2.03	1.84	1.67	1.86	1.95	2.22	1.92	2.58
K2O	1.41	1.56	1.84	1.26	1.83	2.10	1.63	2.04	1.62	1.77
MnO	0.13	0.11	0.11	0.09	0.11	0.07	0.09	0.10	0.10	0.09
P2O5	0.27	0.18	0.19	0.15	0.19	0.17	0.17	0.20	0.16	0.16
Total	94.26	93.64	95.26	94.25	94.73	94.86	95.70	96.58	93.66	95.05
As	2	0	0	3	2	15	3	1	2	1
Ba	440	376	402	297	380	415	428	459	380	406
Co	25	18	27	15	17	18	16	17	16	17
Cr	154	156	152	177	196	132	155	162	178	149
Cu	22	20	23	18	21	22	19	24	17	14
Ga	14	12	15	11	14	13	14	15	13	15
La	31	28	41	29	35	37	32	31	35	36
Ni	48	58	59	50	72	72	60	69	67	58
Nb	16	17	17	14	19	16	18	20	17	16
Pb	7	5	16	7	14	7	10	4	9	6
Rb	34	39	46	36	49	61	47	49	41	46
Sr	197	119	110	84	83	63	110	95	94	135
Sb	0	0	0	0	0	0	0	0	0	0
S	862	578	191	648	273	313	399	631	746	179
Th	11	8	12	10	14	10	8	8	12	8
V	124	133	121	111	127	94	111	126	127	107
Y	27	27	36	24	25	22	26	29	29	25
Zn	60	60	62	57	67	59	53	60	55	53
Zr	207	344	252	248	323	197	232	302	284	224
Quartz	436	536	466	545	497	422	450	520	524	478
Feldspar	230	91	79	116	33	138	90	62	61	122
Basic	80	80	52	108	6	29	68	112	25	54
Acid	2	0	1	8	5	0	4	0	12	7
Metamorphic	27	31	20	23	24	28	29	19	32	48
Sedimentary	22	30	7	28	11	1	7	5	9	10
Ferromagnesian	1	3	2	5	4	1	1	1	2	3
Matrix	202	229	373	167	420	381	351	281	335	278

TABLE 4.44

Afton Formation : Geochemistry and Petrography

Part 3

VAR. / ID.	N242	N255	N257	N259	N260	N265	N270	K317	K330	W382
East	26721	26802	26795	26792	26779	26860	26872	26898	27123	25100
North	61219	61182	61168	61155	61134	61084	61051	60903	60880	60230
SiO ₂	62.50	65.09	65.16	67.58	74.45	65.15	66.67	65.01	64.44	64.91
Al ₂ O ₃	14.70	13.16	13.14	13.24	9.91	13.64	13.34	12.65	12.75	12.80
TiO ₂	1.35	1.41	1.10	0.81	0.72	1.16	1.22	0.85	1.00	1.17
Fe ₂ O ₃	7.95	8.29	6.63	6.05	4.83	7.64	6.98	6.41	6.69	7.78
MgO	3.83	3.77	3.02	3.03	2.18	2.64	2.75	4.44	3.93	3.59
CaO	0.75	0.88	1.23	0.93	0.56	0.98	0.65	3.40	3.04	0.74
Na ₂ O	2.12	2.18	2.74	3.31	2.47	1.97	2.20	1.58	1.71	3.03
K ₂ O	1.92	1.87	1.94	1.53	1.18	2.11	1.74	2.43	2.02	1.66
MnO	0.10	0.12	0.09	0.09	0.09	0.10	0.08	0.08	0.08	0.12
P ₂ O ₅	0.18	0.18	0.18	0.16	0.15	0.16	0.18	0.15	0.17	0.18
Total	95.40	96.95	95.23	96.73	96.54	95.55	95.81	97.00	95.83	95.98
As	2	2	0	3	5	1	0	0	2	2
Ba	413	400	414	345	325	455	384	410	369	479
Co	17	20	17	17	11	27	17	18	16	17
Cr	209	204	152	135	115	196	137	142	177	153
Cu	23	21	19	17	13	17	22	16	18	18
Ga	15	15	14	14	9	15	14	13	14	16
La	48	29	33	30	26	27	38	27	37	38
Ni	73	69	55	56	44	68	60	73	72	64
Nb	20	18	18	14	12	16	19	15	17	15
Pb	10	8	15	8	11	14	8	14	12	11
Rb	53	47	50	43	33	51	46	66	57	42
Sr	81	90	164	157	95	114	90	202	107	193
Sb	0	0	0	0	0	0	0	0	0	0
S	516	118	1297	937	184	193	459	378	914	201
Th	10	14	8	8	8	7	14	9	7	10
V	140	133	113	91	82	116	115	94	100	118
Y	27	27	25	21	20	22	26	23	24	25
Zn	95	60	64	53	44	66	51	65	63	43
Zr	302	329	250	203	154	235	265	206	266	211
Quartz	336	497	458	424	540	458	494	434	447	438
Feldspar	164	127	145	224	148	104	145	201	199	291
Basic	12	35	47	50	27	53	9	11	14	33
Acid	6	4	1	4	17	14	0	17	21	33
Metamorphic	12	28	43	37	40	60	64	42	38	29
Sedimentary	54	10	12	38	6	7	2	25	25	6
Ferromagnesian	0	2	2	3	0	0	1	4	0	3
Matrix	416	297	292	220	222	304	285	267	256	167

TABLE 4.44

Afton Formation : Geochemistry and Petrography

Part 4

VAR. / ID.	W389	N397	N410	E503	N612
East	25430	26778	26792	27646	26672
North	59590	61141	61152	60739	61207
SiO2	65.28	71.02	64.47	64.97	63.36
Al2O3	12.24	12.46	13.73	12.39	12.26
TiO2	1.09	0.84	0.95	1.05	1.19
Fe2O3	6.91	4.66	6.62	6.92	8.13
MgO	2.80	2.20	3.49	3.61	4.16
CaO	1.13	0.84	0.64	1.86	0.88
Na2O	2.20	1.99	2.49	1.72	2.11
K2O	1.82	1.71	1.83	1.74	1.85
MnO	0.10	0.08	0.08	0.07	0.10
P2O5	0.17	0.13	0.14	0.15	0.19
Total	93.74	95.93	94.44	94.48	94.23
As	2	13	3	2	4
Ba	447	340	348	356	521
Co	13	10	16	15	18
Cr	104	139	126	153	191
Cu	17	16	20	20	21
Ga	14	14	14	14	15
La	28	25	26	24	30
Ni	29	44	65	53	74
Nb	18	14	16	15	18
Pb	9	7	10	11	14
Rb	46	50	49	50	48
Sr	117	90	73	69	99
Sb	0	0	1	4	0
S	317	285	969	1361	0
Th	8	8	9	6	5
V	106	88	99	111	126
Y	31	24	24	29	32
Zn	51	35	50	64	65
Zr	272	208	212	254	288
Quartz	607	394	440	430	392
Feldspar	190	181	184	272	168
Basic	14	24	11	10	26
Acid	11	52	25	2	8
Metamorphic	28	14	14	12	0
Sedimentary	5	56	10	2	16
Ferromagnesian	3	3	0	0	2
Matrix	152	276	316	272	388

TABLE 4.45

Blackcraig Formation : Geochemistry and Petrography.

VAR. / ID.	A15	A46	A200	A202	A205	A209	A212	A214	K28w
East	26303	26386	26384	26387	26386	26372	26378	26380	26882
North	60503	60718	60677	60659	60631	60760	60784	60810	60912
SiO ₂	60.66	62.28	66.33	61.56	61.37	59.87	60.51	60.50	58.78
Al ₂ O ₃	10.73	11.02	9.07	10.24	10.83	10.14	10.75	11.77	11.52
TiO ₂	1.22	1.26	0.88	1.39	1.45	1.33	1.33	1.33	1.61
Fe ₂ O ₃	8.93	8.78	7.88	8.43	9.50	9.59	9.81	10.10	9.73
MgO	4.89	4.62	3.87	3.91	5.03	4.46	5.20	5.99	5.30
CaO	4.20	4.49	2.26	4.40	4.63	5.04	3.19	3.12	3.37
Na ₂ O	2.60	2.89	2.77	2.72	2.74	2.66	2.79	2.75	2.80
K ₂ O	1.12	0.99	1.33	1.08	0.79	0.96	0.81	0.66	0.81
MnO	0.15	0.14	0.12	0.13	0.16	0.15	0.16	0.16	0.13
P ₂ O ₅	0.13	0.14	0.11	0.14	0.16	0.14	0.13	0.14	0.16
Total	94.63	96.61	94.62	94.00	96.66	94.34	94.68	96.52	94.21
As	0	0	0	2	0	1	3	0	2
Ba	278	269	329	291	223	246	228	214	188
Co	26	22	24	20	24	23	23	23	25
Cr	159	159	1117	165	186	195	162	172	179
Cu	21	23	16	23	23	19	22	25	25
Ga	15	16	13	15	14	15	15	16	16
La	13	5	13	15	14	14	11	17	19
Ni	47	44	52	42	52	57	44	47	50
Nb	9	9	8	12	11	9	8	10	10
Pb	9	14	9	11	13	10	5	6	11
Rb	27	25	26	25	18	22	18	16	20
Sr	192	183	173	217	229	194	180	202	196
Sb	0	0	0	1	0	0	0	0	0
S	637	864	0	747	660	1283	217	1313	1166
Th	9	3	7	7	2	3	3	1	4
V	178	201	128	197	207	181	192	205	211
Y	27	29	25	29	31	28	29	29	31
Zn	74	69	55	62	74	68	40	76	69
Zr	127	123	103	143	147	134	107	130	162
Quartz	282	354	386	328	400	294	416	347	296
Feldspar	308	173	101	114	124	183	133	137	298
Basic	26	127	106	148	77	101	167	206	21
Acid	18	6	41	16	10	23	2	27	2
Metamorphic	8	92	105	75	28	65	52	44	14
Sedimentary	0	10	16	5	0	5	13	12	39
Ferromagnesian	122	66	23	61	55	71	18	29	32
Matrix	236	172	222	253	306	258	199	198	298

TABLE 4.46

Scar Formation : Geochemistry and Petrography.

VAR. / ID.	385	S100	S105	S111	S113	E117	S119	S121	S125	S127
East	27634	27641	27664	27566	27548	27442	27456	27466	27460	27465
North	60299	60256	60239	60349	60359	60520	60503	60483	60434	60418
SiO ₂	57.73	61.58	57.70	60.22	58.55	59.85	61.82	60.41	64.58	58.69
Al ₂ O ₃	12.43	11.32	12.89	12.85	12.00	12.50	12.02	12.01	10.57	13.09
TiO ₂	1.14	0.87	1.00	0.93	1.03	0.81	0.82	1.01	0.92	1.00
Fe ₂ O ₃	8.18	7.04	8.04	7.93	8.16	7.18	7.16	8.01	7.59	8.28
MgO	7.18	6.51	7.25	7.10	6.24	6.72	5.76	6.55	4.86	6.56
CaO	4.73	2.94	3.82	3.39	4.26	2.39	3.74	3.81	2.87	4.44
Na ₂ O	2.39	2.45	2.39	2.47	2.60	2.67	3.36	2.60	2.41	2.70
K ₂ O	1.93	1.65	1.74	1.80	1.37	1.86	1.24	1.28	1.52	1.60
MnO	0.13	0.10	0.12	0.14	0.14	0.12	0.12	0.13	0.12	0.13
P ₂ O ₅	0.24	0.19	0.19	0.16	0.19	0.15	0.17	0.21	0.15	0.21
Total	96.08	94.65	95.14	96.99	94.54	94.25	96.21	96.02	95.59	96.70
As	0	3	0	0	0	0	0	0	0	0
La	616	619	744	605	502	676	405	365	507	469
Co	27	21	27	21	23	18	24	26	20	25
Cr	322	308	395	321	269	231	260	294	416	250
Cu	33	28	30	25	30	25	24	26	20	33
Ga	16	13	16	14	15	14	13	15	13	13
La	25	23	27	23	24	23	16	17	24	17
Ni	143	141	157	97	104	89	86	87	66	78
Nb	11	11	11	10	12	9	10	11	8	9
Pb	14	18	14	14	15	14	13	13	12	14
Rb	49	40	43	45	32	49	29	30	37	38
Sr	455	310	357	286	422	333	226	181	317	302
Sb	0	0	0	0	0	0	0	0	0	0
S	166	393	463	414	316	792	903	1251	1003	682
Th	8	8	8	11	7	11	8	15	15	8
V	151	121	147	145	145	128	123	156	165	168
Y	21	17	23	21	21	20	21	21	21	21
Zn	68	63	109	68	68	67	69	66	72	71
Zr	187	149	192	163	159	137	141	188	197	150
Quartz	165	266	150	261	128	217	220	260	161	167
Feldspar	279	346	576	515	570	480	492	222	532	538
Basic	188	80	60	38	38	60	40	61	58	62
Acid	79	6	13	52	31	2	17	36	60	21
Metamorphic	4	0	6	13	18	12	23	15	57	29
Sedimentary	0	32	0	3	14	36	24	21	11	28
Ferromagnesian	72	18	6	10	13	13	74	19	24	50
Matrix	213	252	189	108	188	180	110	366	97	105

TABLE 4.46

Scar Formation : Geochemistry and Petrography				Part 2			
VAR. / ID.	S129	S131	S133	E140	L527	L528	N615
East	27480	27493	27509	27415	28543	28494	27712
North	60402	60388	60378	60554	60759	60828	60227
SiO2	60.64	60.58	61.97	61.08	60.49	58.14	58.96
Al2O3	12.69	13.43	11.58	13.22	11.33	11.61	10.30
TiO2	0.87	0.97	0.77	1.16	0.80	1.17	0.92
Fe2O3	7.26	8.09	6.70	9.34	7.71	8.57	8.07
MgO	5.91	6.00	4.66	5.51	7.22	6.99	6.36
CaO	2.56	3.09	4.25	1.62	3.98	2.47	5.33
Na2O	3.00	3.42	3.20	3.38	2.57	2.48	2.56
K2O	1.28	0.84	1.52	0.87	1.53	1.83	1.36
MnO	0.10	0.13	0.11	0.12	0.13	0.14	0.12
P2O5	0.15	0.18	0.14	0.19	0.19	0.18	0.21
Total	94.46	96.73	94.90	96.49	95.95	93.58	94.19
As	2	0	0	0	15	2	0
Ba	442	283	472	257	520	729	537
Co	16	23	21	24	21	24	26
Cr	294	352	200	253	270	365	386
Cu	22	27	21	27	24	30	29
Ga	14	16	15	15	16	15	15
La	24	22	12	19	18	16	21
Ni	95	92	76	80	140	133	168
Nb	8	11	10	9	10	11	10
Pb	13	13	12	13	25	6	14
Rb	31	23	35	24	38	41	30
Sr	302	318	233	302	353	507	395
Sb	4	0	0	0	3	0	0
S	813	647	340	857	251	190	293
Th	7	3	6	10	4	4	9
V	135	130	110	149	115	163	143
Y	21	21	19	18	20	24	21
Zn	54	74	53	67	61	41	62
Zr	145	152	130	139	143	171	193
Quartz	220	234	185	215	138	162	158
Feldspar	400	491	157	498	660	726	458
Basic	89	19	26	70	8	8	32
Acid	34	12	50	5	2	0	0
Metamorphic	53	1	32	19	2	4	0
Sedimentary	21	24	7	16	26	22	4
Ferromagnesian	16	3	26	1	12	0	52
Matrix	167	216	157	176	152	78	296

TABLE 4.47

Shinnel Formation : Geochemistry and Petrography.

VAR. / ID.	S54	S56	S60	S64	N456	S466	S492	S494	S496	S497
East	27886	27873	27844	27811	28387	28089	28068	28078	28092	28094
North	60031	60042	60063	60075	60529	59813	60243	60322	60301	60300
SiO ₂	60.08	67.88	70.73	69.22	73.38	64.55	73.00	72.13	72.56	77.05
Al ₂ O ₃	11.18	9.64	10.63	10.14	8.18	10.92	8.23	9.99	6.07	7.76
TiO ₂	0.90	0.89	0.96	1.37	0.67	0.93	0.73	0.85	0.66	1.14
Fe ₂ O ₃	6.39	6.59	4.93	6.53	4.10	6.36	4.25	4.64	3.63	4.06
MgO	4.25	4.03	2.10	2.74	2.24	4.80	2.40	2.02	1.63	1.70
CaO	8.45	3.07	1.74	1.94	2.52	3.13	2.08	2.55	8.16	1.02
Na ₂ O	2.26	2.32	2.01	2.06	1.76	2.08	1.83	2.33	1.69	2.12
K ₂ O	2.01	1.72	1.68	1.22	1.27	1.71	1.14	1.38	0.93	0.94
MnO	0.24	0.09	0.07	0.08	0.09	0.08	0.09	0.10	0.13	0.05
P ₂ O ₅	0.26	0.17	0.20	0.42	0.11	0.16	0.13	0.17	0.12	0.15
Total	96.02	96.40	95.05	95.72	94.32	94.72	93.88	96.16	95.58	95.99
As	3	4	1	0	3	3	3	2	4	1
Ba	406	437	368	295	257	378	261	299	185	240
Co	17	11	13	17	10	17	9	10	10	8
Cr	184	183	82	86	80	236	82	80	71	68
Cu	23	12	13	13	9	18	10	13	11	9
Ga	13	12	10	11	9	12	9	10	8	8
La	27	27	28	51	23	29	18	31	20	30
Ni	56	44	25	39	31	71	35	24	25	18
Nb	12	11	17	21	12	14	14	17	13	16
Pb	8	41	9	15	10	10	10	11	8	10
Rb	52	41	47	33	34	47	31	36	24	25
Sr	177	154	89	87	83	132	66	81	142	56
Sb	0	0	0	0	2	2	3	1	0	0
S	495	701	0	7	0	672	84	0	2343	355
Th	8	10	10	16	4	6	8	6	6	8
V	114	115	75	94	59	110	61	70	57	69
Y	20	22	24	33	17	24	18	26	27	20
Zn	34	66	45	58	33	41	42	45	29	32
Zr	174	233	302	511	170	252	202	221	150	318
Quartz	420	404	721	670	636	386	690	650	630	728
Feldspar	173	228	63	53	88	272	94	70	98	104
Basic	73	50	29	19	2	38	12	2	20	4
Acid	27	69	10	23	6	12	0	0	0	0
Metamorphic	20	0	0	11	18	2	12	0	12	2
Sedimentary	45	29	8	14	2	18	8	2	36	8
Ferromagnesian	8	0	11	2	2	0	0	2	0	0
Matrix	234	220	158	208	246	272	184	274	204	154

TABLE 4.47

Shinnel Formation : Geochemistry and Petrography Part 2

VAR. / ID.	L515	L520	L522
East	28928	28986	29310
North	60932	60848	61019
SiO ₂	62.83	64.58	64.83
Al ₂ O ₃	10.38	8.86	12.02
TiO ₂	1.11	1.13	0.99
Fe ₂ O ₃	8.31	7.47	7.53
MgO	5.42	5.19	5.10
CaO	2.43	3.09	1.53
Na ₂ O	2.53	1.92	2.93
K ₂ O	1.57	1.28	1.48
MnO	0.12	0.12	0.10
P ₂ O ₅	0.19	0.14	0.17
Total	94.89	93.78	96.68
As	5	2	0
Ba	588	380	343
Co	18	13	13
Cr	296	271	211
Cu	20	13	6
Ga	13	11	13
La	31	16	26
Ni	57	44	61
Nb	13	11	12
Pb	12	8	10
Rb	34	29	37
Sr	205	135	105
Sb	0	3	0
S	270	489	0
Th	9	10	7
V	156	137	117
Y	26	19	27
Zn	58	31	50
Zr	280	215	248
Quartz	374	440	406
Feldspar	334	310	336
Basic	10	24	2
Acid	12	20	4
Metamorphic	8	2	8
Sedimentary	8	44	0
Ferromagnesian	0	0	0
Matrix	254	160	244

TABLE 4.48

Marchburn Formation : Geochemistry and Granule Petrography.

VAR. / ID.	W379	W380
East	24969	25050
North	60358	60280
SiO ₂	55.25	57.41
Al ₂ O ₃	10.14	10.36
TiO ₂	1.31	1.30
Fe ₂ O ₃	9.83	10.47
MgO	8.95	9.28
CaO	5.03	3.77
Na ₂ O	2.30	2.30
K ₂ O	1.04	1.28
MnO	0.17	0.16
P ₂ O ₅	0.18	0.22
Total	94.20	96.55
As	1	0
Ba	302	541
Co	30	29
Cr	560	478
Cu	29	31
Ga	14	14
La	12	24
Ni	213	190
Nb	10	8
Pb	9	11
Rb	23	29
Sr	386	310
Sb	0	0
S	765	1584
Th	6	7
V	210	206
Y	23	24
Zn	66	69
Zr	112	123
Quartz	12	20
Feldspar	10	15
Coarse Basic	14	14
Spillite	15	11
Andesite	17	13
Coarse Acid	3	6
Fine Acid	22	17
Metamorphic	2	2
Sedimentary	5	6

TABLE 4.49

Afton Formation : Geochemistry and Granule Petrography.

VAR. / ID.	E157	E160	E162	E176	E177	N265	E391	W582
East	27437	27317	27308	27281	27267	26860	26960	24340
North	60731	60715	60735	60821	60782	61084	60701	59810
SiO2	65.17	67.16	68.66	65.49	68.57	65.15	62.82	66.00
Al2O3	11.63	10.60	10.46	11.92	10.22	13.64	11.16	12.38
TiO2	1.38	1.05	1.02	1.34	1.00	1.16	0.85	1.02
Fe2O3	7.47	6.76	7.05	8.37	6.74	7.64	7.16	7.11
MgO	3.67	3.42	3.11	3.06	3.36	2.64	3.73	3.05
CaO	1.19	1.61	1.32	0.91	1.02	0.98	3.19	1.03
Na2O	2.03	1.91	1.89	2.03	1.84	1.97	4.02	2.41
K2O	1.53	1.17	1.41	1.84	1.26	2.11	0.74	2.00
HrO	0.09	0.09	0.10	0.11	0.09	0.10	0.14	0.10
P2O5	0.19	0.16	0.15	0.19	0.15	0.16	0.23	0.16
Total	94.35	93.93	95.17	95.26	94.25	95.55	94.04	95.26
As	0	2	0	0	3	1	3	3
Ba	399	305	327	402	297	455	414	553
Co	20	20	16	27	15	27	16	16
Cr	201	175	157	152	177	196	159	169
Cu	22	24	18	23	18	17	19	17
Ga	13	12	12	15	11	15	16	14
La	39	26	29	41	29	27	36	26
Ni	62	53	56	59	50	68	54	55
Nb	18	14	14	17	14	16	14	15
Pb	13	9	14	16	7	14	23	13
Rb	40	31	35	46	36	51	20	48
Sr	100	111	116	110	84	114	750	186
Sb	0	0	0	0	0	0	0	1
S	715	977	374	191	648	193	243	35
Th	12	7	7	12	10	7	10	7
V	140	122	107	121	111	116	110	106
Y	30	25	24	36	24	22	27	27
Zn	61	63	59	62	57	66	59	63
Zr	370	275	225	252	248	235	209	224
Quartz	58	45	51	48	57	52	51	55
Feldspar	7	5	6	10	6	6	10	14
Coarse Basic	1	2	2	1	0	0	1	0
Spilite	2	15	3	6	3	4	7	1
Andesite	1	5	2	6	5	2	3	2
Coarse Acid	3	2	8	5	4	6	7	2
Fine Acid	11	18	20	14	15	12	17	17
Metamorphic	7	7	3	4	5	5	1	4
Sedimentary	10	1	5	6	5	13	3	5

TABLE 4.50

Blackcraig Formation : Geochemistry and Granule Petrography.

VAR. / ID.	A12	A33	A43	A46	A439
East	26293	26305	26387	26386	26168
North	60517	60617	60705	60718	60734
SiO2	61.56	59.41	63.34	62.28	60.73
Al2O3	9.96	10.99	9.25	11.02	11.09
TiO2	1.33	1.36	1.51	1.26	1.21
Fe2O3	8.51	9.30	9.40	8.78	8.69
MgO	3.97	5.01	3.75	4.62	5.42
CaO	5.70	4.36	5.21	4.49	3.55
Na2O	2.47	2.79	2.45	2.89	2.59
K2O	1.01	0.92	1.00	0.99	1.27
MnO	0.14	0.15	0.16	0.14	0.17
P2O5	0.14	0.15	0.13	0.14	0.14
Total	94.79	94.44	96.20	96.61	94.86
As	2	0	0	0	2
Ba	269	273	276	269	307
Co	32	25	22	22	18
Cr	158	174	153	159	156
Cu	28	25	20	23	25
Ga	15	16	15	16	16
La	10	13	15	5	26
Ni	45	47	37	44	44
Nb	9	12	9	9	10
Pb	12	12	12	14	7
Rb	22	21	23	25	29
Sr	220	214	195	183	187
Sb	0	0	0	0	0
S	1529	1156	1493	864	1881
Th	9	5	7	3	5
V	195	212	216	201	186
Y	28	30	28	29	32
Zn	64	75	67	69	74
Zr	128	146	119	123	136
Quartz	24	37	33	29	20
Feldspar	9	12	5	13	2
Coarse Basic	4	8	18	4	5
Spillite	7	16	13	12	17
Andesite	9	3	7	10	14
Coarse Acid	10	6	4	3	5
Fine Acid	23	7	17	14	22
Metamorphic	5	2	0	6	8
Sedimentary	9	9	3	9	7

TABLE 4.51

Scar Formation : Geochemistry and Granule Petrography.

VAR / ID.	S100	E117	S127	S129	E408	S491	L528	L584	L585
East	27641	27442	27465	27480	27335	28060	28494	28484	28487
North	60256	60520	60418	60402	60503	60358	60828	60647	60658
SiO ₂	61.58	59.85	58.69	60.64	60.71	59.95	58.14	60.68	60.53
Al ₂ O ₃	11.32	12.50	13.09	12.69	11.66	12.78	11.61	10.93	11.88
TiO ₂	0.87	0.81	1.00	0.87	1.00	0.95	1.17	1.22	1.16
Fe ₂ O ₃	7.04	7.18	8.28	7.26	8.84	7.82	8.57	8.99	9.09
MgO	6.51	6.72	6.56	5.91	5.45	7.56	6.99	7.07	7.62
CaO	2.94	2.39	4.44	2.56	4.33	2.26	2.47	1.66	1.14
Na ₂ O	2.45	2.67	2.70	3.00	2.96	2.49	2.48	2.41	2.38
K ₂ O	1.65	1.86	1.60	1.28	1.42	2.11	1.83	1.48	1.76
MnO	0.10	0.12	0.13	0.10	0.15	0.11	0.14	0.13	0.11
P ₂ O ₅	0.19	0.15	0.21	0.15	0.20	0.16	0.18	0.18	0.19
Total	94.65	94.25	96.70	94.46	96.72	96.19	93.58	94.75	95.86
As	3	0	0	2	2	2	2	3	4
Ba	619	676	469	442	443	570	729	458	450
Co	21	18	25	16	23	18	24	24	24
Cr	308	231	250	294	211	342	365	476	375
Cu	28	25	33	22	31	25	30	2	9
Ga	13	14	13	14	15	14	15	14	14
La	23	23	17	24	21	21	16	21	11
Ni	141	89	78	95	79	147	133	162	165
Nb	11	9	9	8	10	11	11	10	11
Pb	18	14	14	13	12	8	6	9	10
Rb	40	49	38	31	30	50	41	33	36
Sr	310	333	302	302	172	258	507	224	188
Sb	0	0	0	4	0	0	0	3	0
S	393	792	682	813	1107	316	190	0	0
Th	8	11	8	7	6	5	4	7	5
V	121	128	168	135	164	128	163	147	124
Y	17	20	21	21	23	21	24	21	24
Zn	63	67	71	54	64	48	41	55	67
Zr	149	137	150	145	149	162	171	179	165
Quartz	28	20	21	35	19	25	23	25	27
Feldspar	14	15	20	14	16	8	13	10	10
Coarse Basic	1	3	3	1	1	0	3	1	2
Spillite	8	21	19	9	9	9	23	18	23
Andesite	10	6	5	4	15	2	3	1	10
Coarse Acid	6	6	6	4	5	6	4	3	4
Fine Acid	20	21	18	24	17	32	19	27	16
Metamorphic	3	2	2	4	3	7	4	2	5
Sedimentary	10	6	6	5	15	11	8	13	3

TABLE 4.52

Shinnel Formation : Geochemistry and Granule Petrography.

VAR. / ID.	N456	S492	S496	L520
East	28387	28068	28092	28986
North	60529	60243	60301	60848
SiO ₂	73.38	73.00	72.56	64.58
Al ₂ O ₃	8.18	8.23	6.07	8.86
TiO ₂	0.67	0.73	0.66	1.13
Fe ₂ O ₃	4.10	4.25	3.63	7.47
MgO	2.24	2.40	1.63	5.19
CaO	2.52	2.08	8.16	3.09
Na ₂ O	1.76	1.83	1.69	1.92
K ₂ O	1.27	1.14	0.93	1.28
MnO	0.09	0.09	0.13	0.12
P ₂ O ₅	0.11	0.13	0.12	0.14
Total	94.32	93.88	95.58	93.78
As	3	3	4	2
Ba	257	261	185	380
Co	10	9	10	13
Cr	80	82	71	271
Cu	9	10	11	13
Ga	9	9	8	11
La	23	18	20	16
Ni	31	35	25	44
Nb	12	14	13	11
Pb	10	10	8	8
Rb	34	31	24	29
Sr	83	66	142	135
Sb	2	3	0	3
S	0	84	2343	489
Th	4	8	6	10
V	59	61	57	137
Y	17	18	27	19
Zn	33	42	29	31
Zr	170	202	150	215
Quartz	60	54	60	40
Feldspar	7	10	5	13
Coarse Basic	0	0	0	0
Spillite	2	5	2	1
Andesite	1	2	0	2
Coarse Acid	5	1	5	10
Fine Acid	10	10	5	16
Metamorphic	4	10	13	4
Sedimentary	11	8	10	14

VAR. / ID.	AX-54	AX-156	AX-214	AX-215	AX-216	AX-217	AX-224	AX-292	AX-293	AX-294
East	29102	30286	29717	29674	29643	29647	30284	27477	27431	27467
North	62609	63328	62910	62960	62902	62912	63330	61739	61734	61736
SiO2	60.02	59.43	58.97	59.09	59.37	61.57	57.16	56.45	58.45	64.21
Al2O3	14.02	13.27	14.16	14.13	15.28	14.18	13.21	12.68	14.22	12.35
TiO2	1.42	1.51	1.40	1.60	1.10	1.07	1.57	1.46	1.40	1.33
Fe2O3	8.66	9.00	8.68	8.83	7.51	7.70	9.24	8.41	8.57	7.30
MgO	4.49	5.86	5.62	5.59	5.95	4.34	6.48	4.48	4.42	3.70
CaO	4.87	2.15	2.35	1.78	2.16	2.74	3.34	2.27	2.49	3.27
Na2O	3.76	3.62	4.10	3.08	3.44	4.83	3.01	3.04	3.33	3.94
K2O	0.65	0.82	1.23	1.46	2.09	1.01	1.44	1.27	1.54	0.81
MnO	0.14	0.14	0.14	0.11	0.12	0.14	0.17	0.13	0.14	0.12
P2O5	0.40	0.28	0.33	0.22	0.26	0.30	0.45	0.29	0.38	0.21
Total	98.43	96.08	96.98	95.89	97.28	97.88	96.07	90.48	94.94	97.24
As	0	0	0	0	0	0	0	0	0	3
Ba	530	907	588	563	848	677	457	441	450	358
Co	36	37	35	37	29	41	40	29	36	31
Cr	169	179	178	244	161	148	161	191	144	209
Cu	27	23	23	30	28	25	23	25	18	23
Ga	19	14	17	17	17	17	16	16	15	15
La	44	23	30	32	36	38	27	26	30	23
Ni	50	62	61	87	63	56	48	46	50	58
Nb	21	15	17	18	16	18	15	17	14	15
Pb	19	14	13	9	19	18	17	13	7	16
Rb	19	22	33	38	58	25	34	37	42	19
Sr	857	371	531	258	604	633	400	209	210	269
Sb	0	0	2	0	0	0	0	0	0	0
S	52	237	43	187	52	128	63	596	412	312
Th	13	2	7	7	4	4	7	9	6	0
V	184	176	179	189	152	160	198	183	188	163
Y	31	25	28	29	28	31	25	31	23	27
Zn	100	91	89	72	86	84	95	67	80	64
Zr	194	181	186	197	187	177	173	180	159	173

VAR. / ID.	A1	A232	A233	A234	N237	N238	N241	N292	N294	A297
East	26302	26226	26210	26200	26719	26720	26721	26243	26251	26147
North	60544	61065	61059	61065	61272	61261	61228	61192	61139	61119
SiO2	58.75	55.23	54.87	52.71	50.07	52.57	57.78	53.60	53.64	55.11
Al2O3	10.67	12.31	13.18	12.47	10.94	12.15	10.08	12.46	11.36	12.82
TiO2	1.30	1.78	1.72	2.22	1.78	1.93	1.21	2.03	1.75	1.80
Fe2O3	9.56	11.45	10.27	12.50	11.90	12.68	9.61	12.06	12.32	10.95
MgO	5.15	8.34	6.81	8.18	10.93	8.33	5.14	8.17	8.55	6.43
CaO	4.34	2.27	2.98	2.48	5.33	3.14	7.03	4.14	3.69	1.82
Na2O	2.62	2.70	2.89	2.68	1.94	2.22	2.33	2.07	2.72	2.73
K2O	0.96	1.31	1.66	1.27	0.87	1.68	1.75	1.70	0.94	1.82
MnO	0.15	0.16	0.15	0.17	0.18	0.16	0.16	0.18	0.17	0.18
P2O5	0.14	0.20	0.22	0.22	0.17	0.20	0.43	0.21	0.20	0.19
Total	93.64	95.75	94.75	94.90	94.11	95.06	95.52	96.62	95.34	93.85
As	2	2	3	3	0	5	4	6	2	0
Ba	295	343	352	303	157	252	523	311	191	289
Co	24	29	28	33	31	39	28	35	31	32
Cr	181	293	269	374	853	535	335	720	385	265
Cu	27	38	41	44	87	36	33	35	34	29
Ga	16	16	17	17	15	17	15	16	16	16
La	8	16	17	20	26	6	25	15	16	21
Ni	53	131	107	126	336	226	92	225	112	104
Nb	8	15	17	16	8	10	14	12	12	14
Pb	10	9	12	9	6	11	9	8	5	16
Rb	23	26	36	24	16	39	34	39	20	43
Sr	196	149	204	184	138	138	404	168	204	150
Sb	0	0	0	0	0	0	0	0	0	0
S	14	932	2173	1745	1186	2282	218	4398	1526	2228
Th	3	5	6	5	4	5	7	2	5	0
V	202	215	213	275	246	250	193	232	246	233
Y	27	28	30	27	23	20	28	22	25	24
Zn	74	76	107	79	70	57	58	53	95	56
Zr	111	145	176	152	100	131	170	127	120	143

VAR. / ID.	A299	W379	W380	N413	N426	N430	N431	N433	C469	C472
East	26141	24969	25050	26743	26675	26723	26722	26612	26060	26017
North	61142	60358	60280	61374	61289	61233	61232	61272	60939	60980
SiO2	63.96	55.25	57.41	52.65	59.29	56.96	55.48	65.01	55.59	61.68
Al2O3	11.53	10.14	10.36	7.93	11.43	13.12	10.40	11.68	11.68	12.89
TiO2	1.46	1.31	1.30	1.18	1.39	1.66	1.32	1.11	1.38	1.55
Fe2O3	8.50	9.83	10.47	8.60	9.00	10.70	8.95	7.68	10.18	8.97
MgO	4.14	8.95	9.28	9.35	4.90	6.53	7.70	3.91	7.60	4.28
CaO	2.04	5.03	3.77	14.43	3.56	2.66	9.25	2.24	4.50	1.44
Na2O	3.16	2.30	2.30	1.45	3.54	2.86	2.30	2.94	2.91	4.72
K2O	1.60	1.04	1.28	0.36	1.02	1.34	0.55	1.71	0.95	0.68
MnO	0.13	0.17	0.16	0.15	0.14	0.16	0.19	0.11	0.17	0.50
P2O5	0.23	0.18	0.22	0.15	0.34	0.21	0.18	0.24	0.19	0.29
Total	96.75	94.20	96.55	96.25	94.61	96.20	96.32	96.63	95.15	97.00
As	0	1	0	0	0	5	3	0	2	0
Ba	390	302	541	140	425	319	173	554	282	279
Co	23	30	29	30	23	26	29	22	28	24
Cr	182	560	478	903	155	262	425	178	313	155
Cu	20	29	31	37	31	36	26	28	34	15
Ga	14	14	14	11	16	16	14	14	15	16
La	23	12	24	15	30	22	19	26	11	42
Ni	61	213	190	372	57	112	156	64	131	50
Nb	14	10	8	10	14	14	9	16	15	17
Pb	11	9	11	8	12	11	9	17	12	14
Rb	42	23	29	12	21	30	17	48	20	17
Sr	262	386	310	100	331	185	236	392	204	361
Sb	0	0	0	0	0	3	0	0	0	0
S	0	765	1584	747	0	2701	1452	0	1957	0
Th	9	6	7	0	10	2	4	9	0	10
V	159	210	206	168	175	196	183	144	215	215
Y	23	23	24	23	27	28	23	29	27	26
Zn	56	66	69	49	84	67	56	70	78	71
Zr	158	112	123	108	164	141	124	179	127	180

VAR. / ID.	C473	C474	N476	N478	N480	W506	N542	N543	N591	W603
East	26001	26003	26710	26721	26720	26858	26727	26718	26722	23350
North	61014	60991	61258	61253	61262	61360	61294	61275	61239	59470
SiO2	62.93	62.13	50.07	60.19	52.94	62.58	51.30	55.54	56.38	61.25
Al2O3	11.27	11.50	11.36	13.11	11.75	14.34	10.13	10.81	12.46	10.70
TiO2	1.56	1.63	1.80	1.36	1.45	1.42	2.12	1.42	1.54	1.19
Fe2O3	8.41	9.78	13.19	9.62	11.06	9.76	13.10	10.20	10.02	7.79
MgO	3.92	4.67	11.07	4.70	8.55	2.23	11.97	9.17	5.90	6.38
CaO	1.69	1.71	3.24	3.05	4.40	2.60	3.18	3.42	3.29	2.61
Na2O	3.11	3.56	2.05	2.55	2.28	1.69	2.01	2.38	2.62	2.82
K2O	1.31	0.96	0.97	1.32	1.47	1.72	0.54	0.97	1.12	1.85
MnO	0.12	0.16	0.17	0.14	0.15	0.17	0.17	0.14	0.13	0.11
P2O5	0.20	0.21	0.19	0.25	0.20	0.17	0.25	0.15	0.19	0.15
Total	94.52	96.31	94.11	96.29	94.25	96.68	94.77	94.20	93.65	94.85
As	3	0	4	4	2	1	2	2	4	1
Ba	370	227	237	325	337	305	308	346	230	342
Co	21	22	35	18	28	41	44	26	19	19
Cr	216	215	905	176	457	247	338	361	260	402
Cu	18	13	46	26	40	14	42	30	30	17
Ga	14	16	17	16	15	12	17	14	16	13
La	25	23	18	24	14	15	12	14	18	17
Ni	80	79	288	75	224	173	203	211	106	160
Nb	17	14	11	15	11	12	15	9	16	13
Pb	10	8	9	17	14	9	7	5	10	13
Rb	31	25	24	41	37	47	13	20	28	37
Sr	203	237	184	249	159	88	149	128	170	97
Sb	0	0	4	0	0	0	2	0	0	0
S	295	34	2009	5216	2394	0	0	1749	2872	0
Th	8	5	3	2	4	5	4	4	4	4
V	164	182	258	143	215	141	268	218	184	139
Y	20	30	31	27	20	25	25	23	30	26
Zn	54	70	70	68	56	87	91	56	84	64
Zr	167	160	121	155	119	185	141	107	150	152

VAR. / ID.	W604	N610	N619	AX866
East	24850	26682	26646	30223
North	60280	61238	61315	63199
SiO2	54.12	57.47	60.34	59.12
Al2O3	10.33	12.44	12.02	11.71
TiO2	1.85	1.65	1.28	1.34
Fe2O3	13.20	9.99	8.87	9.05
MgO	11.83	6.45	4.70	5.84
CaO	2.01	3.79	1.94	2.96
Na2O	1.88	2.81	3.07	3.40
K2O	1.32	0.69	1.92	2.60
MnO	0.18	0.14	0.14	0.16
P2O5	0.16	0.19	0.23	0.34
Total	96.88	95.62	94.51	96.52
As	1	16	0	0
Ba	239	172	482	696
Co	31	27	18	25
Cr	485	285	148	143
Cu	33	28	18	23
Ga	16	16	17	16
La	13	15	18	36
Ni	196	114	74	47
Nb	9	15	16	13
Pb	6	33	13	12
Rb	28	21	44	46
Sr	122	173	326	328
Sb	2	2	3	0
S	267	338	0	0
Th	3	1	5	7
V	252	197	132	181
Y	24	27	30	28
Zn	79	90	73	75
Zr	122	152	180	165

TABLE 4.53

VAR. / ID.	AX-62	AX-63	AX-131	AX-132	AX-133	AX-134	AX-135	AX-136	AX-137	AX-140
East	29274	29101	23525	23532	23653	23490	23390	23285	23540	24920
North	62080	62545	59069	58945	58150	58460	58350	58090	58178	59705
SiO2	62.22	65.58	67.26	63.56	70.48	71.40	66.51	61.21	62.21	67.93
Al2O3	12.50	16.02	14.47	15.88	13.43	13.61	14.75	13.77	13.28	15.59
TiO2	0.84	1.30	0.97	0.95	0.92	1.07	1.11	0.98	0.89	0.91
Fe2O3	5.74	7.54	7.38	7.09	5.64	5.43	7.14	7.55	6.28	6.31
MgO	3.22	3.83	3.71	3.89	3.21	2.57	3.90	6.14	4.64	2.91
CaO	7.19	0.65	0.96	0.95	0.55	0.56	0.79	2.97	3.85	0.85
Na2O	1.91	2.58	2.57	2.09	2.72	2.56	2.12	1.90	1.81	2.98
K2O	1.47	1.76	2.11	2.45	1.36	1.48	1.80	2.15	1.89	1.69
MnO	0.13	0.10	0.13	0.11	0.06	0.05	0.09	0.10	0.08	0.07
P2O5	0.16	0.20	0.19	0.17	0.16	0.22	0.17	0.28	0.16	0.17
Total	95.38	99.56	99.75	97.14	98.53	98.95	98.38	97.05	95.09	99.41
As	0	0	14	3	19	2	0	0	0	5
Ba	278	438	768	566	381	381	400	632	406	420
Co	33	35	47	27	39	43	34	27	32	35
Cr	134	140	195	115	121	146	140	167	145	110
Cu	18	25	19	25	18	17	21	30	20	19
Ga	14	17	15	17	12	12	14	16	14	15
La	29	40	41	35	29	34	37	44	38	37
Ni	62	74	64	60	47	55	63	82	67	47
Nb	16	20	14	18	16	19	18	15	16	16
Pb	12	12	23	18	13	13	13	17	16	19
Rb	47	55	47	71	39	44	52	60	53	50
Sr	106	93	186	85	156	68	84	419	145	153
Sb	0	0	0	0	0	0	0	0	0	0
S	110	478	296	204	1166	1183	514	663	624	854
Th	2	11	8	7	10	9	8	8	6	6
V	98	120	133	101	84	92	111	146	99	97
Y	24	33	25	24	23	27	26	28	25	25
Zn	49	58	86	69	66	57	65	72	58	66
Zr	210	281	244	222	238	330	241	239	250	223

VAR. / ID.	AX-141	AX-149	AX-169	AX-170	AX-171	AX-172	AX-202	AX-204	AX-222	AX-223
East	24868	23758	30321	30269	30392	30384	30031	30172	30237	30252
North	59822	58941	63052	63083	63217	63258	62856	62900	63181	63225
SiO2	64.42	63.42	66.50	61.34	62.41	61.54	60.42	68.05	66.07	64.99
Al2O3	15.34	15.22	15.69	13.18	12.43	12.89	14.35	15.91	11.53	13.36
TiO2	1.28	1.00	1.06	1.00	0.88	1.01	1.24	1.05	0.88	0.96
Fe2O3	8.15	7.19	6.22	6.53	6.21	7.68	7.34	6.33	6.25	6.95
MgO	3.90	2.94	2.40	4.75	3.79	6.10	4.82	2.90	5.32	5.64
CaO	0.99	1.46	2.58	4.45	3.98	3.44	3.04	0.64	0.21	1.47
Na2O	2.44	2.38	2.29	1.62	1.49	1.88	1.38	2.42	1.17	1.28
K2O	1.73	2.05	1.92	1.87	1.89	1.79	2.07	1.88	1.64	1.60
MnO	0.10	0.08	0.18	0.11	0.20	0.09	0.08	0.07	0.05	0.07
P2O5	0.17	0.23	0.17	0.19	0.12	0.19	0.20	0.20	0.12	0.12
Total	98.52	95.97	99.01	95.04	93.40	96.61	94.94	99.45	93.24	96.44
As	0	5	0	0	0	0	0	0	3	2
Ba	442	476	373	408	363	698	430	502	600	285
Co	45	36	36	32	29	32	30	43	31	41
Cr	170	133	134	233	187	195	282	83	386	407
Cu	25	21	20	18	16	22	23	19	14	19
Ga	17	16	15	13	14	14	16	15	13	15
La	40	30	29	38	32	44	47	32	26	34
Ni	63	66	46	82	67	72	93	29	176	213
Nb	20	19	16	16	17	18	21	18	16	15
Pb	18	18	12	17	18	18	20	12	61	16
Rb	54	63	57	57	60	48	66	53	48	46
Sr	157	151	118	223	158	244	117	88	48	82
Sb	0	0	1	0	0	0	0	0	0	0
S	949	457	669	451	485	368	618	656	668	930
Th	1	8	9	6	5	5	12	5	13	8
V	127	115	112	116	96	144	118	103	102	111
Y	29	31	25	28	27	27	30	30	25	23
Zn	84	79	70	60	66	77	87	55	50	77
Zr	250	251	247	358	298	283	431	258	233	228

VAR. / ID.	AX-296	AX-298	AX-299	AX-300	AX-301	AX-302	AX-305	AX-306	AX-307	AX-308
East	27572	27615	27642	27670	27681	27681	27712	27714	27721	27741
North	61478	61455	61449	61448	61425	61414	61357	61354	61338	61319
SiO2	61.40	72.95	63.59	69.00	66.64	70.51	64.23	64.15	65.30	61.41
Al2O3	17.02	11.65	15.24	12.36	13.70	12.68	14.39	15.11	15.51	14.41
TiO2	1.38	0.61	0.94	0.71	1.04	0.75	1.33	1.08	1.43	1.02
Fe2O3	8.09	4.41	6.58	5.01	6.42	5.17	7.58	7.17	7.66	7.32
MgO	3.95	2.58	3.83	2.47	4.01	2.92	4.11	3.97	3.39	5.33
CaO	0.47	2.46	1.65	3.25	3.28	1.42	2.58	1.95	0.75	3.62
Na2O	2.19	2.92	2.80	2.20	1.97	2.62	1.80	2.20	2.13	1.37
K2O	2.20	1.12	1.81	1.39	1.58	1.54	1.76	2.15	1.84	2.04
MnO	0.12	0.11	0.12	0.12	0.09	0.07	0.11	0.10	0.09	0.09
P2O5	0.18	0.12	0.18	0.13	0.17	0.17	0.17	0.16	0.21	0.17
Total	97.00	98.93	96.74	96.64	98.90	97.85	98.06	98.04	98.31	96.78
As	0	0	0	0	1	1	1	3	4	0
Ba	831	332	618	296	386	679	386	561	467	396
Co	34	45	33	34	41	35	37	32	30	27
Cr	164	110	126	128	182	125	227	176	202	194
Cu	30	15	20	13	20	16	23	21	24	23
Ga	17	10	16	11	11	13	14	16	14	14
La	40	24	37	32	40	32	33	34	26	41
Ni	75	37	56	45	69	47	72	86	65	73
Nb	20	11	15	12	16	12	17	18	18	16
Pb	16	14	12	15	14	17	13	9	12	15
Rb	59	33	44	38	45	41	48	56	48	58
Sr	94	137	208	155	114	161	98	104	91	186
Sb	0	0	0	0	0	0	0	0	0	0
S	113	787	323	1161	738	1400	504	306	644	571
Th	10	4	4	1	5	6	6	6	9	10
V	135	76	112	89	115	88	141	120	145	114
Y	29	15	25	20	25	20	28	25	27	23
Zn	85	56	50	53	61	54	67	56	52	64
Zr	272	156	217	191	286	195	322	246	361	292

VAR. / ID.	AX-311	DTIA-131	DTIA-212	E146	E148	E150	E151	E152	E153	E155
East	27792	25246	26118	27395	27392	27423	27423	27421	27421	27441
North	61284	59144	60347	60621	60644	60662	60672	60681	60689	60709
SiO2	64.63	75.32	64.31	65.52	65.68	65.37	65.23	64.94	64.00	70.45
Al2O3	13.48	10.05	15.72	10.84	11.86	13.11	11.74	13.00	13.83	10.69
TiO2	0.88	0.83	1.45	0.93	1.11	1.19	1.29	0.93	0.95	1.10
Fe2O3	6.17	4.64	7.45	6.50	6.96	7.70	7.70	6.72	6.62	6.09
MgO	4.89	1.96	3.60	3.96	4.24	3.79	4.19	3.64	4.16	3.19
CaO	3.96	0.74	1.59	3.16	2.88	1.65	1.92	2.14	2.80	1.16
Na2O	1.58	2.42	2.14	1.60	1.74	1.65	1.92	1.77	1.92	2.13
K2O	2.01	1.56	1.81	2.04	2.12	1.90	1.98	2.46	2.36	1.23
MnO	0.08	0.05	0.10	0.08	0.10	0.09	0.10	0.10	0.08	0.08
P2O5	0.17	0.11	0.21	0.13	0.15	0.16	0.16	0.14	0.16	0.16
Total	97.85	97.68	98.38	94.76	96.84	96.61	96.23	95.84	96.88	96.28
As	0	4	4	0	2	3	0	0	1	0
Ba	415	439	367	429	525	318	466	468	480	332
Co	31	56	32	15	17	14	15	18	15	16
Cr	156	71	220	184	192	186	160	117	134	152
Cu	19	18	20	16	17	16	19	12	20	16
Ga	12	10	14	14	14	14	14	15	14	12
La	29	24	36	28	36	33	27	31	28	30
Ni	63	22	69	71	71	74	62	63	70	48
Nb	16	13	19	15	17	17	17	16	18	15
Pb	18	13	13	17	14	11	12	12	20	13
Rb	55	40	50	59	57	53	55	74	71	32
Sr	102	71	109	94	98	66	92	87	114	93
Sb	0	0	0	0	0	2	0	0	0	0
S	552	1254	1102	535	525	741	649	515	869	704
Th	5	8	8	12	15	11	8	12	10	9
V	99	86	135	100	104	123	119	88	99	113
Y	24	21	31	27	26	27	25	23	25	24
Zn	60	47	69	63	64	67	54	54	66	48
Zr	272	186	332	257	283	292	252	213	223	278

VAR. / ID.	E156	E157	E159	E160	E161	E162	E163	E164	E165	E166
East	27452	27437	27419	27317	27314	27308	27303	27296	27284	27280
North	60726	60731	60743	60715	60725	60735	60746	60752	60759	60769
SiO2	64.89	65.17	72.27	67.16	69.68	68.66	67.43	65.60	70.10	65.51
Al2O3	12.31	11.63	10.41	10.60	10.44	10.46	12.72	11.56	10.08	12.77
TiO2	1.03	1.38	0.88	1.05	0.99	1.02	1.04	1.44	1.00	1.23
Fe2O3	6.89	7.47	5.07	6.76	6.80	7.05	6.95	8.16	6.53	7.85
MgO	3.50	3.67	2.22	3.42	3.28	3.11	3.26	3.07	2.78	3.68
CaO	1.19	1.19	1.64	1.61	1.48	1.32	1.26	1.46	0.65	0.82
Na2O	2.22	2.03	2.41	1.91	1.98	1.89	2.17	1.95	1.97	2.02
K2O	1.44	1.53	1.47	1.17	1.26	1.41	1.75	1.70	1.44	1.71
MnO	0.10	0.09	0.07	0.09	0.09	0.10	0.09	0.11	0.08	0.10
P2O5	0.17	0.19	0.15	0.16	0.17	0.15	0.19	0.23	0.13	0.17
Total	93.74	94.35	96.59	93.93	96.17	95.17	96.86	95.26	94.76	95.86
As	3	0	0	2	2	0	0	2	2	3
Ba	367	399	335	305	379	327	430	421	335	419
Co	19	20	14	20	17	16	20	16	13	18
Cr	135	201	97	175	156	157	133	247	141	158
Cu	22	22	14	24	17	18	22	23	16	23
Ga	14	13	11	12	12	12	14	14	11	14
La	34	39	28	26	26	29	32	37	25	45
Ni	60	62	37	53	52	56	58	58	52	56
Nb	15	18	14	14	13	14	17	19	14	16
Pb	9	13	9	9	13	14	14	21	5	11
Rb	39	40	39	31	31	35	47	44	37	45
Sr	116	100	102	111	119	116	138	139	91	111
Sb	1	0	0	0	0	0	0	0	1	0
S	399	715	859	977	553	374	585	865	334	544
Th	15	12	7	7	11	7	5	13	12	12
V	115	140	83	122	119	107	113	146	108	116
Y	26	30	23	25	24	24	26	30	24	29
Zn	65	61	39	63	60	59	72	69	47	64
Zr	214	370	226	275	250	225	237	410	203	251

TABLE 4.54

VAR. / ID.	E168	E171	E172	E173	E174	E175	E176	E177	A181	A186
East	27260	27246	27263	27272	27286	27287	27281	27267	26461	26437
North	60791	60819	60854	60867	60844	60833	60821	60782	60436	60480
SiO2	69.47	67.17	63.43	63.18	64.32	67.18	65.49	68.57	62.77	62.27
Al2O3	11.76	11.73	13.93	11.37	11.16	12.19	11.92	10.22	15.00	12.02
TiO2	0.99	1.30	1.35	1.12	1.24	1.00	1.34	1.00	1.11	1.31
Fe2O3	6.24	7.30	8.58	7.78	7.92	6.33	8.37	6.74	7.81	8.38
MgO	2.77	3.10	3.90	4.14	3.27	2.73	3.06	3.36	2.91	4.91
CaO	1.01	0.79	0.59	2.35	2.02	1.06	0.91	1.02	1.12	2.04
Na2O	2.11	2.05	0.79	2.51	1.86	1.96	2.03	1.84	1.81	1.67
K2O	1.60	1.70	1.91	1.41	1.56	1.91	1.84	1.26	2.90	1.83
MnO	0.09	0.10	0.10	0.13	0.11	0.08	0.11	0.09	0.23	0.11
P2O5	0.16	0.18	0.19	0.27	0.18	0.15	0.19	0.15	0.17	0.19
Total	96.20	95.42	94.77	94.26	93.64	94.59	95.26	94.25	95.83	94.73
As	2	3	2	2	0	1	0	3	12	2
Ba	368	416	419	440	376	429	402	297	664	380
Co	15	15	19	25	18	14	27	15	18	17
Cr	116	136	143	154	156	104	152	177	196	196
Cu	21	22	28	22	20	15	23	18	23	21
Ga	13	13	16	14	12	13	15	11	15	14
La	37	48	43	31	28	27	41	29	32	35
Ni	43	54	73	48	58	42	59	50	65	72
Nb	16	16	19	16	17	16	17	14	17	19
Pb	8	10	10	7	5	10	16	7	11	14
Rb	41	43	50	34	39	47	46	36	75	49
Sr	96	105	93	197	119	85	110	84	95	83
Sb	0	0	0	0	0	3	0	0	22	0
S	421	88	315	862	578	594	191	648	53	273
Th	8	11	9	11	8	12	12	10	9	14
V	96	121	127	124	133	99	121	111	103	127
Y	24	33	30	27	27	27	36	24	26	25
Zn	50	55	70	60	60	59	62	57	70	67
Zr	222	252	251	207	344	223	252	248	229	323

TABLE 4.54

VAR. / ID.	A187	A188	A189	A190	A191	A192	A193	A216	A219	A221
East	26432	26427	26423	26420	26418	26412	26407	26361	26327	26314
North	60492	60501	60511	60519	60527	60538	60547	60824	60891	60909
SiO2	64.50	64.20	62.81	61.93	63.17	60.47	59.63	66.77	63.57	64.88
Al2O3	12.33	13.41	11.66	10.69	13.49	12.76	10.30	12.45	15.01	11.88
TiO2	1.01	0.90	1.22	1.25	0.90	1.38	0.75	1.03	1.36	1.29
Fe2O3	7.17	6.75	8.94	7.33	6.93	8.31	5.73	6.82	7.82	7.51
MgO	3.99	4.18	6.00	5.46	4.39	5.65	3.57	3.51	3.48	3.44
CaO	2.64	1.22	2.47	4.11	1.23	2.49	12.52	1.28	0.78	0.86
Na2O	1.66	1.86	1.53	1.22	1.61	1.42	1.01	1.95	2.22	1.92
K2O	2.04	2.10	1.87	2.27	2.29	2.25	2.41	1.63	2.04	1.62
MnO	0.07	0.07	0.13	0.17	0.06	0.12	0.11	0.09	0.10	0.10
P2O5	0.16	0.17	0.24	0.19	0.16	0.18	0.15	0.17	0.20	0.16
Total	95.57	94.86	96.87	94.62	94.23	95.03	96.18	95.70	96.58	93.66
As	3	15	5	7	3	5	2	3	1	2
Ba	402	415	391	415	405	429	284	428	459	380
Co	26	18	17	21	14	25	13	16	17	16
Cr	169	132	186	308	124	230	122	155	162	178
Cu	17	22	20	17	20	22	16	19	24	17
Ga	14	13	14	14	15	15	11	14	15	13
La	27	37	42	35	29	39	24	32	31	35
Ni	74	72	69	103	65	87	62	60	69	67
Nb	16	16	17	16	17	20	14	18	20	17
Pb	12	7	11	10	12	7	13	10	4	9
Rb	56	61	46	60	66	62	58	47	49	41
Sr	113	63	83	98	56	73	198	110	95	94
Sb	0	0	0	0	2	0	0	0	0	0
S	202	313	496	461	341	607	452	452	631	746
Th	11	10	13	13	13	12	9	8	8	12
V	106	94	133	123	92	132	76	111	126	127
Y	22	22	26	30	24	28	20	26	29	29
Zn	66	59	63	51	48	57	50	53	60	55
Zr	261	197	265	444	190	389	178	232	302	284

VAR. / ID.	A222	A225	A227	A228	A229	N242	N250	N251	N252	N253
East	26302	26273	26257	26247	26237	26721	26752	26758	26760	26764
North	60916	60963	60980	60988	60991	61219	61079	61087	61097	61106
SiO2	64.63	63.86	62.58	65.37	64.58	62.50	62.73	64.78	64.41	66.99
Al2O3	12.59	11.77	9.37	12.51	13.53	14.70	13.43	13.06	12.36	12.66
TiO2	1.14	0.99	1.50	1.03	1.18	1.35	1.27	1.21	1.23	1.06
Fe2O3	7.51	6.57	9.48	6.99	7.48	7.95	7.32	7.60	7.57	6.45
MgO	3.37	3.33	3.88	3.36	3.48	3.83	3.36	3.03	3.30	2.63
CaO	1.90	6.49	4.48	1.19	0.70	0.75	1.51	0.86	1.04	2.10
Na2O	1.75	1.70	2.56	2.58	2.29	2.12	1.77	2.07	1.70	1.71
K2O	1.73	1.91	0.95	1.77	2.11	1.92	1.97	2.09	1.86	1.71
MnO	0.10	0.09	0.17	0.09	0.11	0.10	0.14	0.09	0.11	0.11
P2O5	0.17	0.15	0.13	0.16	0.17	0.18	0.17	0.18	0.15	0.17
Total	94.89	96.86	95.10	95.05	95.63	95.40	93.67	94.97	93.73	95.59
As	2	3	3	1	3	2	5	2	10	3
Ba	374	336	271	406	455	413	463	471	398	381
Co	19	22	30	17	16	17	20	21	20	13
Cr	158	209	256	149	537	209	238	151	197	149
Cu	23	20	22	14	23	23	22	24	19	18
Ga	14	14	13	15	16	15	15	15	14	12
La	29	25	15	36	29	48	34	32	34	28
Ni	67	91	42	58	67	73	79	68	71	57
Nb	15	16	10	16	18	20	19	18	18	16
Pb	10	10	9	6	11	10	10	12	11	11
Rb	47	48	20	46	54	53	55	55	52	46
Sr	104	115	178	135	100	81	113	100	83	110
Sb	0	0	0	0	0	0	8	0	3	3
S	889	516	364	179	184	516	256	28	259	867
Th	8	11	7	8	12	10	8	11	11	8
V	117	104	203	107	114	140	134	115	125	104
Y	26	24	28	25	28	27	28	25	26	21
Zn	55	57	72	53	64	95	62	72	63	56
Zr	234	219	132	224	266	302	319	236	271	259

TABLE 4.54

VAR. / ID.	N255	N256	N257	N258	N259	N260	N261	N262	N263	N265
East	26802	26799	26795	26793	26792	26779	26775	26770	26768	26860
North	61182	61174	61168	61161	61155	61134	61127	61119	61113	61084
SiO2	65.09	64.24	65.16	67.40	67.58	74.45	72.44	63.47	62.88	65.15
Al2O3	13.16	13.81	13.14	13.00	13.24	9.91	10.36	14.73	14.60	13.64
TiO2	1.41	1.23	1.10	1.01	0.81	0.72	0.86	1.18	1.39	1.16
Fe2O3	8.29	7.63	6.63	6.47	6.05	4.83	5.53	7.27	7.81	7.64
MgO	3.77	2.78	3.02	3.26	3.03	2.18	2.24	2.98	3.23	2.64
CaO	0.88	1.12	1.23	1.01	0.93	0.56	0.36	1.21	0.94	0.98
Na2O	2.18	2.27	2.74	2.30	3.31	2.47	2.56	1.97	2.03	1.97
K2O	1.87	2.13	1.94	1.83	1.53	1.18	1.37	2.08	2.06	2.11
MnO	0.12	0.10	0.09	0.08	0.09	0.09	0.07	0.10	0.10	0.10
P2O5	0.18	0.18	0.18	0.15	0.16	0.15	0.18	0.17	0.18	0.16
Total	96.95	95.49	95.23	96.51	96.73	96.54	95.97	95.16	95.22	95.55
As	2	2	0	2	3	5	5	9	2	1
Ba	400	450	414	387	345	325	341	463	460	455
Co	20	18	17	19	17	11	12	17	22	27
Cr	204	135	152	135	135	115	138	157	181	196
Cu	21	24	19	16	17	13	12	21	23	17
Ga	15	14	14	13	14	9	10	15	15	15
La	29	37	33	27	30	26	26	33	44	27
Ni	69	61	55	55	56	44	42	71	70	68
Nb	18	19	18	15	14	12	14	20	20	16
Pb	8	9	15	7	8	11	9	7	8	14
Rb	47	54	50	47	43	33	34	61	56	51
Sr	90	109	164	92	157	95	117	92	99	114
Sb	0	1	0	0	0	0	5	7	0	0
S	118	223	1297	221	937	184	160	223	189	193
Th	14	8	8	9	8	8	12	9	12	7
V	133	113	113	113	91	82	95	117	131	116
Y	27	29	25	21	21	20	23	27	30	22
Zn	60	56	64	50	53	44	38	61	70	66
Zr	329	282	250	201	203	154	196	264	355	235

VAR. / ID.	N267	N268	N269	N270	N274	K280	A302	A303	A304	A305
East	26849	26842	26839	26832	26936	26887	26387	26394	26402	26412
North	61070	61065	61057	61051	60984	60944	60363	60358	60349	60351
SiO2	62.80	63.14	65.16	66.67	64.26	63.85	63.91	63.75	65.13	56.34
Al2O3	12.50	13.09	12.13	13.34	12.31	13.84	12.24	13.57	12.50	19.16
TiO2	1.21	1.23	1.12	1.22	0.97	0.90	0.91	1.04	1.17	1.31
Fe2O3	7.59	7.75	7.34	6.98	7.45	7.04	7.13	7.27	7.59	9.74
MgO	4.18	3.60	3.15	2.75	4.57	3.83	4.36	4.54	4.47	3.67
CaO	1.28	1.66	1.71	0.65	3.26	2.39	2.71	2.13	1.98	0.33
Na2O	2.21	2.23	2.04	2.20	1.52	1.77	1.76	1.67	1.62	1.61
K2O	1.76	1.77	1.76	1.74	2.26	2.44	1.89	2.29	1.86	2.99
MnO	0.11	0.11	0.09	0.08	0.12	0.11	0.10	0.10	0.11	0.09
P2O5	0.21	0.22	0.18	0.18	0.16	0.18	0.17	0.18	0.18	0.16
Total	93.85	94.80	94.68	95.81	96.88	96.35	95.18	96.54	96.61	95.40
As	0	2	2	0	1	3	0	0	2	8
Ba	487	417	382	384	349	369	371	438	400	673
Co	19	16	20	17	19	16	18	18	18	22
Cr	214	140	169	137	154	121	140	178	240	175
Cu	20	20	18	22	15	16	18	21	20	33
Ga	13	15	13	14	14	13	13	16	14	21
La	36	41	27	38	26	32	32	28	29	41
Ni	63	61	63	60	72	67	62	76	91	68
Nb	17	17	16	19	16	15	16	17	17	20
Pb	8	8	8	8	9	8	15	16	12	11
Rb	45	43	45	46	59	63	53	63	50	87
Sr	120	147	103	90	79	77	153	119	92	81
Sb	0	0	0	0	0	3	0	0	0	7
S	317	434	554	459	295	276	317	661	450	2145
Th	12	10	6	14	10	12	14	10	11	16
V	123	131	117	115	98	85	97	110	114	153
Y	27	27	25	26	25	25	24	23	24	31
Zn	59	68	53	51	52	41	65	70	67	94
Zr	251	209	226	265	219	181	237	226	293	205

VAR. / ID.	A306	A307	N308	A309	A310	A311	A313	A315	K317	K318
East	26425	26434	26443	26482	26489	26528	26505	26368	26898	26908
North	60347	60346	60344	60329	60326	60266	60228	60821	60903	60899
SiO2	61.70	63.83	62.29	60.24	62.68	68.41	66.61	62.32	65.01	59.28
Al2O3	13.24	10.91	16.09	11.34	10.35	12.04	11.09	13.29	12.65	9.83
TiO2	1.55	0.95	1.27	1.32	0.99	1.09	1.32	1.13	0.85	1.10
Fe2O3	8.57	7.30	8.15	8.99	7.47	6.93	7.89	7.45	6.41	6.98
MgO	3.65	4.17	3.33	5.85	5.69	2.88	3.68	3.24	4.44	5.82
CaO	1.47	3.11	0.93	2.38	3.26	0.90	0.86	2.22	3.40	7.56
Na2O	2.03	2.86	2.02	2.10	2.00	2.08	2.12	1.89	1.58	1.43
K2O	1.77	1.75	2.47	1.16	1.29	1.64	1.40	1.94	2.43	2.13
MnO	0.13	0.13	0.08	0.12	0.08	0.11	0.12	0.10	0.08	0.26
P2O5	0.22	0.27	0.21	0.41	0.17	0.17	0.17	0.19	0.15	0.19
Total	94.33	95.28	96.84	93.91	93.98	96.25	95.26	93.77	97.00	94.58
As	2	3	1	2	0	4	1	3	0	2
Ba	341	1484	509	371	309	373	322	401	410	325
Co	17	17	22	18	20	21	16	18	18	14
Cr	186	216	156	251	288	124	195	140	142	233
Cu	9	26	32	26	18	17	12	26	16	14
Ga	15	13	17	14	13	14	13	15	13	13
La	36	38	34	38	26	25	32	40	27	33
Ni	73	63	66	80	68	53	61	61	73	63
Nb	21	14	20	16	12	16	16	20	15	16
Pb	5	12	15	12	12	7	10	12	14	39
Rb	48	37	69	29	37	41	39	53	66	55
Sr	84	1027	121	314	214	77	89	123	202	79
Sb	0	0	0	2	0	1	0	0	0	0
S	566	683	705	491	454	321	520	397	378	401
Th	8	10	9	12	9	7	8	12	9	13
V	132	139	130	171	127	105	134	115	94	114
Y	29	27	27	24	23	26	29	28	23	26
Zn	61	44	99	87	54	52	51	75	65	41
Zr	323	251	231	264	258	208	321	263	206	306

VAR. / ID.	K321	K322	K323	K325	K327	K328	K330	K331	A334	A335
East	26947	26963	27000	27009	26990	26986	27123	27200	26284	26268
North	60881	60878	60893	60879	60861	60852	60880	60874	60899	60832
SiO2	61.59	63.34	57.42	64.34	59.45	61.66	64.44	63.85	68.88	68.14
Al2O3	14.74	12.98	14.86	12.76	13.86	13.28	12.75	13.16	11.40	11.63
TiO2	1.11	1.33	1.24	1.04	1.21	1.00	1.00	1.45	1.05	0.91
Fe2O3	8.17	7.72	8.57	6.98	8.26	7.01	6.69	8.43	6.41	6.66
MgO	4.30	4.55	5.71	3.96	5.11	4.76	3.93	3.84	2.57	3.15
CaO	2.96	1.18	1.38	1.33	2.06	2.80	3.04	0.65	0.58	1.15
Na2O	0.94	1.77	1.51	1.77	1.51	1.60	1.71	1.96	2.06	1.87
K2O	2.49	2.12	2.95	1.97	2.73	2.49	2.02	1.80	1.50	1.27
MnO	0.09	0.07	0.08	0.09	0.11	0.08	0.08	0.10	0.10	0.09
P2O5	0.18	0.21	0.28	0.19	0.23	0.16	0.17	0.21	0.15	0.15
Total	96.57	95.27	94.00	94.43	94.53	94.84	95.83	95.45	94.70	95.02
As	3	2	6	0	4	1	2	4	2	2
Ba	394	433	889	416	550	446	369	439	339	306
Co	18	19	18	17	19	16	16	18	16	15
Cr	161	220	137	167	162	152	177	174	141	135
Cu	22	22	36	18	29	18	18	20	16	19
Ga	16	15	17	14	16	14	14	15	12	11
La	35	34	58	33	53	30	37	36	27	34
Ni	76	79	67	71	73	73	72	75	58	55
Nb	17	19	20	14	19	17	17	19	13	16
Pb	9	12	9	13	11	12	12	10	7	7
Rb	66	59	75	54	73	69	57	45	41	35
Sr	105	80	161	84	115	98	107	87	78	93
Sb	2	0	0	0	0	0	0	2	0	1
S	466	567	1113	518	1108	327	914	357	494	446
Th	14	11	13	14	19	9	7	8	12	6
V	112	134	148	111	135	102	100	127	104	95
Y	25	26	30	24	29	25	24	26	19	22
Zn	40	66	83	60	58	67	63	63	39	56
Zr	259	340	258	250	275	242	266	303	252	233

TABLE 4.54

VAR. / ID.	A336	A337	K337	A338	K373	A377	W382	W383	W384	W385
East	26264	26254	26254	26246	26651	26394	25100	25130	25100	25110
North	60809	60796	60796	60789	60742	60866	60230	60199	60120	60080
SiO2	65.36	65.71	63.76	65.85	62.01	68.43	64.91	63.65	58.85	61.61
Al2O3	12.24	12.05	10.74	12.86	14.73	12.40	12.80	14.26	10.47	15.87
TiO2	1.06	1.13	1.14	1.09	0.97	1.00	1.17	0.92	0.83	1.21
Fe2O3	7.21	7.47	7.59	6.75	6.85	6.27	7.78	6.77	5.65	7.71
MgO	2.70	3.21	5.01	3.20	3.63	2.45	3.59	3.03	6.23	3.50
CaO	1.09	1.21	2.68	0.81	3.49	0.42	0.74	0.37	9.95	0.55
Na2O	2.25	2.12	1.69	2.08	1.35	2.75	3.03	3.95	1.40	2.57
K2O	1.55	1.51	1.94	1.46	2.47	1.48	1.66	1.84	2.49	3.30
MnO	0.09	0.09	0.09	0.08	0.10	0.08	0.12	0.09	0.09	0.11
P2O5	0.18	0.17	0.17	0.17	0.16	0.15	0.18	0.16	0.13	0.20
Total	93.73	94.67	94.81	94.35	95.76	95.43	95.98	95.04	96.09	96.63
As	2	3	3	2	4	8	2	1	7	0
Ba	345	360	602	355	419	383	479	681	391	1054
Co	15	12	19	26	15	17	17	13	15	15
Cr	110	162	205	134	156	122	153	90	147	126
Cu	20	23	17	24	22	18	18	5	14	6
Ga	12	14	15	14	15	13	16	17	13	19
La	37	29	30	35	33	34	38	19	22	52
Ni	51	59	72	61	77	51	64	43	70	57
Nb	17	16	16	17	17	16	15	14	13	19
Pb	9	7	18	10	14	11	11	9	10	12
Rb	42	40	51	41	69	41	42	45	58	79
Sr	114	110	215	96	124	111	193	469	138	343
Sb	0	0	2	0	4	2	0	0	3	0
S	2254	699	451	0	565	211	201	176	194	340
Th	9	9	6	15	11	11	10	7	10	12
V	102	117	123	110	108	98	118	90	81	120
Y	28	29	26	28	24	25	25	19	18	24
Zn	46	61	70	67	49	61	43	39	41	43
Zr	229	267	298	260	245	195	211	205	183	228

TABLE 4.54

VAR. / ID.	W386	W387	W388	W389	E391	K394	K395	A396	N397	E404
East	25190	25460	25580	25430	26960	26455	26560	26478	26778	27330
North	59970	59840	59800	59590	60701	60485	60503	60447	61141	60568
SiO2	62.60	69.54	67.18	65.28	62.82	63.02	65.30	60.98	71.02	67.03
Al2O3	13.94	12.50	9.73	12.24	11.16	14.75	12.66	13.07	12.46	12.09
TiO2	1.24	0.87	0.88	1.09	0.85	1.10	0.84	1.10	0.84	1.00
Fe2O3	7.57	5.73	7.01	6.91	7.16	8.12	6.54	8.29	4.66	7.14
MgO	3.15	2.09	4.06	2.80	3.73	4.05	3.81	4.87	2.20	3.71
CaO	0.47	0.25	2.50	1.13	3.19	0.53	1.21	1.03	0.84	0.81
Na2O	2.28	2.46	2.03	2.20	4.02	1.71	2.09	1.95	1.99	1.73
K2O	2.11	1.68	2.48	1.82	0.74	2.75	2.17	2.93	1.71	2.03
MnO	0.10	0.08	0.12	0.10	0.14	0.06	0.09	0.12	0.08	0.10
P2O5	0.18	0.17	0.31	0.17	0.23	0.16	0.17	0.28	0.13	0.15
Total	93.64	95.37	96.30	93.74	94.04	96.25	94.88	94.62	95.93	95.79
As	2	25	3	2	3	5	5	9	13	16
Ba	489	402	566	447	414	510	463	1402	340	421
Co	13	12	20	13	16	20	14	17	10	24
Cr	172	86	197	104	159	125	133	103	139	173
Cu	26	27	25	17	19	23	18	30	16	7
Ga	17	13	14	14	16	17	14	15	14	16
La	36	25	39	28	36	37	27	57	25	30
Ni	68	33	62	29	54	75	59	52	44	68
Nb	21	18	15	18	14	18	16	18	14	17
Pb	12	125	19	9	23	15	12	18	7	9
Rb	63	48	55	46	20	79	59	67	50	57
Sr	98	73	409	117	750	74	87	250	90	61
Sb	0	2	0	0	0	0	2	2	0	0
S	231	989	703	317	243	0	3027	978	285	589
Th	11	7	8	8	10	10	7	14	8	8
V	132	71	112	106	110	103	88	146	88	105
Y	33	24	30	31	27	28	26	30	24	29
Zn	83	329	71	51	59	81	58	74	35	51
Zr	258	198	223	272	209	220	227	227	208	255

VAR. / ID.	E407	N410	S449	S450	E452	K462	A463	N486	E503	W580
East	27340	26792	26910	26935	26964	26622	26399	26782	27646	24340
North	60558	61152	60360	60340	60694	60849	60561	61141	60739	59920
SiO2	62.66	64.47	60.46	66.67	68.79	59.10	63.06	87.98	64.97	66.13
Al2O3	11.55	13.73	15.02	11.10	10.45	10.87	11.02	3.97	12.39	12.87
TiO2	1.46	0.95	1.23	1.16	0.91	0.92	0.62	0.26	1.05	1.06
Fe2O3	9.17	6.62	8.76	7.46	6.05	7.52	4.66	3.10	6.92	7.05
MgO	4.77	3.49	3.41	4.37	2.74	5.14	2.83	1.47	3.61	3.35
CaO	1.25	0.64	0.64	0.62	2.79	7.00	7.75	0.21	1.86	0.49
Na2O	2.66	2.49	1.93	1.83	2.39	1.47	0.78	0.10	1.72	2.61
K2O	0.81	1.83	2.30	1.26	1.69	2.25	2.57	0.94	1.74	1.60
MnO	0.11	0.08	0.10	0.10	0.10	0.13	0.11	0.08	0.07	0.10
P2O5	0.14	0.14	0.18	0.16	0.18	0.26	0.13	0.05	0.15	0.15
Total	94.58	94.44	94.03	94.73	96.09	94.66	93.53	98.16	94.48	95.41
As	0	3	4	2	0	2	15	17	2	5
Ba	250	348	512	293	400	667	273	180	356	457
Co	20	16	20	19	12	17	12	10	15	17
Cr	181	126	136	260	118	150	117	39	153	159
Cu	23	20	29	15	12	28	14	9	20	20
Ga	14	14	16	14	12	15	11	8	14	14
La	21	26	38	31	27	35	26	15	24	41
Ni	52	65	54	66	44	56	56	23	53	60
Nb	12	16	20	17	16	16	13	6	15	17
Pb	15	10	11	11	14	19	13	5	11	8
Rb	26	49	63	39	38	56	66	39	50	47
Sr	124	73	94	55	149	428	90	26	69	146
Sb	0	1	0	5	5	0	6	1	4	0
S	1880	969	1604	961	3833	409	600	0	1361	0
Th	5	9	8	5	7	12	2	1	6	7
V	191	99	119	133	93	138	71	28	111	110
Y	30	24	33	28	22	29	22	11	29	30
Zn	53	50	81	58	73	70	45	28	64	55
Zr	160	212	268	346	184	233	192	47	254	264

VAR. / ID.	W582	N602	N612	AX857
East	24340	23430	26672	30196
North	59810	59350	61207	62954
SiO2	66.00	63.80	63.36	67.11
Al2O3	12.38	13.27	12.26	11.11
TiO2	1.02	1.42	1.19	1.16
Fe2O3	7.11	9.07	8.13	7.03
MgO	3.05	3.43	4.16	2.53
CaO	1.03	0.41	0.88	1.01
Na2O	2.41	1.93	2.11	1.90
K2O	2.00	1.96	1.85	1.62
MnO	0.10	0.09	0.10	0.10
P2O5	0.16	0.19	0.19	0.15
Total	95.26	95.57	94.23	93.72
As	3	8	4	0
Ba	553	434	521	368
Co	16	16	18	10
Cr	169	217	191	107
Cu	17	21	21	14
Ga	14	17	15	13
La	26	33	30	28
Ni	55	72	74	28
Nb	15	20	18	17
Pb	13	10	14	12
Rb	48	51	48	40
Sr	186	80	99	77
Sb	1	2	0	2
S	35	409	0	628
Th	7	13	5	7
V	106	137	126	109
Y	27	34	32	27
Zn	63	77	65	51
Zr	224	356	288	294

TABLE 4.54

XRF Analyses: Blackcraig Formation (GWKE10)

Part 1

VAR. / ID.	AX-288	AX-289	AX-290	A2	A6	A7	A12	A13	A14	A15
East	27504	27495	27495	26303	26282	26282	26293	26294	26298	26303
North	61523	61590	61590	60549	60535	60529	60517	60512	60508	60503
SiO2	65.60	54.68	51.06	60.25	60.83	60.29	61.56	61.24	62.55	60.66
Al2O3	14.92	13.64	12.37	10.93	10.97	10.48	9.96	11.33	9.47	10.73
TiO2	1.01	1.38	1.53	1.40	1.30	1.02	1.33	1.26	1.31	1.22
Fe2O3	6.85	9.39	10.07	9.18	9.21	9.33	8.51	8.83	8.93	8.93
MgO	3.24	8.34	8.26	4.66	4.77	4.48	3.97	5.35	4.18	4.89
CaO	0.72	3.23	3.35	4.90	5.16	4.04	5.70	4.19	4.63	4.20
Na2O	2.67	3.02	2.43	2.76	2.85	2.95	2.47	2.70	2.31	2.60
K2O	1.68	1.12	1.02	1.00	0.92	0.87	1.01	1.08	1.21	1.12
MnO	0.09	0.14	0.16	0.15	0.15	0.15	0.14	0.15	0.16	0.15
P2O5	0.17	0.18	0.17	0.14	0.14	0.12	0.14	0.14	0.13	0.13
Total	96.95	95.12	90.42	95.37	96.30	93.73	94.79	96.27	94.88	94.63
As	0	6	0	0	2	1	2	0	0	0
Ba	1120	380	288	267	251	272	269	279	278	278
Co	41	33	35	22	23	24	32	22	25	26
Cr	119	279	331	169	176	170	158	154	158	159
Cu	22	36	35	25	26	22	28	23	24	21
Ga	15	17	17	15	15	15	15	15	14	15
La	37	16	14	14	9	16	10	13	12	13
Ni	56	129	112	49	55	42	45	44	42	47
Nb	17	14	15	11	8	8	9	11	11	9
Pb	18	14	15	17	11	10	12	10	12	9
Rb	46	25	24	22	22	21	22	25	26	27
Sr	121	215	200	209	230	248	220	243	190	192
Sb	0	0	0	3	0	0	0	0	0	0
S	526	865	1652	357	541	249	1529	689	517	637
Th	5	5	1	4	5	8	9	6	6	9
V	109	193	224	214	210	173	195	193	178	178
Y	29	27	26	29	27	25	28	27	26	27
Zn	75	82	77	75	77	70	64	73	63	74
Zr	268	143	155	127	120	105	128	123	115	127

TABLE 4.55

VAR. / ID.	A17	A18	A19	A20	A21	A22	A23	A24	A26	A33
East	26279	26278	26277	26276	26277	26279	26281	26282	26286	26305
North	60549	60554	60558	60567	60571	60574	60576	60581	60589	60617
SiO2	59.73	59.34	58.50	55.27	54.42	58.73	57.85	60.90	62.40	59.41
Al2O3	13.49	12.09	13.16	14.59	15.42	12.58	12.12	12.07	9.89	10.99
TiO2	1.19	1.25	1.24	1.43	1.37	1.36	1.46	1.38	1.28	1.36
Fe2O3	7.82	9.70	9.48	11.42	10.68	9.88	9.79	9.38	9.23	9.30
MgO	4.69	4.64	5.16	6.80	5.83	5.37	6.51	5.03	4.38	5.01
CaO	3.82	3.19	3.62	2.83	2.58	3.65	3.13	3.84	4.88	4.36
Na2O	1.78	3.00	2.78	2.33	2.32	2.70	2.67	2.79	2.66	2.79
K2O	2.01	1.15	1.51	1.55	1.99	1.20	0.74	1.02	1.14	0.92
MnO	0.10	0.14	0.15	0.14	0.14	0.17	0.16	0.14	0.16	0.15
P2O5	0.17	0.14	0.15	0.16	0.16	0.15	0.15	0.16	0.13	0.15
Total	94.80	94.64	95.75	96.52	94.91	95.79	94.58	96.71	96.15	94.44
As	2	0	0	3	3	2	0	3	1	0
Ba	375	378	417	307	426	339	254	278	287	273
Co	21	23	26	28	31	28	26	27	21	25
Cr	187	156	152	162	184	264	179	168	144	174
Cu	28	29	29	44	42	29	26	27	22	25
Ga	15	14	16	17	18	15	17	16	14	16
La	30	18	12	21	24	20	11	18	12	13
Ni	68	49	55	62	70	55	50	49	41	47
Nb	15	9	12	11	13	11	11	10	10	12
Pb	13	12	15	17	21	10	13	10	8	12
Rb	61	29	37	44	63	30	19	23	27	21
Sr	126	216	248	182	197	232	210	192	201	214
Sb	0	0	0	0	0	0	0	0	0	0
S	916	1021	1058	3993	5555	1671	899	2163	728	1156
Th	10	3	1	6	7	4	4	5	3	5
V	140	174	172	209	196	191	207	198	194	212
Y	31	27	30	34	32	29	30	27	25	30
Zn	77	74	76	96	103	76	78	77	66	75
Zr	241	129	142	152	162	139	152	136	118	146

TABLE 4.55

VAR. / ID.	A35	A36	A43	A45	A46	A49	A51	A195	A197	A198
East	26397	26398	26387	26387	26386	26396	26357	26396	26386	26381
North	60615	60612	60705	60714	60718	60728	60734	60564	60580	60587
SiO2	62.57	60.08	63.34	61.08	62.28	59.81	57.28	58.93	62.42	62.05
Al2O3	11.37	11.19	9.25	11.01	11.02	10.49	12.56	11.03	10.72	9.54
TiO2	1.14	1.29	1.51	1.28	1.26	1.31	1.27	1.51	1.15	1.25
Fe2O3	8.69	8.64	9.40	9.48	8.78	9.48	9.57	10.97	8.64	9.28
MgO	4.05	4.73	3.75	4.77	4.62	5.01	6.26	5.14	5.03	4.60
CaO	3.87	4.62	5.21	4.54	4.49	3.54	3.79	3.78	3.96	3.58
Na2O	3.17	2.87	2.45	2.85	2.89	2.77	2.75	2.92	2.84	2.49
K2O	1.15	0.91	1.00	1.03	0.99	1.02	1.09	1.02	1.18	1.16
MnO	0.13	0.13	0.16	0.15	0.14	0.16	0.14	0.18	0.16	0.14
P2O5	0.14	0.14	0.13	0.15	0.14	0.14	0.15	0.15	0.14	0.13
Total	96.28	94.60	96.20	96.34	96.61	93.73	94.86	95.63	96.24	94.22
As	0	0	0	1	0	0	3	3	0	1
Ba	297	256	276	263	269	274	254	262	276	262
Co	23	23	22	29	22	22	27	26	29	23
Cr	131	163	153	168	159	149	188	183	149	141
Cu	26	26	20	27	23	23	24	28	26	16
Ga	14	14	15	14	16	13	16	17	14	14
La	7	14	15	0	5	13	13	14	16	10
Ni	45	49	37	48	44	44	63	49	49	38
Nb	9	10	9	10	9	9	9	9	9	8
Pb	12	15	12	10	14	9	12	10	12	11
Rb	26	22	23	24	25	22	25	24	27	29
Sr	185	186	195	212	183	169	175	216	199	159
Sb	0	0	0	0	0	0	0	0	0	0
S	0	144	1493	118	864	0	1468	640	790	444
Th	2	4	7	5	3	6	3	9	6	7
V	164	198	216	195	201	192	187	203	172	189
Y	26	27	28	30	29	30	30	30	27	28
Zn	67	71	67	72	69	63	79	87	106	57
Zr	110	130	119	127	123	123	136	153	126	111

TABLE 4.55

VAR. / ID.	A199	A200	A201	A202	A203	A204	A205	A207	A208	A209
East	26383	26384	26385	26387	26385	26385	26386	26371	26370	26372
North	60685	60677	60668	60659	60649	60641	60631	60743	60752	60760
SiO2	58.66	66.33	61.80	61.56	58.72	60.27	61.37	60.62	60.11	59.87
Al2O3	10.22	9.07	9.55	10.24	10.35	10.66	10.83	9.87	11.30	10.14
TiO2	1.50	0.88	1.30	1.39	1.51	1.55	1.45	1.34	1.30	1.33
Fe2O3	10.14	7.88	8.71	8.43	10.08	9.67	9.50	9.51	9.64	9.59
MgO	4.50	3.87	3.98	3.91	5.16	4.66	5.03	4.86	5.26	4.46
CaO	5.09	2.26	4.86	4.40	4.87	4.25	4.63	6.18	4.77	5.04
Na2O	2.91	2.77	2.44	2.72	2.66	2.60	2.74	2.63	2.96	2.66
K2O	0.86	1.33	1.18	1.08	0.84	0.99	0.79	0.51	0.90	0.96
MnO	0.15	0.12	0.15	0.13	0.17	0.16	0.16	0.16	0.15	0.15
P2O5	0.15	0.11	0.14	0.14	0.15	0.16	0.16	0.14	0.14	0.14
Total	94.18	94.62	94.11	94.00	94.51	94.97	96.66	95.82	96.53	94.34
As	1	0	0	2	2	2	0	2	1	1
Ba	241	329	322	291	259	265	223	244	232	246
Co	27	24	19	20	31	20	24	24	28	23
Cr	162	1117	171	165	196	186	186	243	202	195
Cu	23	16	21	23	27	23	23	20	25	19
Ga	17	13	12	15	14	15	14	14	15	15
La	10	13	7	15	13	14	14	10	20	14
Ni	49	52	47	42	57	47	52	63	62	57
Nb	10	8	9	12	9	11	11	10	10	9
Pb	7	9	9	11	9	11	13	10	9	10
Rb	19	26	27	25	19	22	18	12	20	22
Sr	206	173	194	217	233	214	229	189	186	194
Sb	0	0	0	1	4	0	0	0	0	0
S	387	0	519	747	465	535	660	1364	915	1283
Th	7	7	4	7	4	6	2	6	6	3
V	210	128	190	197	217	203	207	196	194	181
Y	31	25	28	29	27	29	31	28	27	28
Zn	70	55	66	62	73	83	74	66	73	68
Zr	147	103	137	143	128	189	147	113	118	134

TABLE 4.55

VAR. / ID.	A210	A211	A212	A214	A215	K284	A300	A301	A340	D344
East	26374	26377	26378	26380	26376	26882	26306	26302	26244	26136
North	60768	60776	60784	60810	60822	60912	60594	60483	60765	60410
SiO2	59.78	59.59	60.51	60.50	60.30	58.78	62.34	58.69	57.55	59.20
Al2O3	11.66	9.86	10.75	11.77	11.19	11.52	9.79	11.16	11.06	11.35
TiO2	1.28	1.47	1.33	1.33	1.36	1.61	1.19	1.41	1.53	1.24
Fe2O3	9.27	9.99	9.81	10.10	9.08	9.73	8.41	10.21	10.33	9.54
MgO	5.45	5.03	5.20	5.99	5.51	5.30	4.08	4.91	6.20	4.90
CaO	4.31	6.47	3.19	3.12	3.63	3.37	5.88	5.05	3.23	3.36
Na2O	2.82	2.33	2.79	2.75	2.51	2.80	2.65	2.83	2.65	3.47
K2O	0.85	0.79	0.81	0.66	0.49	0.81	1.17	0.92	0.89	1.08
MnO	0.14	0.16	0.16	0.16	0.13	0.13	0.14	0.16	0.15	0.15
P2O5	0.17	0.17	0.13	0.14	0.14	0.16	0.13	0.16	0.15	0.13
Total	95.73	95.86	94.68	96.52	94.34	94.21	95.78	95.44	93.74	94.42
As	0	1	3	0	1	2	2	2	2	7
Ba	238	208	228	214	173	188	271	257	178	310
Co	25	20	23	23	22	25	25	23	33	29
Cr	189	210	162	172	192	179	163	164	183	169
Cu	27	23	22	25	21	25	23	23	23	25
Ga	14	13	15	16	14	16	13	16	15	15
La	12	12	11	17	15	19	10	13	7	6
Ni	58	50	44	47	55	50	38	53	52	47
Nb	9	11	8	10	10	10	8	10	10	9
Pb	14	10	5	6	11	11	11	11	6	6
Rb	18	19	18	16	12	20	26	22	21	24
Sr	244	222	180	202	162	196	175	261	148	211
Sb	0	0	0	0	0	0	0	1	0	0
S	1367	2087	217	1313	1997	1166	640	493	1077	408
Th	8	4	3	1	4	4	3	5	0	8
V	189	214	192	205	198	211	180	200	222	183
Y	29	30	29	29	29	31	27	32	32	28
Zn	70	80	40	76	71	69	72	87	61	71
Zr	128	129	107	130	151	162	113	137	144	123

VAR. / ID.	A369	A370	A374	A378	A439	A440	A441	N487	A488	W581
East	26541	26543	26438	26370	26168	26080	26079	26391	26391	24340
North	60782	60794	60811	60815	60734	60661	60669	60818	60818	59880
SiO2	61.56	64.55	60.83	58.80	60.73	56.99	67.72	60.40	64.92	63.04
Al2O3	10.10	10.55	11.57	12.88	11.09	13.71	10.11	13.88	11.21	10.31
TiO2	1.51	1.37	1.31	1.22	1.21	1.31	0.93	1.06	1.06	1.20
Fe2O3	9.32	8.17	9.69	9.83	8.69	11.29	7.40	8.35	8.23	9.29
MgO	4.11	3.38	5.05	5.05	5.42	5.32	3.50	4.05	3.80	4.36
CaO	5.16	4.09	3.62	3.60	3.55	2.62	2.52	3.05	2.69	3.96
Na2O	2.77	3.16	3.08	2.97	2.59	2.55	2.76	1.63	2.78	3.16
K2O	0.92	1.13	0.71	1.32	1.27	1.80	1.21	2.79	1.05	1.28
MnO	0.15	0.13	0.15	0.14	0.17	0.28	0.11	0.12	0.13	0.14
P2O5	0.14	0.13	0.16	0.13	0.14	0.16	0.13	0.31	0.14	0.12
Total	95.74	96.66	96.17	95.94	94.86	96.03	96.39	95.64	96.01	96.86
As	2	0	2	2	2	4	0	3	2	0
Ba	286	308	234	383	307	356	233	809	268	306
Co	23	24	21	23	18	29	14	15	16	15
Cr	163	139	166	148	156	163	148	127	148	145
Cu	21	25	25	27	25	38	20	35	21	20
Ga	14	14	16	17	16	18	12	15	14	14
La	8	14	11	17	26	23	12	44	22	14
Ni	40	42	41	44	44	60	45	48	42	31
Nb	10	9	10	10	10	14	11	18	11	8
Pb	11	13	9	11	7	11	12	17	12	12
Rb	23	24	16	29	29	50	25	65	27	27
Sr	279	244	260	277	187	199	160	281	180	253
Sb	0	0	0	2	0	1	0	0	0	4
S	1568	1605	1265	1898	1881	2531	1347	1883	1469	1502
Th	6	5	1	5	5	3	4	11	0	0
V	224	191	183	171	186	192	132	141	147	178
Y	28	28	29	29	32	36	28	32	29	28
Zn	68	59	74	78	74	92	47	77	61	83
Zr	133	130	129	137	136	155	133	236	155	112

TABLE 4.55

VAR. / ID.	W599
East	24340
North	59850
SiO2	61.97
Al2O3	10.49
TiO2	1.09
Fe2O3	8.68
MgO	4.08
CaO	3.54
Na2O	3.32
K2O	1.32
MnO	0.13
P2O5	0.11
Total	94.73
As	0
Ba	339
Co	17
Cr	137
Cu	18
Ga	16
La	13
Ni	31
Nb	7
Pb	11
Rb	30
Sr	256
Sb	0
S	1152
Th	2
V	154
Y	29
Zn	63
Zr	111

XRF Analyses: Scar Formation (GWKE11)

Part 1

VAR. / ID.	AX-2	AX-67	AX-68	AX-73	AX-75	AX-111	AX-112	AX-113	AX-117	AX-118
East	32773	29460	29456	29350	29385	23612	23792	23809	23867	23872
North	64746	61782	61793	61953	61893	57482	57509	57430	57694	57730
SiO2	61.44	63.16	63.10	62.40	57.56	60.80	57.92	57.29	56.68	60.40
Al2O3	12.86	14.90	14.26	13.47	15.84	14.79	15.34	14.30	14.94	15.44
TiO2	0.93	0.74	0.70	0.80	0.78	0.76	0.88	0.94	0.90	0.85
Fe2O3	7.56	6.83	6.44	7.38	7.40	6.98	8.18	8.20	8.06	7.51
MgO	7.04	5.43	4.76	4.55	5.58	6.38	6.27	5.92	5.62	5.35
CaO	4.73	2.53	3.02	4.73	3.00	3.56	5.52	6.11	4.99	4.97
Na2O	2.12	3.43	4.16	3.77	3.59	3.44	3.22	3.32	2.71	3.34
K2O	0.72	1.86	1.26	1.00	1.93	1.74	1.15	0.73	1.80	1.69
MnO	0.11	0.11	0.12	0.14	0.13	0.13	0.14	0.15	0.13	0.13
P2O5	0.21	0.17	0.14	0.19	0.21	0.25	0.21	0.23	0.21	0.20
Total	97.72	99.16	97.96	98.43	96.02	98.83	98.83	97.19	96.04	99.88
As	0	0	0	0	4	4	0	0	4	0
Ba	318	602	597	378	573	426	342	282	495	446
Co	37	43	33	47	29	33	34	37	32	36
Cr	350	236	182	209	119	288	238	227	181	205
Cu	28	31	25	30	29	26	31	37	48	42
Ga	16	15	15	16	18	16	16	18	17	16
La	23	22	11	20	21	23	14	17	19	18
Ni	106	80	60	54	49	69	66	62	61	76
Nb	10	9	9	10	9	10	7	11	10	9
Pb	15	19	16	19	18	16	15	15	13	17
Rb	20	48	32	27	54	46	33	21	45	46
Sr	301	333	349	345	419	346	342	311	370	428
Sb	0	0	1	0	0	0	0	0	0	0
S	294	923	916	3436	1097	1441	1042	1213	1909	959
Th	4	1	4	8	7	4	2	1	0	2
V	150	127	126	149	136	141	177	184	184	166
Y	20	22	21	20	20	21	18	19	19	20
Zn	65	59	58	70	71	70	70	67	70	70
Zr	163	151	129	134	128	136	127	134	134	131

TABLE 4.56

VAR. / ID.	AX-119	AX-122	AX-123	AX-124	AX-130	AX-157	AX-158	AX-159	AX-163	AX-168
East	23970	23661	23676	23708	23658	30342	30379	30357	30717	30342
North	57835	57420	57297	57262	57381	62877	62754	62811	62835	63041
SiO2	57.07	53.63	57.45	61.92	57.06	61.12	62.43	58.27	61.00	53.47
Al2O3	15.18	14.73	15.42	14.72	13.23	14.72	13.78	14.27	14.08	14.28
TiO2	0.85	0.98	0.93	0.79	0.97	0.87	0.75	0.97	0.87	1.16
Fe2O3	7.61	8.47	8.21	6.83	8.04	7.02	6.65	8.26	7.35	9.08
MgO	6.14	6.42	6.61	5.45	6.20	6.09	5.67	6.02	6.56	5.54
CaO	4.26	5.69	3.49	2.92	3.21	3.36	2.99	5.08	2.87	3.75
Na2O	3.87	2.20	2.44	3.09	3.64	2.29	3.19	3.06	2.98	2.19
K2O	1.45	1.89	2.08	2.13	0.78	2.82	1.47	1.49	1.00	2.07
MnO	0.14	0.13	0.13	0.09	0.13	0.11	0.11	0.14	0.12	0.12
P2O5	0.21	0.24	0.18	0.17	0.22	0.22	0.14	0.23	0.18	0.22
Total	96.78	94.38	96.94	98.11	93.48	98.62	97.18	97.79	97.01	91.88
As	4	2	0	0	0	2	0	0	0	0
Ba	399	356	726	607	377	741	518	426	379	1000
Co	37	35	33	35	32	29	33	30	31	29
Cr	167	225	185	181	290	216	256	247	344	243
Cu	35	40	36	42	32	50	22	43	22	45
Ga	18	18	17	17	15	16	13	17	15	17
La	19	13	20	29	22	21	21	15	23	18
Ni	59	72	59	77	77	79	92	73	157	73
Nb	7	10	7	9	10	9	11	9	12	12
Pb	17	16	18	28	17	13	14	18	15	18
Rb	43	51	56	53	19	73	37	43	33	51
Sr	420	235	324	417	338	472	277	311	265	505
Sb	0	0	1	0	0	0	0	0	0	0
S	528	568	1457	2024	1200	977	586	757	508	1290
Th	5	7	5	8	6	5	6	3	6	5
V	169	190	180	142	163	159	132	184	120	226
Y	17	18	18	20	20	20	21	19	18	23
Zn	67	74	67	66	70	51	57	73	62	82
Zr	121	137	121	145	148	154	146	157	162	149

VAR. / ID.	AX-180	AX-181	AX-190	AX-191	AX-200	AX-201	AX-206	AX-210	AX-211	AX-212
East	29902	29618	30141	30014	30358	30187	30333	30461	30427	30341
North	62278	62177	62401	62270	62477	62505	62770	62697	62767	62837
SiO2	57.73	57.27	57.36	56.45	57.39	56.06	57.85	57.72	58.48	54.66
Al2O3	14.34	14.27	14.41	11.82	13.78	14.60	14.94	15.11	12.83	14.27
TiO2	0.96	0.92	0.96	1.01	0.99	1.00	0.94	0.93	0.95	1.03
Fe2O3	8.13	8.48	7.86	7.97	7.86	7.86	8.22	7.19	7.19	9.10
MgO	5.91	5.85	6.63	8.08	7.27	9.53	6.76	6.71	6.04	7.77
CaO	4.72	4.08	3.82	3.91	4.25	2.07	2.76	4.32	2.09	4.14
Na2O	3.63	2.68	2.81	2.05	2.21	2.52	2.78	3.30	2.66	2.35
K2O	1.18	1.41	1.90	1.25	1.87	1.80	2.30	1.41	1.52	1.78
MnO	0.14	0.13	0.13	0.13	0.11	0.12	0.12	0.11	0.10	0.15
P2O5	0.26	0.23	0.21	0.20	0.24	0.20	0.20	0.23	0.17	0.26
Total	97.00	95.32	96.09	92.87	95.97	95.76	96.87	97.03	92.03	95.51
As	0	5	0	0	0	0	0	0	0	0
Ba	345	475	587	373	727	906	644	449	470	546
Co	29	36	34	38	35	35	35	38	35	35
Cr	217	257	308	403	406	255	216	211	373	281
Cu	42	34	38	28	38	35	14	35	22	38
Ga	17	18	17	13	16	16	17	18	16	16
La	20	22	24	22	28	22	25	25	27	19
Ni	66	66	136	121	162	134	76	113	95	74
Nb	9	9	11	11	13	11	9	10	9	10
Pb	19	14	19	16	17	14	13	18	14	20
Rb	36	39	52	32	51	54	60	42	41	52
Sr	335	356	426	211	409	304	434	375	351	462
Sb	0	0	0	0	0	0	0	0	0	0
S	412	418	382	401	515	295	20	235	958	798
Th	4	5	11	3	2	6	6	2	6	5
V	189	177	150	172	169	153	168	139	162	208
Y	20	23	21	21	24	19	24	19	21	23
Zn	71	74	71	60	54	54	60	66	69	86
Zr	159	143	166	164	207	158	151	158	200	156

XRF Analyses: Scar Formation (GWKE11)

Part 4

VAR. / ID.	AX-213	AX-275	AX-277	AX-278	AX-279	DTIA-103	DTIA-104	DTIA-211	S-251	S-252
East	30324	34065	33973	33974	33978	25454	25452	25980	23802	23577
North	62904	65402	65644	65615	65554	58667	58668	59318	57473	57527
SiO2	58.44	61.54	59.79	62.85	58.16	59.57	59.02	54.39	76.17	58.98
Al2O3	14.99	13.40	15.08	14.63	15.47	16.31	14.40	11.95	10.38	16.19
TiO2	0.88	0.74	1.00	0.80	0.95	0.89	0.81	0.97	0.59	0.88
Fe2O3	8.06	5.98	7.70	6.53	7.02	5.71	7.24	8.41	4.17	7.83
MgO	7.25	6.07	5.83	5.22	6.38	3.90	5.57	6.33	1.81	4.61
CaO	2.11	4.33	2.89	2.96	4.45	0.89	1.01	3.34	1.93	3.75
Na2O	2.83	3.10	2.77	3.83	3.40	3.09	2.47	2.99	1.41	2.67
K2O	2.17	1.51	1.42	1.36	1.57	1.93	1.38	1.14	1.21	2.93
MnO	0.13	0.09	0.09	0.11	0.09	0.06	0.08	0.16	0.07	0.13
P2O5	0.18	0.17	0.19	0.18	0.22	0.16	0.14	0.22	0.13	0.17
Total	97.04	96.93	96.76	98.47	97.71	92.51	92.12	89.90	97.87	98.14
As	0	0	0	0	0	19	17	0	2	0
Ba	730	479	485	498	483	385	353	462	254	1295
Co	33	28	30	33	31	28	24	31	49	34
Cr	165	211	258	190	198	217	204	302	62	155
Cu	10	29	35	26	42	27	24	35	12	52
Ga	17	15	15	14	17	17	15	17	8	16
La	20	27	26	17	23	27	30	26	23	25
Ni	76	96	119	72	108	66	74	72	21	64
Nb	8	10	12	11	11	9	10	9	12	10
Pb	13	14	16	15	22	6	10	15	12	20
Rb	60	38	43	35	43	65	45	31	36	74
Sr	446	272	431	312	363	124	126	321	65	532
Sb	0	0	0	0	0	0	0	0	0	0
S	931	208	975	658	323	308	1754	439	1106	3114
Th	8	5	6	6	1	5	8	4	1	6
V	166	116	152	127	142	136	130	182	60	169
Y	19	19	23	20	21	22	20	22	16	22
Zn	59	47	70	59	63	131	80	68	34	74
Zr	127	160	171	150	164	153	141	155	158	138

TABLE 4.56

VAR. / ID.	S75	S77	S85	S95	S96	S97	S99	S100	S102	S104
East	27661	27628	27634	27599	27592	27585	27580	27641	27622	27653
North	60123	60125	60299	60356	60363	60368	60371	60256	60261	60245
SiO2	59.74	59.95	57.73	58.21	55.84	65.64	61.88	61.58	56.89	58.40
Al2O3	12.85	12.25	12.43	14.74	14.41	9.82	12.64	11.32	12.04	12.67
TiO2	0.85	0.88	1.14	1.17	0.89	0.86	0.99	0.87	0.90	0.94
Fe2O3	6.70	7.43	8.18	8.07	7.54	7.30	6.89	7.04	7.34	7.38
MgO	6.13	7.12	7.18	6.67	7.46	5.59	4.20	6.51	7.99	8.01
CaO	2.74	2.38	4.73	2.78	3.05	4.31	4.45	2.94	3.95	2.81
Na2O	2.62	2.35	2.39	1.98	2.53	2.19	2.42	2.45	2.29	2.66
K2O	2.15	2.08	1.93	2.85	2.28	0.86	2.01	1.65	1.78	1.52
MnO	0.10	0.10	0.13	0.11	0.13	0.12	0.16	0.10	0.13	0.10
P2O5	0.17	0.19	0.24	0.22	0.19	0.16	0.20	0.19	0.21	0.21
Total	94.05	94.73	96.08	96.80	94.32	96.85	95.84	94.65	93.52	94.70
As	1	1	0	2	4	0	0	3	0	0
Ba	770	778	616	749	643	331	548	619	871	649
Co	26	25	27	23	23	18	24	21	27	27
Cr	286	304	322	257	175	297	240	308	306	329
Cu	27	25	33	36	33	19	31	25	33	30
Ga	16	15	16	16	15	12	14	13	16	15
La	19	22	25	26	23	19	25	23	22	19
Ni	154	158	143	118	113	89	100	141	149	148
Nb	10	12	11	13	11	10	12	11	10	13
Pb	22	15	14	17	10	16	12	18	15	18
Rb	55	53	49	74	69	20	54	40	44	39
Sr	389	309	455	370	367	157	311	310	447	403
Sb	0	2	0	0	0	0	0	0	0	0
S	197	272	166	917	300	339	162	393	291	307
Th	4	11	8	10	6	4	7	8	6	13
V	117	125	151	157	130	121	134	121	142	143
Y	19	20	21	21	19	15	23	17	18	21
Zn	64	66	68	66	63	58	43	63	77	69
Zr	159	167	187	167	149	131	193	149	158	176

VAR. / ID.	S105	S110	S111	S113	S114	S115	S116	E117	S118	S119
East	27664	27686	27566	27548	27542	27532	27526	27442	27452	27456
North	60239	60201	60349	60359	60365	60366	60372	60520	60512	60503
SiO2	57.70	58.73	60.22	58.55	61.06	60.78	62.10	59.85	60.34	61.82
Al2O3	12.89	11.59	12.85	12.00	14.05	12.79	14.10	12.50	12.55	12.02
TiO2	1.00	0.89	0.93	1.03	0.96	0.67	0.80	0.81	0.75	0.82
Fe2O3	8.04	7.08	7.93	8.16	7.61	6.01	6.86	7.18	6.38	7.16
MgO	7.25	5.42	7.10	6.24	5.11	5.04	4.08	6.72	4.53	5.76
CaO	3.82	6.04	3.39	4.26	2.47	3.66	2.78	2.39	4.13	3.74
Na2O	2.39	2.21	2.47	2.60	2.81	3.54	2.51	2.67	4.02	3.36
K2O	1.74	1.47	1.80	1.37	1.98	1.38	2.80	1.86	0.95	1.24
MnO	0.12	0.14	0.14	0.14	0.12	0.10	0.11	0.12	0.11	0.12
P2O5	0.19	0.19	0.16	0.19	0.16	0.15	0.15	0.15	0.16	0.17
Total	95.14	93.76	96.99	94.54	96.33	94.12	96.29	94.25	93.92	96.21
As	0	2	0	0	0	0	2	0	0	0
Ba	744	309	605	502	578	497	741	676	389	405
Co	27	21	21	23	20	12	20	18	21	24
Cr	395	355	321	269	227	151	151	231	208	260
Cu	30	27	25	30	23	20	29	25	25	24
Ga	16	14	14	15	16	14	16	14	15	13
La	27	21	23	24	21	15	20	23	18	16
Ni	157	138	97	104	92	58	61	89	72	86
Nb	11	11	10	12	10	8	9	9	9	10
Pb	14	8	14	15	16	14	15	14	15	13
Rb	43	41	45	32	49	35	79	49	26	29
Sr	357	223	286	422	332	198	312	333	428	226
Sb	0	0	0	0	0	0	0	0	0	0
S	463	266	414	316	614	557	2389	792	886	903
Th	8	5	11	7	9	9	10	11	9	8
V	147	137	145	145	127	105	121	128	125	123
Y	23	19	21	21	18	18	22	20	21	21
Zn	109	53	68	68	70	52	74	67	60	69
Zr	192	166	163	159	148	129	137	137	150	141

TABLE 4.56

VAR. / ID.	S120	S121	S122	S123	S124	S125	S126	S127	S128	S129
East	27455	27466	27462	27476	27462	27460	27454	27465	27471	27480
North	60491	60483	60474	60469	60447	60434	60422	60418	60410	60402
SiO2	60.44	60.41	63.09	59.82	65.17	64.58	69.31	58.69	58.30	60.64
Al2O3	12.49	12.01	12.91	13.64	11.14	10.57	11.81	13.09	13.46	12.69
TiO2	0.82	1.01	0.77	0.83	0.71	0.92	0.84	1.00	0.89	0.87
Fe2O3	7.17	8.01	6.32	7.61	6.75	7.59	5.25	8.28	7.52	7.26
MgO	5.51	6.55	4.53	5.57	5.81	4.86	2.48	6.56	5.44	5.91
CaO	3.92	3.81	3.11	1.75	1.96	2.87	1.60	4.44	3.24	2.56
Na2O	3.96	2.60	3.63	3.04	2.54	2.41	2.67	2.70	2.49	3.00
K2O	1.05	1.28	1.56	1.37	1.85	1.52	1.77	1.60	2.16	1.28
MnO	0.12	0.13	0.10	0.10	0.12	0.12	0.06	0.13	0.11	0.10
P2O5	0.19	0.21	0.16	0.16	0.13	0.15	0.19	0.21	0.18	0.15
Total	95.67	96.02	96.18	93.89	96.18	95.59	95.98	96.70	93.79	94.46
As	0	0	0	1	0	0	0	0	0	2
Ba	389	365	463	443	555	507	366	469	685	442
Co	24	26	20	20	18	20	13	25	29	16
Cr	209	294	173	153	258	416	132	250	239	294
Cu	24	26	19	26	16	20	16	33	31	22
Ga	16	15	13	15	13	13	11	13	18	14
La	19	17	23	17	23	24	28	17	19	24
Ni	73	87	72	74	73	66	42	78	94	95
Nb	9	11	9	11	9	8	15	9	10	8
Pb	12	13	16	13	14	12	14	14	15	13
Rb	24	30	36	37	46	37	46	38	58	31
Sr	221	181	220	266	262	317	128	302	453	302
Sb	0	0	2	2	1	0	0	0	0	4
S	711	1251	940	1702	930	1003	1975	682	1495	813
Th	7	15	7	7	9	15	6	8	7	7
V	131	156	112	114	119	165	87	168	139	135
Y	18	21	20	23	18	21	21	21	23	21
Zn	63	66	56	63	70	72	49	71	70	54
Zr	140	188	142	146	117	197	222	150	153	145

VAR. / ID.	S130	S131	S133	S134	E135	E136	E139	E140	S356	L399
East	27487	27493	27509	27517	27468	27459	27424	27415	27629	28320
North	60393	60388	60378	60375	60533	60541	60548	60554	60142	60960
SiO2	62.42	60.58	61.97	62.21	62.66	59.84	59.59	61.08	61.08	61.58
Al2O3	12.19	13.43	11.58	11.43	13.66	14.54	12.21	13.22	12.19	11.88
TiO2	0.90	0.97	0.77	0.79	0.84	1.01	1.20	1.16	0.90	0.77
Fe2O3	7.04	8.09	6.70	7.18	7.02	8.45	9.27	9.34	7.63	6.96
MgO	6.15	6.00	4.66	5.09	4.72	5.44	5.67	5.51	6.37	7.20
CaO	3.48	3.09	4.25	2.39	2.47	1.45	3.89	1.62	2.65	1.14
Na2O	2.64	3.42	3.20	2.82	3.38	2.51	2.96	3.38	2.85	3.34
K2O	1.58	0.84	1.52	1.63	1.69	2.44	1.31	0.87	1.69	1.68
MnO	0.11	0.13	0.11	0.11	0.10	0.10	0.14	0.12	0.10	0.10
P2O5	0.17	0.18	0.14	0.14	0.14	0.18	0.22	0.19	0.18	0.15
Total	96.68	96.73	94.90	93.79	96.68	95.96	96.46	96.49	95.64	94.80
As	0	0	0	0	0	2	1	0	1	2
Ba	618	283	472	483	608	677	435	257	701	511
Co	22	23	21	17	16	32	23	24	23	16
Cr	225	352	200	234	154	204	257	253	301	180
Cu	23	27	21	20	21	30	32	27	24	19
Ga	13	16	15	13	13	18	14	15	16	14
La	20	22	12	28	18	24	26	19	19	21
Ni	95	92	76	74	73	87	83	80	149	72
Nb	11	11	10	10	9	12	10	9	10	7
Pb	13	13	12	13	13	17	14	13	15	10
Rb	38	23	35	39	43	60	28	24	40	41
Sr	367	318	233	256	347	383	191	302	360	224
Sb	0	0	0	0	0	2	3	0	0	0
S	322	647	340	872	847	2528	824	857	294	774
Th	8	3	6	9	6	12	8	10	9	6
V	118	130	110	117	112	139	181	149	118	114
Y	20	21	19	19	20	22	21	18	18	21
Zn	63	74	53	59	64	73	77	67	65	52
Zr	158	152	130	142	119	162	165	139	158	136

TABLE 4.56

VAR. / ID.	E408	E409	S491	L527	L528	L548	L554	L559	L562	L566
East	27335	27359	28060	28543	28494	28683	28683	28626	28626	28626
North	60503	60498	60358	60759	60828	61372	61372	61360	61360	61360
SiO2	60.71	59.94	59.95	60.49	58.14	57.33	54.17	54.95	55.44	56.30
Al2O3	11.66	12.88	12.78	11.33	11.61	11.57	11.59	13.52	13.20	12.47
TiO2	1.00	0.89	0.95	0.80	1.17	1.17	0.93	1.14	0.90	0.88
Fe2O3	8.84	7.75	7.82	7.71	8.57	10.34	8.82	9.73	8.73	8.68
MgO	5.45	5.55	7.56	7.22	6.99	5.99	5.43	6.84	5.69	5.99
CaO	4.33	4.17	2.26	3.98	2.47	5.41	8.80	3.15	6.07	5.34
Na2O	2.96	3.19	2.49	2.57	2.48	3.38	2.27	2.55	2.86	2.81
K2O	1.42	1.45	2.11	1.53	1.83	0.69	1.33	2.13	1.34	1.12
MnO	0.15	0.13	0.11	0.13	0.14	0.17	0.16	0.15	0.17	0.15
P2O5	0.20	0.21	0.16	0.19	0.18	0.23	0.21	0.20	0.19	0.19
Total	96.72	96.16	96.19	95.95	93.58	96.28	93.71	94.36	96.59	93.93
As	2	2	2	15	2	0	4	2	11	2
Ba	443	548	570	520	729	398	362	722	451	412
Co	23	23	18	21	24	22	25	26	24	19
Cr	211	215	342	270	365	378	312	234	174	247
Cu	31	35	25	24	30	36	40	30	25	21
Ga	15	15	14	16	15	17	16	15	16	16
La	21	20	21	18	16	16	21	16	18	14
Ni	79	73	147	140	133	56	58	66	52	55
Nb	10	9	11	10	11	10	9	8	8	8
Pb	12	15	8	25	6	14	21	8	10	12
Rb	30	33	50	38	41	19	39	47	39	32
Sr	172	234	258	353	507	351	378	362	423	380
Sb	0	0	0	3	0	0	0	0	0	0
S	1107	774	316	251	190	2005	1889	753	387	2275
Th	6	8	5	4	4	7	4	9	3	4
V	164	148	128	115	163	208	191	187	153	155
Y	23	22	21	20	24	24	21	21	17	20
Zn	64	59	48	61	41	71	92	53	65	68
Zr	149	144	162	143	171	155	151	127	122	124

VAR. / ID.	L572	L584	L585	L586	N615	S618	AX852	AX873	AK336	AK778
East	28777	28484	28487	28507	27712	27622	30382	30515	33650	33470
North	61324	60647	60658	60680	60227	60261	62677	63108	65289	65320
SiO2	56.08	60.68	60.53	62.82	58.96	58.83	62.12	57.38	61.26	59.88
Al2O3	13.06	10.93	11.88	18.64	10.30	11.09	10.09	12.60	11.97	12.35
TiO2	0.90	1.22	1.16	1.12	0.92	0.96	0.83	0.93	0.95	0.84
Fe2O3	7.50	8.99	9.09	5.46	8.07	8.19	7.98	8.24	7.93	7.48
MgO	5.34	7.07	7.62	3.91	6.36	6.84	5.08	5.70	5.73	5.23
CaO	8.71	1.66	1.14	0.24	5.33	3.63	4.52	5.86	3.82	2.80
Na2O	2.18	2.41	2.38	2.00	2.56	2.24	2.49	2.95	3.02	3.32
K2O	2.03	1.48	1.76	1.90	1.36	1.89	1.56	1.24	1.62	1.82
MnO	0.16	0.13	0.11	0.03	0.12	0.14	0.17	0.13	0.14	0.11
P2O5	0.21	0.18	0.19	0.07	0.21	0.20	0.14	0.18	0.16	0.17
Total	96.17	94.75	95.86	96.19	94.19	94.01	94.98	95.21	96.60	94.00
As	5	3	4	4	0	4	0	5	2	3
Ba	484	458	450	380	537	805	445	387	625	409
Co	16	24	24	15	26	25	16	23	20	17
Cr	202	476	375	390	386	277	351	221	290	170
Cu	34	2	9	330	29	28	17	28	20	28
Ga	16	14	14	18	15	15	13	16	14	16
La	16	21	11	32	21	26	19	12	20	18
Ni	51	162	165	137	168	133	83	82	80	71
Nb	9	10	11	12	10	10	9	11	10	8
Pb	18	9	10	24	14	10	12	11	13	15
Rb	49	33	36	51	30	41	36	29	40	44
Sr	283	224	188	91	395	420	196	228	266	264
Sb	2	3	0	4	0	0	0	0	0	0
S	1492	0	0	981	293	126	448	677	547	587
Th	7	7	5	8	9	9	6	4	10	9
V	159	147	124	134	143	129	132	142	142	117
Y	25	21	24	21	21	21	24	22	24	24
Zn	107	55	67	72	62	65	53	69	60	60
Zr	121	179	165	201	193	166	162	132	182	153

VAR. / ID.	AX-1	AX-36	AX-37	AX-38	AX-127	AX-143	AX-164	AX-177	AX-189	AX-226
East	33020	35792	35865	35873	26070	26040	30719	30281	30035	29737
North	64609	66685	66837	66813	58390	58410	62771	62235	61949	61572
SiO2	61.48	64.68	74.28	73.19	62.93	59.54	61.80	66.64	63.46	65.15
Al2O3	12.51	11.79	11.86	10.49	13.86	12.39	14.37	10.92	13.96	14.33
TiO2	0.99	0.92	0.95	1.29	0.75	0.87	0.90	0.80	1.09	0.90
Fe2O3	6.40	6.22	4.05	4.14	5.89	6.43	6.54	5.72	7.85	6.74
MgO	4.53	5.47	2.30	3.25	5.13	5.59	3.95	3.41	4.92	3.56
CaO	5.57	2.22	1.41	2.44	2.90	4.14	2.25	4.01	0.87	1.67
Na2O	3.25	2.22	2.30	2.22	2.58	2.25	3.42	2.53	3.18	3.47
K2O	0.75	1.90	1.29	1.02	2.13	1.88	1.74	0.83	1.47	1.43
MnO	0.13	0.08	0.08	0.12	0.07	0.09	0.07	0.09	0.10	0.07
P2O5	0.26	0.16	0.17	0.30	0.16	0.17	0.18	0.13	0.23	0.21
Total	95.87	95.66	98.69	98.46	96.40	93.35	95.22	95.08	97.13	97.53
As	0	4	0	0	0	0	2	0	0	0
Ba	246	472	285	395	449	467	505	221	681	377
Co	28	39	48	38	39	30	29	40	36	35
Cr	232	290	66	77	196	293	106	229	187	118
Cu	22	23	12	14	22	21	24	15	22	23
Ga	13	13	10	9	14	15	15	11	16	16
La	33	25	33	28	26	22	33	24	30	29
Ni	59	72	25	28	99	100	42	54	56	47
Nb	15	12	17	20	9	12	14	11	14	13
Pb	14	25	12	12	21	11	7	17	18	8
Rb	24	48	36	27	53	47	56	28	40	41
Sr	311	141	50	70	183	231	246	141	166	98
Sb	0	0	0	0	0	0	0	0	0	0
S	721	575	360	705	94	236	19	659	409	293
Th	6	6	6	9	4	3	13	7	5	6
V	130	119	68	80	104	123	107	106	132	108
Y	26	21	20	28	19	21	25	21	25	23
Zn	59	52	37	36	44	37	51	41	80	51
Zr	359	282	297	709	156	190	266	251	270	232

TABLE 4.57

VAR. / ID.	AX-229	AX-230	AX-231	AX-235	AX-236	AX-246	AX-276	AX-287	DT1A-47	S-6
East	28062	28067	28099	29552	29528	31580	34125	34111	25623	26080
North	59663	59638	59616	61627	61643	63641	65320	65253	58238	58350
SiO2	71.16	69.48	65.61	66.17	67.05	55.50	64.76	71.90	69.14	57.00
Al2O3	13.19	12.92	14.37	12.02	12.53	13.77	11.72	10.44	10.37	10.93
TiO2	0.93	0.85	0.98	0.93	0.74	0.98	0.96	0.92	0.82	0.97
Fe2O3	5.38	5.49	6.20	6.78	5.60	8.43	6.24	4.91	4.22	7.08
MgO	2.60	4.11	4.06	4.67	4.13	6.84	5.54	3.03	2.06	5.02
CaO	1.65	1.89	1.87	2.43	3.58	4.16	3.79	2.48	5.40	4.39
Na2O	2.10	2.08	2.63	3.04	2.21	2.84	1.90	2.37	1.64	1.97
K2O	1.94	1.53	1.79	0.68	1.65	1.41	1.60	1.23	1.49	1.28
MnO	0.07	0.09	0.08	0.09	0.08	0.14	0.08	0.08	0.16	0.10
P2O5	0.19	0.18	0.21	0.14	0.14	0.22	0.16	0.16	0.19	0.14
Total	99.21	98.62	97.80	96.95	97.71	94.29	96.75	97.52	95.49	88.88
As	0	0	0	0	2	4	2	0	0	0
Ba	406	302	404	253	337	484	413	369	317	323
Co	38	38	35	40	33	31	37	42	34	25
Cr	107	182	115	317	185	297	316	162	97	422
Cu	19	14	21	17	11	39	30	13	11	20
Ga	13	11	14	12	12	16	12	10	9	14
La	33	28	28	26	23	24	26	26	31	23
Ni	44	77	46	69	56	75	104	55	34	109
Nb	16	14	16	12	10	10	13	14	15	10
Pb	16	13	17	16	9	14	10	13	13	16
Rb	55	45	52	22	51	41	46	34	42	37
Sr	74	58	90	183	142	358	94	89	102	194
Sb	0	0	2	0	0	0	0	0	1	0
S	421	378	337	594	416	2596	418	390	159	371
Th	2	6	9	10	7	7	7	6	4	6
V	91	87	104	124	104	180	112	85	73	148
Y	27	24	25	21	21	22	22	20	23	22
Zn	46	43	66	47	36	75	46	33	33	54
Zr	284	278	259	293	209	176	271	294	291	215

VAR. / ID.	S54	S56	S57	S58	S59	S60	S62	S64	S65	S67
East	27886	27873	27869	27858	27851	27844	27825	27811	27801	27774
North	60031	60042	60048	60056	60057	60063	60069	60075	60082	60093
SiO2	60.08	67.88	61.45	71.45	69.71	70.73	71.78	69.22	73.68	62.90
Al2O3	11.18	9.64	13.15	11.85	11.28	10.63	10.92	10.14	9.19	11.85
TiO2	0.90	0.89	0.83	0.91	1.00	0.96	0.90	1.37	0.91	0.95
Fe2O3	6.39	6.59	6.36	4.84	5.14	4.93	4.55	6.53	3.88	7.82
MgO	4.25	4.03	4.73	1.88	2.29	2.10	2.23	2.74	1.92	5.72
CaO	8.45	3.07	4.80	0.85	1.10	1.74	1.97	1.94	2.78	1.76
Na2O	2.26	2.32	0.99	2.31	1.90	2.01	2.12	2.06	2.31	2.25
K2O	2.01	1.72	2.50	1.61	1.77	1.68	1.71	1.22	1.13	1.22
MnO	0.24	0.09	0.08	0.08	0.07	0.07	0.06	0.08	0.06	0.12
P2O5	0.26	0.17	0.17	0.26	0.20	0.20	0.17	0.42	0.27	0.16
Total	96.02	96.40	95.06	96.04	94.46	95.05	96.41	95.72	96.13	94.75
As	3	4	4	0	0	1	0	0	1	3
Ba	406	437	369	350	394	368	354	295	254	334
Co	17	11	15	13	17	13	12	17	12	22
Cr	184	183	142	81	93	82	80	86	72	334
Cu	23	12	26	13	13	13	11	13	11	20
Ga	13	12	13	11	12	10	10	11	9	13
La	27	27	18	38	30	28	31	51	31	32
Ni	56	44	71	30	28	25	25	39	23	105
Nb	12	11	15	18	18	17	18	21	16	11
Pb	8	41	8	13	16	9	14	15	10	18
Rb	52	41	69	47	49	47	47	33	31	36
Sr	177	154	124	68	71	89	91	87	107	164
Sb	0	0	0	0	0	0	2	0	2	0
S	495	701	1633	47	0	0	18	7	126	114
Th	8	10	10	14	9	10	10	16	11	10
V	114	115	93	79	77	75	68	94	68	123
Y	20	22	21	27	24	24	22	33	27	25
Zn	34	66	48	51	48	45	41	58	37	57
Zr	174	233	210	281	297	302	263	511	355	213

VAR. / ID.	S70	S345	S348	S350	S351	S354	S355	S359	S360	S361
East	27734	27903	27942	27987	27991	27796	27754	28023	28025	28025
North	60105	60009	59977	59946	59937	60081	60092	59903	59883	59849
SiO2	61.02	66.29	56.81	67.49	66.83	74.81	65.50	67.45	61.06	61.55
Al2O3	14.88	9.97	10.60	12.06	8.49	7.18	9.56	9.67	13.06	13.52
TiO2	1.04	0.86	1.02	0.84	0.91	1.18	0.82	1.14	0.88	1.01
Fe2O3	8.36	7.15	5.37	3.54	5.66	3.83	4.39	6.16	7.84	7.40
MgO	4.26	4.55	3.38	2.89	5.91	1.59	2.03	3.65	5.10	4.91
CaO	0.87	3.29	12.27	5.84	5.31	2.52	8.88	4.74	4.69	1.79
Na2O	1.51	2.41	2.16	1.18	1.17	2.09	1.91	2.34	1.68	3.01
K2O	2.67	1.94	2.30	2.85	1.97	0.78	1.47	1.24	2.24	1.96
MnO	0.11	0.12	0.17	0.07	0.08	0.08	0.24	0.10	0.12	0.09
P2O5	0.17	0.17	0.21	0.17	0.15	0.17	0.17	0.25	0.19	0.20
Total	94.89	96.75	94.29	96.93	96.48	94.23	94.97	96.69	96.86	95.44
As	3	4	4	3	2	1	0	4	3	2
Ba	495	660	494	311	299	181	269	251	323	664
Co	24	16	17	17	18	7	9	15	20	19
Cr	143	218	193	452	687	74	76	166	145	124
Cu	24	19	21	10	10	9	12	15	22	17
Ga	17	12	12	11	9	8	9	12	13	15
La	31	30	28	23	21	27	25	25	22	22
Ni	92	51	59	132	155	18	23	47	75	51
Nb	17	11	12	14	12	16	16	15	13	15
Pb	19	11	9	11	9	7	12	11	10	8
Rb	77	41	56	63	47	21	36	33	59	52
Sr	77	322	209	84	76	95	134	132	138	239
Sb	0	0	0	0	0	0	0	0	1	0
S	342	498	665	124	22	222	0	347	399	279
Th	12	6	8	9	12	10	9	10	8	11
V	113	124	129	92	99	67	69	97	95	104
Y	24	20	28	22	22	21	23	28	23	29
Zn	81	57	50	39	34	30	36	46	53	47
Zr	220	196	333	328	341	373	228	376	228	270

TABLE 4.57

VAR. / ID.	N400	N401	N402	S448	N456	S464	S466	S492	S494	S496
East	28406	28404	28394	28049	28387	28076	28089	28068	28078	28092
North	60453	60487	60502	59614	60529	59812	59813	60243	60322	60301
SiO2	64.50	70.58	71.59	62.12	73.38	61.81	64.55	73.00	72.13	72.56
Al2O3	8.90	10.40	9.92	10.01	8.18	13.30	10.92	8.23	9.99	6.07
TiO2	1.12	0.89	0.84	0.95	0.67	0.87	0.93	0.73	0.85	0.66
Fe2O3	8.00	5.36	4.80	6.34	4.10	5.72	6.36	4.25	4.64	3.63
MgO	5.28	2.95	2.62	4.75	2.24	2.90	4.80	2.40	2.02	1.63
CaO	2.92	1.35	2.67	6.81	2.52	4.87	3.13	2.08	2.55	8.16
Na2O	2.11	1.96	1.90	2.25	1.76	1.62	2.08	1.83	2.33	1.69
K2O	1.53	2.03	1.90	1.32	1.27	2.39	1.71	1.14	1.38	0.93
MnO	0.15	0.06	0.08	0.13	0.09	0.09	0.08	0.09	0.10	0.13
P2O5	0.17	0.17	0.20	0.20	0.11	0.16	0.16	0.13	0.17	0.12
Total	94.68	95.75	96.52	94.88	94.32	93.73	94.72	93.88	96.16	95.58
As	3	1	0	3	3	3	3	3	2	4
Ba	512	408	369	268	257	334	378	261	299	185
Co	17	12	13	15	10	15	17	9	10	10
Cr	239	116	141	238	80	178	236	82	80	71
Cu	15	9	6	16	9	14	18	10	13	11
Ga	13	11	10	12	9	13	12	9	10	8
La	24	26	36	25	23	21	29	18	31	20
Ni	55	46	43	85	31	79	71	35	24	25
Nb	11	17	15	15	12	15	14	14	17	13
Pb	15	8	8	10	10	10	10	10	11	8
Rb	33	53	48	37	34	60	47	31	36	24
Sr	173	70	79	128	83	211	132	66	81	142
Sb	1	3	0	0	2	1	2	3	1	0
S	794	0	0	1294	0	748	672	84	0	2343
Th	2	6	11	6	4	10	6	8	6	6
V	136	76	75	107	59	97	110	61	70	57
Y	24	27	28	31	17	25	24	18	26	27
Zn	50	45	45	53	33	31	41	42	45	29
Zr	215	256	273	329	170	282	252	202	221	150

VAR. / ID.	S497	S498	S499	W507	L515	L520	L522	S529	S531	S532
East	28094	28109	28095	28308	28928	28986	29310	28029	28019	28010
North	60300	60166	60116	60427	60932	60848	61019	60208	60216	60227
SiO2	77.05	63.52	66.85	72.32	62.83	64.58	64.83	69.59	62.68	69.27
Al2O3	7.76	13.49	6.82	13.09	10.38	8.86	12.02	7.04	11.84	11.53
TiO2	1.14	0.81	0.73	0.86	1.11	1.13	0.99	0.89	0.92	0.89
Fe2O3	4.06	7.10	4.86	3.18	8.31	7.47	7.53	3.72	7.66	5.15
MgO	1.70	4.19	5.09	1.17	5.42	5.19	5.10	1.73	5.71	2.30
CaO	1.02	2.71	6.59	1.97	2.43	3.09	1.53	10.10	3.34	1.74
Na2O	2.12	2.36	1.12	2.02	2.53	1.92	2.93	2.09	2.37	2.15
K2O	0.94	2.28	1.55	1.88	1.57	1.28	1.48	0.90	1.66	1.91
MnO	0.05	0.08	0.07	0.06	0.12	0.12	0.10	0.12	0.15	0.10
P2O5	0.15	0.16	0.12	0.18	0.19	0.14	0.17	0.27	0.15	0.22
Total	95.99	96.70	93.80	96.73	94.89	93.78	96.68	96.45	96.48	95.26
As	1	2	2	0	5	2	0	2	2	0
Ba	240	411	276	933	588	380	343	444	339	378
Co	8	15	13	13	18	13	13	10	21	9
Cr	68	103	448	121	296	271	211	93	293	81
Cu	9	20	10	93	20	13	6	11	17	15
Ga	8	15	9	12	13	11	13	8	14	11
La	30	32	21	31	31	16	26	25	21	31
Ni	18	56	115	43	57	44	61	24	111	31
Nb	16	14	13	15	13	11	12	13	12	17
Pb	10	13	8	9	12	8	10	10	13	14
Rb	25	59	39	51	34	29	37	24	40	46
Sr	56	111	119	51	205	135	105	200	136	75
Sb	0	2	1	0	0	3	0	0	2	2
S	355	256	0	43	270	489	0	1113	212	0
Th	8	7	4	7	9	10	7	6	4	9
V	69	93	77	77	156	137	117	78	116	73
Y	20	26	22	24	26	19	27	32	23	25
Zn	32	64	26	25	58	31	50	34	52	47
Zr	318	196	255	253	280	215	248	349	184	254

VAR. / ID.	5533	L587	L589	L590	S623	S624	AX753	AX800	AK3	AK391
East	28003	28508	28489	28468	27785	27783	31319	30452	34068	33548
North	60234	60679	60673	60534	60122	60117	63546	62782	65403	65107
SiO2	69.76	70.72	69.21	70.08	72.80	72.41	70.76	66.22	61.17	69.95
Al2O3	10.45	11.35	10.57	9.44	10.55	10.69	11.66	9.06	11.62	10.08
TiO2	1.05	1.22	0.87	0.87	0.95	0.82	0.94	0.97	0.99	0.90
Fe2O3	5.14	5.59	4.60	5.30	5.35	4.57	5.62	7.05	7.46	5.23
MgO	2.06	2.20	1.90	2.70	2.13	2.10	2.07	4.12	5.68	2.34
CaO	2.20	0.39	3.49	1.96	1.03	1.37	1.26	3.89	2.78	1.82
Na2O	2.00	1.75	1.66	1.81	1.90	1.93	2.16	2.10	2.84	2.06
K2O	1.78	1.90	2.22	1.85	1.72	1.64	1.80	1.88	2.00	1.68
MnO	0.08	0.08	0.09	0.08	0.08	0.06	0.09	0.11	0.10	0.08
P2O5	0.24	0.22	0.15	0.15	0.17	0.21	0.19	0.15	0.17	0.18
Total	94.76	95.42	94.76	94.24	96.68	95.80	96.55	95.55	94.81	94.32
As	0	0	0	1	0	0	2	3	0	3
Ba	380	360	362	380	374	325	391	422	768	359
Co	9	10	12	9	11	9	9	12	19	15
Cr	82	94	73	107	80	74	79	206	231	102
Cu	14	5	4	6	13	14	13	13	39	13
Ga	11	13	12	9	11	10	12	12	14	12
La	33	30	25	31	24	32	25	25	22	26
Ni	26	34	26	36	25	26	28	42	95	38
Nb	17	18	15	14	18	17	17	11	11	17
Pb	12	9	6	7	12	13	11	9	12	10
Rb	41	42	47	43	41	51	46	43	48	44
Sr	88	54	68	76	56	59	75	147	290	74
Sb	0	0	0	0	0	2	0	5	0	0
S	0	0	0	0	0	0	171	165	0	0
Th	6	6	5	5	8	11	7	4	7	8
V	80	85	69	78	73	68	74	116	129	79
Y	27	29	20	24	26	28	23	22	22	28
Zn	44	45	31	38	51	47	48	46	49	52
Zr	319	433	207	247	235	250	233	236	182	270

TABLE 4.57

VAR. / ID.	AK397
East	33683
North	65085
SiO2	69.43
Al2O3	11.03
TiO2	1.03
Fe2O3	6.00
MgO	2.61
CaO	1.20
Na2O	2.04
K2O	1.67
MnO	0.08
P2O5	0.18
Total	95.27
As	2
Ba	396
Co	13
Cr	97
Cu	12
Ga	12
La	21
Ni	34
Nb	17
Pb	10
Rb	41
Sr	74
Sb	0
S	493
Th	8
V	89
Y	24
Zn	50
Zr	243

XRF Analyses: Pyroxenous Formation (GMKE13)

Part 1

VAR. / ID.	AX-4	AX-5	AX-150	AX-151	AX-155	AX-182	AX-187	AX-194	AX-195	AX-196
East	33065	32935	30977	31080	31034	30040	30132	29880	29908	29941
North	64420	64578	62434	62290	62358	61638	61882	61594	61615	61618
SiO2	61.68	60.55	55.80	58.54	55.83	61.46	70.61	58.84	58.34	62.18
Al2O3	13.27	13.04	12.99	15.43	12.81	12.51	11.53	13.99	14.06	13.70
TiO2	0.90	1.03	1.01	1.04	0.91	0.80	0.54	0.87	0.99	0.87
Fe2O3	6.03	8.43	8.96	8.61	8.30	6.52	4.96	7.47	8.63	7.27
MgO	4.69	5.41	7.91	6.92	7.52	5.06	3.82	4.98	5.54	6.18
CaO	2.04	3.55	3.38	1.24	2.50	4.90	2.74	2.33	4.36	3.04
Na2O	2.22	3.19	2.37	2.43	2.13	2.60	2.35	2.34	3.34	2.70
K2O	2.18	0.98	1.50	2.33	1.63	1.74	1.90	2.62	1.05	1.49
MnO	0.07	0.12	0.16	0.10	0.12	0.12	0.07	0.10	0.13	0.11
P2O5	0.17	0.21	0.22	0.25	0.19	0.21	0.13	0.18	0.22	0.20
Total	93.25	96.51	94.30	96.89	91.94	95.92	98.65	93.72	96.66	97.74
As	0	0	0	8	5	0	0	0	0	0
Ba	570	436	348	654	366	664	531	641	370	436
Co	29	36	37	30	32	36	39	33	41	34
Cr	143	252	225	152	192	191	109	136	180	185
Cu	18	30	37	10	35	23	16	32	36	28
Ga	14	15	16	16	16	14	10	15	18	16
La	29	32	28	20	23	30	20	26	27	29
Ni	70	65	61	64	65	66	46	61	58	63
Nb	14	10	10	13	10	11	10	10	8	12
Pb	15	18	11	11	10	13	16	15	17	15
Rb	66	28	49	70	53	47	47	73	27	43
Sr	221	496	264	247	283	312	192	322	330	335
Sb	0	0	0	0	1	0	0	0	0	0
S	478	478	336	0	157	231	434	825	787	658
Th	7	7	4	10	11	6	5	11	5	4
V	96	186	176	141	161	113	74	140	177	139
Y	25	21	21	22	22	22	21	23	21	23
Zn	57	72	61	74	70	41	42	64	70	62
Zr	227	231	213	219	183	215	172	196	188	224

TABLE 4.58

XRF Analyses: Pyroxenous Formation (GWKE13)

Part 2

VAR. / ID.	AX-197	AX-198	AX-199	AX-219	AX-221	AX-234	AX-274	AX-286	DTIA-5	DTIA-27
East	29972	30000	30026	30125	30075	28192	34235	34293	26130	25630
North	61616	61615	61614	61541	61607	59537	65062	65006	58240	57889
SiO2	64.03	65.45	62.79	61.59	57.01	61.24	58.95	59.27	53.36	58.29
Al2O3	13.17	13.26	13.79	12.74	12.59	12.99	12.74	13.19	12.19	13.27
TiO2	0.92	0.78	0.87	0.85	0.94	0.95	0.94	0.91	1.03	0.97
Fe2O3	7.11	6.74	7.33	7.48	8.07	7.32	7.66	6.87	8.47	8.33
MgO	5.00	5.03	5.09	5.53	5.41	7.09	6.33	6.77	5.94	4.91
CaO	1.83	3.78	4.30	4.39	3.52	2.54	4.63	3.11	6.19	5.01
Na2O	3.92	2.99	2.75	2.52	2.14	2.33	1.64	2.25	1.77	2.39
K2O	0.88	1.57	1.68	1.59	1.61	1.89	1.70	1.99	2.04	1.72
MnO	0.10	0.10	0.12	0.12	0.13	0.11	0.11	0.10	0.22	0.13
P2O5	0.18	0.21	0.21	0.23	0.17	0.19	0.21	0.19	0.26	0.23
Total	97.14	99.91	98.93	97.04	91.59	96.65	94.91	94.65	91.47	95.25
As	0	0	0	0	1	0	0	0	0	0
Ba	309	535	417	607	380	501	388	573	698	436
Co	42	38	39	40	37	39	35	36	31	38
Cr	215	221	188	271	169	336	230	192	152	167
Cu	23	26	31	28	31	25	30	41	34	29
Ga	14	15	15	14	16	15	14	16	16	15
La	32	34	28	25	25	29	28	35	33	29
Ni	54	69	67	69	55	86	76	65	52	52
Nb	14	11	11	10	10	13	11	9	9	9
Pb	18	16	15	15	13	13	17	9	14	18
Rb	27	45	47	40	46	53	48	57	53	49
Sr	299	411	433	368	329	286	300	424	420	291
Sb	0	0	0	0	0	0	0	0	0	0
S	1136	431	311	723	459	868	748	610	337	379
Th	6	7	2	6	5	7	7	7	6	6
V	124	131	153	149	158	147	162	150	211	191
Y	24	20	23	22	22	22	24	23	22	23
Zn	62	62	64	62	67	65	63	58	81	75
Zr	285	220	211	199	200	284	251	207	195	223

TABLE 4.58

VAR. / ID.	DTIA-41	DTIA-42	S-4	AX657	AX659	AX781	AX782	AX783	AX784	AX789
East	25507	25533	26140	31025	30709	30517	30517	30640	30674	30689
North	58077	58126	58230	62448	62228	61869	61869	62200	62034	62085
SiO2	59.06	60.20	59.15	63.70	61.78	61.35	60.67	60.07	62.58	64.66
Al2O3	13.30	12.41	12.61	9.41	10.52	11.37	11.12	11.74	9.58	11.08
TiO2	0.84	1.24	0.91	0.85	0.93	0.88	0.97	1.27	0.84	0.87
Fe2O3	6.44	7.93	7.51	7.59	8.24	7.75	8.64	10.89	7.30	7.51
MgO	5.24	5.77	5.38	4.55	4.76	4.14	3.93	5.33	4.55	5.09
CaO	4.93	3.57	3.57	5.55	3.88	5.53	5.38	2.73	4.56	2.92
Na2O	2.48	2.25	2.10	2.69	2.41	2.35	1.88	2.03	2.28	2.30
K2O	1.61	1.42	1.92	1.18	1.80	1.96	2.51	2.18	1.63	2.14
MnO	0.26	0.09	0.12	0.20	0.15	0.13	0.20	0.13	0.14	0.11
P2O5	0.16	0.16	0.20	0.16	0.19	0.21	0.22	0.20	0.20	0.18
Total	94.32	95.04	93.47	95.88	94.66	95.67	95.52	96.57	93.66	96.86
As	0	0	0	0	0	3	2	1	2	6
Ba	337	387	561	360	547	367	466	1035	462	574
Co	35	31	40	17	18	20	23	26	19	18
Cr	228	481	192	310	179	161	181	248	260	215
Cu	24	26	27	15	20	25	24	7	20	19
Ga	13	14	13	13	13	15	14	14	13	14
La	25	23	31	27	26	26	24	21	22	31
Ni	85	92	68	59	63	51	47	68	66	63
Nb	9	10	11	10	11	13	10	9	11	12
Pb	14	18	14	16	14	8	9	10	10	12
Rb	51	42	56	29	43	53	65	58	42	52
Sr	273	193	377	260	315	483	319	236	269	285
Sb	0	0	0	1	0	0	2	0	2	0
S	0	377	320	624	0	353	431	731	548	343
Th	5	4	7	4	10	5	9	4	9	8
V	128	184	154	117	140	128	168	191	137	120
Y	21	19	22	21	26	24	26	19	24	26
Zn	59	59	59	54	53	58	68	48	56	56
Zr	161	191	206	202	204	212	194	189	239	214

VAR. / ID.	AX790	AX791	AX796	AX797	AX802	AX803	AX805	AX861	AK1	AK83
East	30692	30809	30727	30662	30557	30528	30534	30578	34215	34242
North	62154	62012	61757	62143	62187	62112	62025	61862	65071	65096
SiO2	60.03	61.60	58.15	62.53	61.43	58.66	59.53	61.86	60.33	60.62
Al2O3	10.20	10.52	10.73	9.98	11.20	10.87	12.06	11.16	10.72	10.00
TiO2	1.11	0.89	1.08	0.87	0.79	1.02	1.00	0.99	0.88	1.22
Fe2O3	9.84	7.80	9.01	7.56	7.11	9.13	8.78	8.75	7.73	9.05
MgO	5.36	4.69	5.09	5.10	4.36	5.54	5.70	5.93	5.01	5.15
CaO	3.69	5.19	4.69	3.65	5.56	5.61	4.02	3.92	5.95	5.28
Na2O	2.14	2.08	2.69	2.99	2.03	2.54	2.33	2.23	2.20	2.38
K2O	1.41	1.92	1.75	0.93	2.27	1.35	1.89	1.75	2.36	1.40
MnO	0.14	0.14	0.15	0.12	0.14	0.15	0.12	0.14	0.15	0.14
P2O5	0.21	0.20	0.20	0.18	0.19	0.19	0.21	0.22	0.21	0.20
Total	94.13	95.03	93.54	93.91	95.08	95.06	95.64	96.95	95.54	95.44
As	3	3	3	2	2	6	3	4	2	2
Ba	449	383	550	351	526	388	474	460	599	411
Co	21	16	27	16	18	23	23	22	17	19
Cr	270	251	186	228	186	181	200	184	152	367
Cu	22	20	36	18	21	26	30	22	25	27
Ga	15	14	15	13	15	16	16	16	14	14
La	22	30	27	21	21	25	27	26	25	29
Ni	55	69	67	56	68	47	64	58	58	71
Nb	12	11	10	11	11	10	11	11	12	13
Pb	11	10	10	13	11	29	9	10	13	12
Rb	39	49	45	26	60	32	49	40	59	38
Sr	341	345	474	350	484	376	309	410	351	210
Sb	3	0	0	0	0	0	0	2	0	0
S	1113	373	119	565	243	313	263	0	347	532
Th	7	5	2	7	6	4	6	5	8	6
V	179	127	156	124	120	162	163	145	122	179
Y	25	23	25	24	25	27	25	26	25	29
Zn	71	57	63	50	58	86	57	58	52	68
Zr	217	208	195	232	192	187	188	192	203	381

TABLE 4.58

VAR. / ID.	AK88	AK390	AK454
East	34256	33587	33712
North	65057	65038	64806
SiO2	58.82	59.35	61.88
Al2O3	12.41	10.98	12.42
TiO2	0.96	1.14	0.96
Fe2O3	8.39	9.30	8.10
MgO	4.62	6.09	6.17
CaO	5.47	3.87	2.37
Na2O	2.14	2.66	2.88
K2O	2.04	1.70	1.76
MnO	0.11	0.14	0.09
P2O5	0.22	0.19	0.19
Total	95.18	95.42	96.82
As	0	0	0
Ba	395	484	495
Co	26	22	20
Cr	120	235	143
Cu	32	29	28
Ga	16	15	14
La	22	26	27
Ni	51	63	68
Nb	11	12	12
Pb	13	17	16
Rb	61	46	45
Sr	734	456	339
Sb	2	0	0
S	319	421	250
Th	6	8	5
V	157	175	121
Y	25	26	24
Zn	67	71	58
Zr	170	254	192

XRF Analyses: Intermediate Formation (GWKE14)

Part 1

VAR. / ID.	AX-40	AX-43	AX-44	AX-46	AX-47	AX-48	AX-51	AX-79	AX-80	AX-83
East	30643	30549	30514	30400	30395	30395	29889	30342	30328	30248
North	60192	60302	60330	60404	60410	60424	60980	60549	60569	60616
SiO2	68.31	63.75	62.74	69.02	67.14	68.36	66.13	67.73	64.67	64.87
Al2O3	13.50	16.96	13.75	13.33	14.51	12.21	12.10	14.29	15.47	14.23
TiO2	0.81	0.79	0.95	0.76	0.71	1.17	0.83	0.73	0.99	0.78
Fe2O3	5.20	6.29	6.25	4.88	4.87	5.60	5.88	4.49	5.41	5.35
MgO	3.73	3.97	5.67	4.88	4.64	4.77	4.72	3.60	4.08	4.32
CaO	1.62	1.68	1.06	1.23	2.24	1.85	2.02	2.38	0.83	2.02
Na2O	2.40	2.18	2.29	2.60	2.63	2.04	1.90	3.46	3.82	2.66
K2O	2.35	3.56	2.45	2.32	2.57	1.82	2.30	2.24	3.57	2.64
MnO	0.08	0.12	0.08	0.06	0.08	0.06	0.08	0.09	0.09	0.09
P2O5	0.22	0.17	0.22	0.19	0.19	0.21	0.19	0.26	0.24	0.21
Total	98.22	99.47	95.46	99.27	99.58	98.09	96.15	99.27	99.17	97.17
As	2	0	1	0	2	0	0	0	0	0
Ba	634	816	623	494	714	470	563	692	1094	751
Co	42	30	28	45	37	45	29	34	35	32
Cr	182	103	240	171	211	489	199	122	96	135
Cu	12	20	15	11	11	10	8	10	17	13
Ga	14	17	15	14	13	10	13	14	15	16
La	27	45	27	27	35	41	39	61	54	38
Ni	61	50	86	82	70	88	74	66	47	68
Nb	17	13	14	14	13	17	14	14	15	14
Pb	14	18	16	16	13	13	13	14	16	16
Rb	64	108	68	68	75	49	63	58	95	76
Sr	161	375	243	196	320	118	167	272	359	309
Sb	0	2	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0
Th	12	9	7	8	8	10	7	9	10	11
V	77	99	107	78	76	116	97	69	95	82
Y	28	27	24	24	25	30	26	30	34	26
Zn	48	85	58	49	52	47	50	51	61	52
Zr	362	229	293	325	251	583	285	251	298	254

TABLE 4.59

VAR. / ID.	AX-87	AX-94	AX-95	AX-96	AX-97	AX-99	AX-100	AX-102	AX-103	AX-104
East	29977	31418	32354	31755	31855	31957	32178	32141	32133	23881
North	60867	62008	62320	61810	61930	62164	62330	62381	62403	57331
SiO2	68.42	67.17	69.31	69.46	59.10	66.77	70.10	68.87	65.48	73.55
Al2O3	12.95	13.38	12.49	12.27	13.89	13.91	14.84	12.84	14.55	12.27
TiO2	0.83	0.84	1.05	0.70	1.04	1.03	0.99	0.72	0.87	0.96
Fe2O3	5.43	6.10	6.32	4.99	7.80	6.00	6.21	4.68	5.65	5.01
MgO	3.86	4.59	3.46	4.48	5.30	4.45	2.28	4.14	4.33	2.90
CaO	2.17	2.30	2.19	2.28	1.87	1.12	0.42	2.87	1.71	0.79
Na2O	1.98	2.11	1.47	2.81	3.10	3.29	2.41	2.18	3.82	2.21
K2O	2.41	2.61	1.54	2.10	1.75	2.19	1.55	2.22	1.95	1.27
MnO	0.07	0.08	0.07	0.08	0.15	0.09	0.07	0.08	0.09	0.08
P2O5	0.17	0.22	0.16	0.17	0.23	0.21	0.19	0.17	0.23	0.23
Total	98.29	99.40	98.06	99.34	94.23	99.06	99.06	98.77	98.68	99.27
As	2	0	0	13	0	0	0	0	0	0
Ba	487	668	303	728	764	930	370	555	643	309
Co	42	30	38	38	33	33	41	40	38	47
Cr	211	270	277	246	157	236	107	200	177	72
Cu	11	21	10	15	18	17	21	13	10	18
Ga	12	12	12	13	17	15	13	13	14	11
La	40	32	60	29	39	44	32	29	31	32
Ni	75	67	45	94	55	74	33	87	67	26
Nb	15	14	16	13	15	16	17	14	13	18
Pb	15	19	14	29	19	25	17	18	13	14
Rb	68	73	49	56	48	54	46	60	54	38
Sr	98	197	79	216	469	209	74	131	288	54
Sb	0	0	0	0	0	0	0	0	0	0
S	0	1426	240	297	429	164	177	383	24	116
Th	14	9	13	5	7	8	6	3	10	7
V	86	108	110	83	133	99	101	78	93	79
Y	27	25	37	22	29	31	23	24	25	26
Zn	47	55	47	58	75	71	63	46	30	45
Zr	320	296	607	311	301	376	292	288	295	328

VAR. / ID.	AX-105	AX-106	AX-107	AX-108	AX-109	AX-179	AX-249	AX-251	AX-272	AX-273
East	24864	24911	24895	24895	25013	30370	31959	33428	34485	34808
North	57373	57515	57565	57565	57684	61306	61584	63738	64557	63850
SiO2	71.65	75.32	73.05	76.79	74.45	66.51	68.65	61.54	67.00	64.85
Al2O3	12.55	10.19	11.17	10.21	11.25	12.07	16.52	18.55	13.29	14.08
TiO2	0.81	0.72	0.89	0.71	0.88	0.80	0.79	0.86	1.24	0.73
Fe2O3	4.77	4.68	5.02	4.54	4.93	5.32	4.26	6.04	6.55	4.84
MgO	2.37	2.09	2.33	2.54	2.40	4.75	2.25	3.28	3.88	3.73
CaO	2.32	1.53	2.66	1.57	1.40	3.14	0.98	2.33	0.41	5.18
Na2O	2.12	1.75	1.82	1.86	1.93	1.74	3.38	1.32	2.13	1.69
K2O	1.67	1.21	1.40	1.22	1.43	2.25	2.11	4.96	1.62	2.00
MnO	0.09	0.07	0.10	0.07	0.06	0.07	0.11	0.11	0.08	0.08
P2O5	0.19	0.14	0.20	0.17	0.17	0.18	0.16	0.22	0.17	0.14
Total	98.54	97.70	98.64	99.68	98.90	96.83	99.21	99.21	96.37	97.32
As	0	0	0	2	0	0	0	0	0	0
Ba	339	316	264	241	360	487	421	1380	367	224
Co	42	42	45	56	48	43	38	24	41	35
Cr	74	69	142	111	130	204	95	64	122	105
Cu	18	13	16	14	13	8	10	26	12	7
Ga	11	10	10	10	11	12	15	19	14	12
La	30	30	29	25	31	32	37	55	30	34
Ni	26	24	41	34	40	77	28	33	54	33
Nb	17	12	17	14	17	13	14	20	14	12
Pb	16	13	16	14	16	13	11	24	15	11
Rb	49	32	41	36	41	62	58	183	45	60
Sr	98	75	73	65	69	153	197	475	63	93
Sb	0	0	0	0	0	0	0	0	0	0
S	327	327	476	459	333	0	351	756	0	0
Th	7	5	6	8	3	8	8	9	6	8
V	77	70	77	70	76	84	80	89	109	85
Y	24	20	25	20	20	21	22	35	21	24
Zn	49	32	44	32	36	45	30	75	71	46
Zr	267	202	354	257	304	261	257	311	235	219

VAR. / ID.	AX-280	AX-281	AX-283	AX-284	AX-285	ZK-343	ZK-344	ZK-349	DTIA-2	DTIA-3
East	34779	34493	34605	34518	34477	30843	30826	30660	26260	26260
North	63791	64170	63970	64476	64351	59641	59703	60163	58030	58030
SiO2	69.35	71.03	66.97	66.02	66.38	68.22	61.22	68.90	66.53	68.30
Al2O3	13.76	13.21	13.66	13.90	13.71	13.08	17.83	13.92	13.48	11.58
TiO2	0.87	0.85	1.32	1.08	0.97	1.03	0.93	0.84	0.97	0.82
Fe2O3	5.44	4.98	6.56	6.30	6.05	5.96	6.62	5.70	6.26	6.15
MgO	3.80	3.23	4.60	3.89	3.78	3.27	3.82	4.06	5.80	4.52
CaO	0.82	1.40	1.03	0.41	1.03	1.01	0.59	0.85	0.87	2.11
Na2O	1.68	1.49	1.46	1.34	1.65	1.59	1.30	3.16	2.15	1.58
K2O	2.18	2.19	2.04	2.21	2.20	2.08	3.58	1.95	2.36	2.19
MnO	0.06	0.06	0.08	0.08	0.08	0.07	0.07	0.08	0.08	0.08
P2O5	0.16	0.16	0.17	0.16	0.16	0.18	0.15	0.22	0.19	0.17
Total	98.12	98.60	97.89	95.39	96.01	96.49	96.11	99.68	98.69	97.50
As	0	0	0	0	0	1	2	0	0	2
Ba	397	408	456	441	497	460	558	587	570	515
Co	47	45	36	36	33	35	31	41	39	33
Cr	102	104	221	125	113	130	113	187	330	399
Cu	22	9	9	10	9	9	13	15	18	18
Ga	13	13	13	14	15	13	19	13	12	12
La	45	34	43	44	44	38	39	37	32	36
Ni	48	52	79	69	56	45	61	64	104	84
Nb	16	15	17	17	15	16	16	11	14	13
Pb	15	14	12	15	15	12	14	17	16	13
Rb	70	68	61	68	67	63	113	51	66	62
Sr	69	62	61	57	74	69	68	168	137	116
Sb	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	606	1225
Th	7	9	9	11	11	5	8	5	5	7
V	82	79	108	98	94	90	101	89	106	103
Y	28	24	23	23	29	33	29	23	26	26
Zn	83	59	66	85	65	61	79	53	48	34
Zr	267	279	409	329	254	350	248	257	280	273

TABLE 4.59

VAR. / ID.	S-250	S-70109	S-70110	S-70111	S-70112	S-70115	S-70116	S-70118	S-70119	S-70120
East	24916	36389	36391	36393	36393	35990	36004	36037	35992	36004
North	57446	66236	66232	66221	66222	66801	66783	66743	66798	66782
SiO2	64.02	63.73	67.33	71.60	72.64	65.91	58.74	52.31	64.01	56.26
Al2O3	13.04	16.93	13.49	11.43	10.83	14.30	14.20	11.23	14.89	13.50
TiO2	0.69	1.04	0.88	0.66	0.58	1.03	1.22	0.55	1.03	1.35
Fe2O3	6.71	6.78	6.04	3.86	4.14	5.85	7.92	6.01	6.87	8.39
MgO	5.14	3.67	4.29	3.62	3.20	4.41	5.22	5.82	3.63	6.02
CaO	3.50	0.65	2.25	2.76	4.03	0.48	0.30	13.56	0.40	0.46
Na2O	2.05	1.62	2.52	2.26	2.58	2.01	2.47	0.11	2.81	2.66
K2O	1.86	3.67	2.07	1.84	1.75	2.20	2.23	1.28	2.09	1.83
MnO	0.10	0.04	0.05	0.05	0.06	0.08	0.17	0.16	0.08	0.12
P2O5	0.14	0.14	0.16	0.14	0.14	0.22	0.22	0.19	0.22	0.21
Total	97.25	98.27	99.08	98.22	99.95	96.49	92.69	91.22	96.03	90.80
As	3	0	0	2	5	0	0	38	2	0
Ba	347	574	323	386	341	638	954	201	655	757
Co	28	36	43	48	57	35	34	18	43	32
Cr	266	152	138	154	141	292	205	121	180	199
Cu	21	44	25	14	13	15	12	13	14	17
Ga	13	15	13	11	12	12	13	8	13	14
La	23	37	33	40	34	35	29	17	26	36
Ni	105	59	41	29	29	104	66	48	90	74
Nb	11	16	14	12	13	13	10	9	14	11
Pb	14	18	15	14	15	11	15	16	12	14
Rb	54	122	70	62	66	58	52	33	54	44
Sr	183	92	118	154	167	68	201	375	96	221
Sb	0	0	0	0	2	0	1	3	2	0
S	0	0	0	0	0	0	0	943	0	0
Th	5	10	6	7	11	6	7	6	6	2
V	105	124	92	73	73	113	141	61	109	157
Y	20	35	26	31	34	27	22	21	25	33
Zn	58	81	57	59	50	44	62	51	54	80
Zr	170	265	242	286	275	279	218	234	286	227

VAR. / ID.	S-70121	S-70122	S-70123	S-70124	S-70125	S-70126	S-70127	S-70128	S-70131	S-70132
East	36079	36036	36036	36080	36110	36128	36140	36231	36865	36861
North	66700	66745	66745	66699	66664	66643	66629	66522	65875	65879
SiO2	65.33	65.71	65.30	70.91	60.46	64.16	66.38	56.41	69.43	70.11
Al2O3	15.59	12.98	12.75	18.82	15.95	13.65	13.80	17.57	18.72	17.20
TiO2	1.02	0.70	0.69	0.95	1.10	0.96	0.96	1.02	1.01	0.88
Fe2O3	6.93	5.25	5.19	6.53	6.64	6.30	5.91	7.29	3.82	4.51
MgO	2.99	5.07	4.93	0.56	1.56	4.83	4.59	4.91	1.53	1.82
CaO	0.14	3.87	3.86	0.26	0.20	1.07	0.26	1.45	1.42	1.72
Na2O	1.46	1.80	1.83	0.00	2.06	2.28	2.16	2.02	0.07	0.72
K2O	2.38	1.40	1.40	2.99	2.52	2.16	2.11	4.66	2.36	2.65
MnO	0.07	0.09	0.09	0.18	0.05	0.08	0.06	0.05	0.51	0.08
P2O5	0.19	0.20	0.20	0.23	0.21	0.19	0.21	0.19	0.16	0.16
Total	96.10	97.07	96.24	101.43	90.75	95.68	96.44	95.57	99.03	99.85
As	6	0	0	51	3	0	0	19	4	0
Ba	545	251	242	635	657	740	736	944	374	360
Co	40	53	51	61	32	31	38	32	36	44
Cr	287	194	187	210	242	195	233	139	138	118
Cu	9	18	17	17	7	7	19	49	38	41
Ga	14	9	8	13	13	13	12	22	13	12
La	30	24	23	48	42	40	34	51	47	38
Ni	215	74	75	240	153	65	94	81	75	44
Nb	13	10	9	14	13	15	14	21	15	14
Pb	11	15	16	11	16	12	22	65	13	21
Rb	64	42	40	80	62	58	55	153	71	82
Sr	58	80	79	27	83	131	87	119	98	56
Sb	0	2	0	3	0	0	0	>	0	0
S	0	798	764	0	0	0	0	2684	0	0
Th	7	7	7	8	4	5	7	15	9	4
V	113	89	87	100	115	104	104	127	97	79
Y	38	23	23	73	26	29	34	32	28	26
Zn	40	97	94	24	28	47	67	214	30	27
Zr	291	171	175	353	286	272	283	238	309	274

VAR. / ID.	S-70133	S-70134	S-70135	S-70136	S-70137	S-70141	S-70152	AX604	AX840	AX841
East	36720	36715	36711	36708	36697	36619	36414	31413	30661	30569
North	65991	65995	66001	66003	66012	66056	66191	62010	61572	61674
SiO2	66.03	69.68	68.64	69.96	68.97	65.51	77.78	50.47	66.33	64.33
Al2O3	12.09	12.68	11.75	13.81	12.21	15.45	8.30	10.54	10.36	10.14
TiO2	0.76	1.05	0.64	0.99	0.87	0.92	0.56	2.11	1.03	1.06
Fe2O3	4.51	5.95	3.75	6.05	5.59	6.14	3.80	13.11	6.58	7.22
MgO	3.33	3.84	3.11	3.58	5.04	4.70	3.97	5.24	4.53	4.85
CaO	6.59	1.30	6.76	1.33	1.62	0.23	1.90	9.69	1.62	2.25
Na2O	1.51	1.97	1.37	2.14	2.13	2.05	1.13	3.04	1.78	1.69
K2O	2.10	1.29	1.88	1.65	2.45	2.42	1.35	0.78	2.42	2.32
MnO	0.08	0.10	0.07	0.07	0.05	0.06	0.07	0.33	0.09	0.09
P2O5	0.13	0.17	0.13	0.19	0.20	0.22	0.10	0.41	0.16	0.18
Total	97.13	98.03	98.10	99.77	99.13	97.70	98.96	95.72	94.90	94.13
As	3	0	2	0	1	0	3	0	2	1
Ba	279	273	440	331	680	713	266	185	495	530
Co	27	44	31	75	37	37	76	38	17	21
Cr	173	148	142	117	236	174	152	93	261	327
Cu	9	10	10	9	15	10	7	43	14	15
Ga	11	11	10	12	11	13	7	20	13	13
La	39	30	32	33	33	30	36	18	24	23
Ni	29	53	22	49	85	88	19	29	75	71
Nb	12	11	12	15	14	14	11	11	14	15
Pb	13	12	12	12	17	10	11	7	17	17
Rb	61	33	54	50	65	64	46	30	64	66
Sr	90	53	100	67	144	78	77	264	128	134
Sb	0	0	0	0	2	0	0	0	0	4
S	0	0	4	0	0	0	0	1208	305	932
Th	11	5	7	7	9	14	7	5	8	10
V	78	105	67	91	99	98	51	313	105	118
Y	29	25	26	37	26	30	29	38	27	29
Zn	47	57	50	81	44	42	28	97	49	66
Zr	386	250	325	261	284	244	373	149	349	366

VAR. / ID.	AX842	AX847	AX851	AK33	AK223	AK502	AK509	AK551	AK674
East	30720	30853	30710	34383	34335	33817	33952	33800	33973
North	61565	61404	61483	64628	64793	64645	64788	64588	64218
SiO2	66.71	67.92	63.44	69.33	66.15	65.22	64.26	67.66	61.67
Al2O3	9.82	9.66	10.24	10.65	11.02	10.34	11.13	9.82	14.28
TiO2	0.78	0.76	0.83	1.07	1.00	0.96	0.99	0.91	0.90
Fe2O3	5.48	5.72	5.66	6.46	6.40	6.61	6.76	6.35	7.32
MgO	4.41	4.23	4.29	3.14	5.93	4.55	4.44	4.51	2.95
CaO	3.44	2.88	4.18	0.72	0.95	1.96	1.56	2.16	1.89
Na2O	1.86	1.66	2.13	1.56	1.96	1.80	2.10	2.35	2.88
K2O	2.33	2.44	2.63	2.11	2.87	2.18	2.48	2.24	3.02
MnO	0.09	0.09	0.09	0.09	0.07	0.09	0.08	0.09	0.16
P2O5	0.16	0.17	0.19	0.20	0.20	0.19	0.18	0.19	0.19
Total	95.08	95.53	93.68	95.33	96.55	93.90	93.98	96.28	95.26
As	1	2	2	3	8	2	2	4	4
Ba	448	453	589	467	861	705	1107	723	1342
Co	13	14	14	20	20	20	17	13	16
Cr	192	230	142	157	168	277	195	234	88
Cu	14	15	15	14	23	15	15	17	18
Ga	14	12	13	12	11	11	13	13	16
La	24	24	29	34	35	31	33	32	39
Ni	71	86	58	56	78	76	72	75	47
Nb	14	14	16	16	14	15	13	14	16
Pb	10	14	16	14	58	15	17	16	21
Rb	61	64	71	54	69	57	64	53	74
Sr	126	131	251	67	135	126	161	235	396
Sb	0	1	0	0	0	0	3	0	0
S	284	253	410	0	0	234	75	161	106
Th	7	12	9	8	9	12	10	10	9
V	84	76	92	91	91	112	108	97	92
Y	25	26	30	30	29	27	27	27	30
Zn	34	42	70	54	49	48	52	50	69
Zr	253	269	276	273	255	313	306	298	239

VAR. / ID.	AX-271	AX-282	AK4	AK13	AK17	AK20	AK25	AK30	AK52	AK58
East	34441	34579	34441	34368	34380	34398	34323	34461	34677	34782
North	64616	64082	64615	63941	63927	63948	63871	64382	63730	63795
SiO2	70.32	68.22	69.29	69.00	73.52	69.27	68.36	68.27	68.26	69.90
Al2O3	11.74	12.20	9.17	11.40	9.83	10.28	10.18	12.42	9.80	11.39
TiO2	1.21	0.91	1.13	1.00	0.79	0.98	1.02	1.01	1.06	0.93
Fe2O3	5.98	5.56	6.30	6.31	5.06	6.09	6.06	6.22	6.23	5.95
MgO	4.26	3.35	3.87	3.90	2.95	3.68	3.67	4.33	3.48	3.37
CaO	1.39	2.12	1.73	0.81	0.97	2.23	1.32	0.54	1.38	1.17
Na2O	1.93	1.63	1.52	1.66	1.61	1.57	1.36	1.24	1.34	1.59
K2O	1.35	2.14	1.43	1.52	1.94	1.99	1.99	2.36	2.05	2.22
MnO	0.09	0.08	0.10	0.08	0.08	0.11	0.10	0.08	0.10	0.08
P2O5	0.17	0.16	0.14	0.15	0.13	0.15	0.15	0.15	0.15	0.15
Total	98.44	96.37	94.68	95.83	96.88	96.35	94.21	96.62	93.85	96.75
As	0	0	3	2	2	2	4	0	0	0
Ba	356	424	356	302	405	396	385	425	371	376
Co	49	41	17	17	12	15	15	11	13	14
Cr	160	148	186	134	107	157	165	139	148	124
Cu	12	19	19	11	6	6	10	23	8	6
Ga	12	13	9	12	11	13	12	13	12	12
La	26	43	19	27	34	46	24	34	26	25
Ni	58	63	62	51	45	53	54	69	53	47
Nb	14	17	13	16	14	16	14	16	14	16
Pb	13	19	10	10	9	11	9	14	13	12
Rb	36	70	36	40	54	54	54	64	55	62
Sr	92	80	100	53	59	67	58	50	63	64
Sb	0	0	0	0	0	0	2	0	2	0
S	0	0	0	0	0	0	0	0	0	0
Th	5	8	4	5	3	9	6	6	9	7
V	112	87	112	91	68	79	86	82	88	71
Y	23	31	23	29	28	39	24	35	26	26
Zn	71	63	60	65	71	68	69	61	72	77
Zr	284	334	236	297	208	338	300	290	310	295

TABLE 4.60

VAR. / ID.	AK63
East	34491
North	63516
SiO2	65.43
Al2O3	10.72
TiO2	1.55
Fe2O3	7.36
MgO	3.52
CaO	3.79
Na2O	1.29
K2O	1.82
MnO	0.13
P2O5	0.18
Total	95.79
As	5
Ba	318
Co	15
Cr	271
Cu	12
Ga	13
La	33
Ni	51
Nb	18
Pb	11
Rb	49
Sr	82
Sb	0
S	0
Th	7
V	133
Y	39
Zn	74
Zr	542

TABLE 4.60

VAR. / ID.	AX-114	AX-115	AX-116	AX-121
East	23920	23811	23920	23638
North	57569	57591	57664	57469
SiO2	72.15	73.35	72.01	70.28
Al2O3	13.96	12.45	12.37	15.06
TiO2	0.85	0.84	1.00	0.91
Fe2O3	5.46	4.98	5.48	4.71
MgO	2.24	2.12	2.42	1.80
CaO	0.76	0.82	1.40	1.30
Na2O	1.98	1.85	2.03	2.52
K2O	1.70	1.72	1.46	1.90
MnO	0.05	0.06	0.08	0.06
P2O5	0.19	0.16	0.18	0.22
Total	99.34	98.35	98.43	98.76
As	6	2	0	15
Ba	404	404	358	393
Co	46	51	48	42
Cr	80	77	93	70
Cu	16	13	14	14
Ga	12	11	13	11
La	32	31	35	34
Ni	27	24	27	22
Nb	16	15	17	17
Pb	14	13	15	9
Rb	46	45	39	48
Sr	75	65	70	81
Sb	0	0	0	0
S	1117	603	687	1364
Th	5	2	4	6
V	80	75	86	78
Y	21	21	22	22
Zn	48	38	48	41
Zr	265	253	342	288

XRF Analyses: Epidotitic Formation (GWKE17)

Part 1

VAR. / ID.	S-70113	S-70114	S-70138	S-70139	S-70140	S-70142	S-70143	S-70148	S-70149	S-70150
East	36452	36452	36640	36639	36634	36610	36605	36474	36472	36461
North	66164	66164	66046	66046	66049	66060	66062	66143	66144	66157
SiO2	69.84	70.79	69.88	68.96	69.18	71.81	70.69	68.78	69.67	71.67
Al2O3	11.81	12.24	12.54	12.92	13.31	12.48	12.82	12.57	13.45	11.80
TiO2	1.12	1.07	1.02	1.26	1.22	1.02	1.16	1.26	1.22	1.04
Fe2O3	6.39	6.66	6.04	6.20	6.37	5.48	5.74	6.47	6.16	5.92
MgO	3.30	3.51	3.96	4.00	4.07	3.28	3.42	4.07	3.71	3.36
CaO	1.19	1.65	1.41	1.36	1.16	1.15	1.11	1.59	1.06	1.37
Na2O	1.95	1.95	2.10	2.23	2.43	1.97	1.74	1.93	2.16	2.33
K2O	1.61	0.96	1.43	1.44	1.44	1.46	1.69	1.40	1.68	1.08
MnO	0.07	0.17	0.09	0.10	0.10	0.09	0.10	0.09	0.08	0.08
P2O5	0.19	0.18	0.19	0.20	0.19	0.18	0.20	0.20	0.19	0.18
Total	97.47	99.18	98.66	98.67	99.47	98.92	98.67	98.36	99.38	98.83
As	0	0	0	0	0	0	2	0	0	0
Ba	477	275	383	367	390	394	410	374	417	383
Co	52	39	39	39	48	47	38	50	51	58
Cr	151	204	143	148	145	137	155	174	153	130
Cu	84	10	12	50	15	8	6	64	13	10
Ga	10	12	11	12	12	12	13	11	12	11
La	28	47	37	60	34	51	40	81	22	29
Ni	51	64	55	57	60	63	50	61	57	57
Nb	14	14	13	16	14	14	14	14	16	15
Pb	15	14	14	16	16	14	10	10	14	14
Rb	45	29	39	40	40	43	45	38	48	33
Sr	109	115	100	105	106	93	83	129	112	125
Sb	0	0	0	0	0	0	0	0	1	0
S	0	0	0	0	0	0	0	0	0	0
Th	8	1	4	6	5	5	7	6	9	5
V	115	121	104	113	118	99	98	129	114	105
Y	25	36	29	45	29	57	33	70	26	29
Zn	60	49	58	61	62	56	56	61	54	63
Zr	329	239	278	311	271	311	376	327	299	284

TABLE 4.62

VAR. / ID.	S-70151	S-70154
East	36453	36619
North	66163	66056
SiO2	68.91	75.10
Al2O3	13.14	10.74
TiO2	1.07	0.77
Fe2O3	6.09	4.89
MgO	3.52	2.55
CaO	1.54	1.22
Na2O	2.03	1.97
K2O	1.86	0.81
MnO	0.07	0.08
P2O5	0.22	0.12
Total	98.45	98.25
As	0	0
Ba	464	248
Co	50	55
Cr	119	129
Cu	11	6
Ga	12	9
La	31	34
Ni	47	55
Nb	15	11
Pb	14	11
Rb	50	24
Sr	118	98
Sb	0	0
S	0	0
Th	6	5
V	108	95
Y	30	28
Zn	55	40
Zr	282	141