

TABLE V.
ANALYSIS OF SOILS arranged with regard to their approximate Composition.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	Composition of part soluble in Acid.						Composition of Alkali.		General Character of part, Sand and Gravel.						
No.	Laboratory Number.	Name of Sender.	Character of Soil.	Character of Subsoil.	Locality of Soil.	Water after Air-Drying.	Organic Matter in Water.	Salts soluble in Water.	Salts soluble in Acid alone.	Clay.	Fine Sand.	Coarse Sand.	Gravel.	Principal Constituents of a part soluble in Water.	Silica.	Iron Oxide, &c.	Alumina.	Lime.	Magnesia.	Phosphoric Acid.	Alkalies.	Potash.	Soda.							
1	127	Colonel Haultain	Clayey	Clay	St. John's College, Auckland	4.018	8.473	.027	.022	8.680	50.500	25.080	3.200	3.200	Principally sulphate of lime	.404	3.506	2.900	.540	.510	.320	.500	...	...	Quartz and mica.					
2	119	Major Cargill	Loam	Very stiff clay	Green Island, Otago	8.010	8.894	.006	.035	7.065	37.580	30.600	7.600	7.600	Chloride of sodium and potassium	.710	3.310	2.120	.491	.042	.140	.578	.224	.354	Basalt.					
3	103	Mr. Whitaker	Sandy loam	Clay	North Shore, Auckland	7.660	8.760	.015	.015	4.650	25.820	30.580	10.200	12.300	Sulphate of soda and lime	.060	2.650	1.770	.080	.040	.020	.080	Principally soda.	...	...	Basaltic quartz sand with a little augite and olivine.				
4	126	Hon. H. J. Miller	Ditto	Ditto	Oamaru, Otago	6.000	8.777	.008	.015	9.900	24.100	40.000	11.200	11.200	Principally alkaline and calc. chlorides	.500	4.600	1.800	1.400	.406	.294	.900	Principally soda.	...	...	Feriferous volcanic rock quartz.				
5	132 (1)	Mr. T. W. Parker	Ditto	Stiff loam	Ditto	3.800	5.491	.009	.023	2.702	19.150	49.725	29.100	29.100	Ditto	.446	.520	.970	.207	.219	.470	.306	.127	.179	Ditto, with quartz, felspar, shell.					
6	204 (5)	Lieut.-Col. Moule	Ditto	White porous clay	Waikato	3.910	6.955	.005	.009	5.060	18.000	49.010	17.050	17.050	Sulphates	.440	.190	3.300	.240	.180	.271	.409	...	...	...	Feriferous volcanic rock, quartzose, felspar, shell.				
7	132 (2)	Mr. T. W. Parker	Ditto	Stiff loam	Oamaru, Otago	3.860	9.063	.031	.010	6.200	17.640	42.790	20.400	20.400	Alkaline and calc. chlorides and sulphates	.600	2.020	2.040	.410	.310	.109	.711	...	...	...	Ditto, with quartz and augite.				
8	129	Mr. C. W. Smith	Ditto	Porous clay	West Rangitikei, Wellington	6.050	10.883	.017	.016	5.572	17.150	23.312	23.200	13.800	Ditto	.594	2.731	1.350	.105	.106	.255	.381	.187	.194	...	With quartz and augite.				
9	204 (9)	Captain Clare	Ditto	Sandy gravel	Waikato	6.520	13.082	.009	.008	11.920	16.200	28.160	24.100	...	Alkaline sulphates	.710	4.120	5.580	.330	.490	.214	.476	...	...	...	...	Quartzose.			
10	128	Mr. C. W. Smith	Ditto	Porous clay	West Rangitikei, Wellington	4.387	7.086	.014	.010	5.623	16.000	50.250	16.610	...	Lime and soda salts	.463	1.970	.574	.321	.686	.261	1.348	.518	.830	...	...	...	...	Quartz, olivine, and augite.	
11	204 (1)	Capt. Macpherson	Ditto	Loamy	Waikato	6.520	12.923	.006	.006	13.883	15.000	11.000	41.260	...	Alkaline sulphates	.501	5.789	5.400	.170	.190	.331	.149	...	...	...	...	...	...	Very quartzose with augite.	
12	204 (10)	Captain Clare	Ditto	Sandy clay	Ditto	9.850	11.950	.022	.006	8.310	14.800	30.850	24.500	...	Ditto	.260	1.440	5.488	.310	.230	.182	.400	.251	.149	...	...	...	...	Ditto.	
13	146	Mr. C. Parkinson	Ditto	Stiff clay	Turakina, Wellington	3.800	7.596	.005	.009	1.860	14.500	28.000	30.230	14.000	Principally chlorides	.250	...	.929	.380	.029	.84	.306	...	...	...	...	...	...	Quartz, olivine, and augite.	
14	204 (2)	Capt. Macpherson	Ditto	White strong loam	Waikato	4.130	6.518	.002	.008	6.221	12.800	70.320	...	...	Alkaline sulphates	.570	2.559	.970	.220	.260	.241	1.400	...	...	...	...	...	...	...	Very quartzose with augite.
15	204 (3)	Capt. Macpherson	Ditto	Sandy gravel	Ditto	7.600	9.778	.001	.006	9.753	11.000	5.000	56.860	...	Principally chlorides	.940	...	6.848	.280	.210	.262	1.210	...	...	...	...	...	...	...	Ditto.
16	204 (4)	Lieut.-Col. Moule	Ditto	Sandy	Ditto	5.000	6.374	.005	.006	13.483	9.900	36.700	28.560	...	Alkaline sulphates	1.600	5.711	3.330	.470	.310	.429	1.600	...	...	...	...	...	...	...	Ditto.
17	204 (8)	Captain Clare	Ditto	Sandy gravel	Ditto	13.060	18.468	.001	.008	12.700	5.660	20.400	...	...	Ditto	.310	2.846	6.210	.460	.180	.264	2.430	...	...	...	...	...	...	...	Ditto.
18	134	Mr. J. Kelly	Ditto	Rotten rock	New Plymouth	9.117	13.739	.011	.023	12.100	9.800	65.200	...	...	Alkaline calc. chlorides	1.360	3.210	5.060	.990	.690	.170	.630	.209	.421	...	...	...	...	...	Angitic (volc. rock?)
19	204 (13)	Captain Speedy	Ditto	Sandy loam	Waikato	17.820	24.114	.011	.002	7.790	5.100	21.062	24.100	...	Alkaline sulphates	1.090	3.799	2.070	.150	.210	.211	.260	...	...	...	...	...	...	...	Basaltic rock, augite, and olivine.
20	138 (2)	Mr. R. Parris	Ditto	Rotten rock	Waikato, New Plymouth	8.100	18.490	.010	.013	9.217	4.500	53.340	6.290	...	Alkaline and mag. sesian chlorides	1.010	4.215	2.492	.687	.244	.182	.387	.188	.249	...	...	...	...	...	Volcanic rock, augite, and olivine.
21	138 (3)	Mr. R. Parris	Ditto	Rotten rock	Urenui	10.520	13.828	.008	.014	12.790	4.240	58.600	...	...	Lime and soda sulphates	1.400	7.011	3.060	.420	.460	.299	.140	...	...	...	...	...	...	...	Decomposing trachyte.
22	204 (7)	Captain Clare	Ditto	Sandy soil.	Waikato	14.130	14.333	.006	.014	13.236	3.100	38.180	17.000	...	Alkaline sulphates	.750	3.100	7.110	.360	.370	.336	1.210	...	...	...	...	...	...	...	Volcanic rock, augite, and olivine.
23	92	Mr. H. Richmond	Sandy peat	Rubble	Taranaki	6.890	20.498	.009	.013	10.080	...	58.510	...	4.000	Chlorides of sodium and calcium	1.100	5.490	2.580	.500	.180	.040	.190	.069	.121	...	...	...	...	...	Decomposing trachyte.
24	138 (4)	Mr. R. Parris	Ditto	Rotten rock	Pukearua, Taranaki	7.890	20.081	.009	.020	9.210	...	62.790	...	...	Lime and soda sulphates	1.060	4.340	2.320	.686	.242	.182	.380	...	...	...	...	...	...	...	Volcanic rock, augite, and olivine.
25	204 (14)	Captain Jackson	Ditto	Sandy loam	Waikato	12.390	17.167	.011	.002	7.170	...	34.860	28.400	...	Alkaline sulphates	.440	2.840	2.570	.450	.330	.163	.377	...	...	...	...	...	...	...	Volcanic rock, augite, and olivine.
26	204 (11)	Captain Speedy	Ditto	Ditto	Ditto	12.050	16.004	.001	.004	5.550	...	23.890	42.500	...	Ditto	.406	3.006	1.500	.410	.150	.134	.404	...	...	...	...	...	...	...	Quartz and felspar sand.
27	108 (3)	Colonel Haultain	Ditto	Sand	Auckland	7.580	12.450	.010	.030	15.050	...	40.780	8.300	15.800	Alkaline chlorides and sulphates of lime	1.410	4.950	7.160	.300	.450	.160	.570	...	...	...	...	...	...	...	Volcanic rock, augite, and olivine.
28	138 (1)	Mr. R. Parris	Sandy soil	Rotten rock	Oatka, New Plymouth	9.250	11.797	.003	.017	7.360	...	33.773	43.800	...	Sulphates of soda and lime	.640	4.010	1.700	.230	.260	.130	.390	...	...	...	...	...	...	...	Volcanic rock, augite, and olivine.
29	108 (5)	Colonel Haultain	Ditto	Sand	Auckland	6.600	11.084	.016	.014	14.010	...	3.826	64.950	...	Alkaline chlorides and chlorides of calcium	1.240	7.420	4.040	.140	.390	.250	.530	...	...	...	...	...	...	...	Quartz and felspar sand.
30	204 (12)	Captain Speedy	Ditto	Fine rubble	Waikato	15.210	10.866	.001	.002	6.050	...	23.670	44.200	...	Alkaline sulphates	.430	2.889	1.450	.490	.290	.151	.350	...	...	...	...	...	...	...	Quartz and felspar sand.
31	204 (15)	Captain Fisdal	Ditto	Sandy loam	Ditto	17.300	10.855	.007	.008	8.310	...	33.410	30.020	...	Ditto	.760	4.600	1.470	.440	.150	.040	.490	...	...	...	...	...	...	...	Quartz and felspar sand.
32	108 (2)	Colonel Haultain	Ditto	Sand	Auckland	4.840	9.605	.005	.015	14.850	...	4.235	66.450	...	Prin. chlor. of potas. and sulphate of lime	1.250	8.206	4.165	.113	.322	.292	.502	...	...	...	...	...	...	...	Quartzose.
33	204 (6)	Lieut.-Col. Moule	Ditto	Very sandy	Waikato	2.170	4.386	.007	.006	4.990	...	...	88.490	...	Alkaline sulphates	.410	1.460	2.140	.180	.190	.165	.445	...	...	...	...	...	...	...	Quartzose.