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Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	SiO_2	Al_2O_3	MnO	FeO	P	S	Cu	K_2O	Na_2O	MgO	CaO	Pb	(in g)
NCS DC 11001	Magnetite	44.73	18.22	0.75	0.20	12.91	0.013	1.50				4.18	7.14		60
NCS DC 11013	Iron ore	34.07	48.27	0.74	0.093	20.15	0.054	0.118	0.0031	0.165	0.065	2.86	0.99	0.028	70
NCS DC 11017	Iron ore	63.33	5.56	1.13	0.086	1.76	0.011	0.003	0.0045	0.115	0.07	1.3	1.05	0.0006	70
NCS DC 11018	Iron ore	56.02	4.5	2.20	0.355	7.78	56.02	0.023	0.0044	0.038	0.057	2.87	9.89	0.0031	70

		Zn	TiO_2	As
NCS DC 11013	Iron ore	0.0045	0.043	0.0003
NCS DC 11017	Iron ore	0.0059		0.0006
NCS DC 11018	Iron ore	0.065		0.0014

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	SiO_2	Al_2O_3	CaO	MgO	P	S	FeO	Cu	C	Fe_2O_3	L.O.I	Pb	(in g)
NCS DC 11003a	Dolomite		0.098	0.083	31.49	21.06	0.0016	0.011				0.024	46.71		70
NCS DC 11004a	Iron ore	54.86	8.27	2.85	0.63	0.524	0.119	0.258	1.17	0.068	0.31			0.101	60
NCS DC 11005a	Iron ore	63.34	3.36	0.52	0.12	0.146	0.016	0.107	0.07#	0.034	0.119			0.035	60
NCS DC 11006a	Iron ore	54.74	8.53	1.48	1.02	0.657	0.036	0.439	3.9	0.102	0.227			0.182	60
NCS DC 11007a	Iron ore	52.24	10.2	6.84	0.561	0.606	0.346	0.094	4.21	0.015	0.549			0.034	60
NCS DC 11008a	Iron ore	57.54	7.08	2.14	1.25	0.75	0.073	0.442	8.42	0.095	0.204			0.192	60
NCS DC 11009a	Iron ore	61.96	4.92	0.914	0.375	0.364	0.027	0.212	15.13	0.063	0.128			0.042	60

		Zn	Na_2O	K_2O	MnO	As	TiO_2	BaO	Co	Ti	Sr
NCS DC 11003a	Dolomite		0.017	0.0030	0.061					0.0043	0.021
NCS DC 11004a	Iron ore	0.144	0.047	0.26	1.04	0.096	0.12	0.86*	0.0054		
NCS DC 11005a	Iron ore	0.026	0.02	0.07	0.84	0.0044	0.034	0.62*	0.0031		
NCS DC 11006a	Iron ore	0.3	0.048	0.214	1.31	0.215	0.154	1.08*	0.0086		
NCS DC 11007a	Iron ore	0.066	0.093	0.61	0.194	0.051	0.237	0.028*	0.0043		
NCS DC 11008a	Iron ore	0.362	0.042	0.24	0.623	0.291	0.199	0.42*	0.011		
NCS DC 11009a	Iron ore	0.054	0.024	0.093	0.947	0.011	0.447	0.71*	0.0061		

Number	Name	Chemical Composition(Percent)												Unit Size
		TMn	MnO_2	TFe	SiO_2	Al_2O_3	CaO	MgO	TiO_2	K_2O	Na_2O	Cr	FeO	Ni	(in g)
NCS DC 11019	Manganese ore	18.36	25.59	8.89	21.94	5.66	2.83	0.611	0.206	1.04	0.045	0.012		0.049	60
NCS DC 11020	Manganese ore	22.31	30.34	9.66	28.11	7.69	2.36	1.72	0.27	1.11	0.056	0.026		0.089	60
NCS DC 11021	Manganese ore	26.53	36.6	11.01	22.1	6.99	2.31	0.774	0.247	1.01	0.064	0.019		0.073	60
NCS DC 11022	Manganese ore	29.48	41.76	10.22	19.84	6.49	1.82	0.65	0.224	0.89	0.062	0.018		0.072	60
NCS DC 11023	Manganese ore	35.54	52.73	10.25	13.03	3.8	2.34	0.78	0.143	0.396	0.053	0.0053		0.023	60
NCS DC 11024	Sintered Ore			55.37	5.64	2.19	10.76	2.14		0.082	0.045		(8.20)		70
NCS DC 11025	Pellet Ore			61.37	6.59	1.35	1.04	0.80		0.111	0.105		(1.92)		70

		Cu	V	P	Pb	As	Zn	BaO	S	MnO	TiO_2
NCS DC 11019	Manganese ore	0.014	0.014	0.202	0.08	0.031	0.118	0.43	0.114		
NCS DC 11020	Manganese ore	0.021	0.02	0.171	0.12	0.034	0.1	0.54	0.109		
NCS DC 11021	Manganese ore	0.021	0.02	0.163	0.124	0.052	0.164	0.8	0.084		
NCS DC 11022	Manganese ore	0.018	0.02	0.15	0.107	0.062	0.143	1.04	0.082		
NCS DC 11023	Manganese ore	0.011	0.016	0.105	0.058	0.112	0.066	1.62	0.052		
NCS DC 11024	Sintered Ore			0.056			0.0062		0.017	0.36	0.125
NCS DC 11025	Pellet Ore			0.093			0.012		0.021	0.120	1.61

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	SiO_2	MnO	Al_2O_3	CaO	MgO	K_2O	Na_2O	TiO_2	P	Cu	As	S	(in g)
NCS DC11012a	Iron Ore	62.86	2.62	1.16	0.85	2.17	2.41	0.057	0.016	0.188	0.0019	0.0085	0.026	0.57	60
NCS DC11033	Limonite	51.13	10.43	0.222	3.73	0.085	0.11	0.21	0.013	0.229	0.067	0.219	0.074	0.67	60
NCS DC11034	Serpentine		40.07	0.122	0.97	2.37	39.52			0.096				0.024	35

		Zn	Bi	Sn	Pb	FeO	C	P_2O_5	Cr_2O_3	TFe(Fe_2O_3)	L.O.I
NCS DC11012a	Iron Ore	0.149	0.0012	0.113	0.0024	27.22					
NCS DC11033	Limonite	0.283	0.023	0.0023	0.116	(0.46)					
NCS DC11034	Serpentine						0.65	0.024	0.422	7.86	8.83

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Number	Name	(×10^{-2})											Unit Size
		TFe	SiO_2	Al_2O_3	CaO	MgO	P	S	K_2O	Na_2O	MnO	TiO_2	V_2O_5	(in g)
NCS DC11014a	Iron ore concentrate	66.67	6.08	0.32	0.097	0.046	0.017	0.0083	0.016	0.0077	0.27	0.491	0.25	70
NCS DC11015a	Iron ore concentrate	69.47	0.64	0.323	0.67	0.222	0.094	0.22	0.011	0.0068	0.28	0.51	0.26	70
NCS DC11016a	Iron ore concentrate	67.55	3.08	0.783	0.356	0.42	0.048	0.098	0.076	0.014	0.272	0.505	0.25	70
NCS DC11024a	Sintered ore	56.64	5.04	2.12	10.3	1.21	0.088	0.02	0.059	0.074	0.311	0.195		70
NCS DC11024b	Sintered ore	55.08	5.45	1.11	9.98	3.56	0.035	0.017	0.088	0.072	0.67	0.559	0.113	70
NCS DC11025a	Pellet ore	62.4	7.7	0.839	0.651	1.17	0.017	0.0023	0.075	0.094	0.199	0.191	0.028	70
NCS DC11025b	Pellet ore	65.53	3.01	0.61	0.545	2	0.014	0.011	0.087	0.221	0.046	0.088		70

		Zn	FeO
NCS DC11014a	Iron ore concentrate	0.027	26.3
NCS DC11015a	Iron ore concentrate	0.029	27.41
NCS DC11016a	Iron ore concentrate	0.028	26.57
NCS DC11024a	Sintered ore		8.16
NCS DC11024b	Sintered ore	0.049	10.19
NCS DC11025a	Pellet ore	0.013	(0.97)
NCS DC11025b	Pellet ore		(0.82)

Number	Name	(×10^{-2})											Unit Size
		TMn	MnO_2	TFe	SiO_2	Al_2O_3	CaO	MgO	TiO_2	K_2O	Na_2O	Cr	Ni	(in g)
NCS DC11026	Nickel ore			18.01	39.80	2.93	0.89	15.86	0.041	0.007	0.068	0.76	1.74	35
NCS DC11027	Mangnaese	48.93	72.89	5.07	6.16	3.20	0.10	0.12	0.15	1.32	0.19	0.0074	0.011	70
NCS DC11028	Mangnaese	42.44	62.66	7.76	9.08	5.56	0.17	0.11	0.23	1.76	0.25	0.011	0.0077	70
NCS DC11029	V Ti Magnetite			51.67	4.06	4.99	0.52	2.02	13.54	0.0081	0.023			70
NCS DC11030	V Ti Magnetite			49.12	5.52	5.1	1.16	2.3	12.8	0.023	0.073			70
NCS DC11031	V Ti Magnetite			46.74	8.19	5.49	1.18	2.6	12.24	0.021	0.057			70
NCS DC11032	Iron ore concentrate			70.69	0.293	0.32	0.066	0.045	0.535	0.012	0.01			70

		Cu	V	P	Pb	Co	Zn	BaO	S	MnO	V_2O_5	FeO
NCS DC11026	Nickel ore		0.010	(0.0021)		0.037	0.017		0.011	0.43		
NCS DC11027	Mangnaese	0.0067	0.041	0.089	0.0063	0.017	0.015	0.99	0.0084			
NCS DC11028	Mangnaese	0.0056	0.042	0.066	0.0072	0.014	0.013	0.32	0.0073			
NCS DC11029	V Ti Magnetite			0.046			0.045		0.259	0.238	0.59	27.3
NCS DC11030	V Ti Magnetite			0.179			0.044		0.382	0.24	0.553	26.44
NCS DC11031	V Ti Magnetite			0.101			0.041		0.21	0.226	0.539	24.39
NCS DC11032	Iron ore concentrate			0.012			0.03				0.258	27.98

Number	Name	(×10^{-2})											Unit Size
		P	S	Al_2O_3	CaO	Fe_2O_3	K_2O	MgO	Na_2O	SiO_2	TiO_2	MnO	L.O.I	(in g)
NCS DC11035	Limestone	0.025	0.029	1	49.13	0.55	0.299	2.76	0.014	4.39	0.043	0.055	41.5	50
NCS DC11036	Limestone	0.0044	0.012	0.55	33.92	0.41	0.178	16.76	0.013	3.14	0.028	0.05	44.7	50
NCS DC11037	Limestone	0.003	0.013	0.402	48.26	0.2	0.172	4.95	0.011	2.46	0.021	0.0096	43.28	50
NCS DC11038	Limestone	0.0034	0.014	0.33	52.83	0.197	0.137	1.64	0.012	1.66	0.016	0.0096	43.05	50
NCS DC11039	Limestone	0.0041	0.014	0.466	51.66	0.225	0.203	2.07	0.009	2.24	0.022	0.0087	42.82	50
NCS DC11040	Limestone	0.0068	0.048	0.29	51.12	0.33	0.16	3.26	0.013	1.06	0.015	0.012	43.58	50
NCS DC11041	Limestone	0.0024	0.022	0.24	52.75	0.124	0.099	2.1	0.009	1.36	0.013	0.0057	43.42	50
NCS DC11042	Limestone	0.0024	0.016	0.33	50.14	0.194	0.145	3.53	0.009	2.3	0.018	0.0098	43.17	50
NCS DC11043	Limestone	0.0059	0.036	0.363	46.26	0.36	0.167	7.03	0.013	1.67	0.017	0.022	43.99	50

Number	Name	(×10^{-2})											Unit Size
		Zn	TFe	SiO_2	Al_2O_3	MnO	FeO	P	S	TiO_2	K_2O	Na_2O	MgO	(in g)
NCS DC 13019c	Iron Concentrate	0.0030	68.96	3.98	0.174	0.049	28.98	0.010	0.0277	0.0174	0.0068	0.0060	0.268	50
NCS DC 13033	Iron Ore		35.36	48.50	0.11	0.125	5.18	0.022	0.0064	0.007			0.20	50
NCS DC 13034	Iron Ore		58.70	14.47	0.54	0.061	26.09	0.584	0.047	0.014			0.30	50

		CaO	Pb
NCS DC 13019c	Iron Concentrate	0.196	0.0052
NCS DC 13033	Iron Ore	0.13	
NCS DC 13034	Iron Ore	1.77	

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Number	Name	Chemical Composition(Percent)													Unit Size (in g)
		TFe	SiO_2	Al_2O_3	MnO	FeO	P	S	Cu	K_2O	Na_2O	MgO	CaO	Ni	
NCS DC 14001a	Iron Ore	64.88	3.48	1.59		(0.37)	0.055	0.015		0.085	0.012	0.044	0.080		50
NCS DC 14010a	Iron Ore	58.52	7.77	2.71		19.03	0.019	0.092	0.048	0.272	0.057	1.31	1.82		50
NCS DC 14013a	Iron Ore	55.56	8.10	1.98		22.60	0.029	1.84	0.40	0.33	0.075	2.13	3.33		50
NCS DC 14019a	Dolomite		0.021	0.017	0.032		0.0010	0.018		0.0010	0.023	20.37	32.11		50
NCS DC 14022a	Fluorspar	0.166	3.06				0.014	0.35		0.026	0.006				65
NCS DC 14043	Hematite	57.78	11.18	1.52			1.48	0.046	0.187	0.066	0.22	0.023	0.54	0.56	50
NCS DC14005C	Iron Ore	64.38	3.97	1.311	0.269	25.33	0.042	0.353	0.0005	0.134	0.018	1.33	1.052		50

		Chemical Composition(Percent)												
		Mn	Ti	L.O.I	Fe_2O_3	SrO	CaF_2	$CaCO_3$	Co	TiO_2	Pb	Zn	As	V_2O_5	Cr_2O_3
NCS DC 14001a	Iron Ore	0.056	0.044												
NCS DC 14010a	Iron Ore	0.63								0.121	0.008	0.134			
NCS DC 14013a	Iron Ore	0.31								0.103	0.009	0.062	0.035		
NCS DC 14019a	Dolomite			46.98	0.224										
NCS DC 14022a	Fluorspar						93.68	0.30							
NCS DC 14043	Hematite	0.104	0.070												
NCS DC14005C	Iron Ore									0.5	0.0005	0.03	0.0023	0.221	0.037

Number	Name	Chemical Composition(%)												Unit Size (in g)
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	V_2O_5	TiO_2	S	P	K_2O	Na_2O	
NCS DC 19008a	Coulsonite	18.54	13.92	28.36	11.11	10.71	11.79	0.268	0.158	7.56	0.285	0.108	0.189	0.735	100
NCS DC 52005a	Zinc Concentrate			2.21							29.52				30

		Co*	Cu*	Ni*	Cr*	As	Zn	Sb	Ag (g/t)	Cd	Pb	Cu	Fe		
NCS DC 19008a	Coulsonite	0.01	0.012	0.008	0.002										
NCS DC 52005a	Zinc Concentrate					0.22	51.03	0.029	124	0.31	1.97	0.23	7.17		

Number	Name		Unit Size (in g)
NCS DC11044	pH of soil	4.55	35
NCS DC11045	pH of soil	8.97	35
NCS DC11046	pH of soil	8.16	35
NCS DC11047	pH of soil	7.08	35

Number	Name														Unit Size (in g)
		Cu	As	Pb	Zn	MgO	Bi	Sb	F	Cd	S	Fe	Mn	SiO_2	
NCS DC 11048	Lead concentrate	0.225	0.44	58.98	5.61	0.16	0.0012	5.13	0.02	0.046	17.58	4.49	0.063	3.03	50

		K_2O	Na_2O	CaO	Al_2O_3	Sn	Ag	Co	Au*	Hg*	Se*	Ge*			
NCS DC 11048	Lead concentrate	0.074	0.01	0.148	0.35	0.027	0.76	0.0013	(0.08)	(8)	(25)	(3)			

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Number	Name	Chemical Composition(Percent)												Unit Size
		SiO_2	S	P	K_2O	Na_2O	TFe	Al_2O_3	FeO	TiO_2	MgO	CaO	Mn	Fe_2O_3	(in g)
NCS DC 14049	Iron Ore	4.62	0.020	0.037	0.33	0.027	63.86	2.04	0.25	0.12	0.056	0.082	0.17		65
NCS DC 14050	Limestone	7.97	0.039	0.0033	0.021	0.015		0.36			9.45	42.62		0.260	50

		MnO	L.O.I	Ti	Sr
NCS DC 14049	Iron Ore				
NCS DC 14050	Limestone	0.015	38.80	0.0096	0.017

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	P	TiO_2	S	K_2O	Na_2O	Cu	(in g)
NCS DC 14009a	Sintered Ore	55.58	20.06	9.95	2.38	3.62	5.99	0.097	0.017	0.266	0.106	0.316	0.068	0.017	50
NCS DC 14014b	Limestone			0.073	0.079	55.12	0.73	0.0058	0.0013		0.010	0.0030	0.0075		50
NCS DC 14015b	Limestone			2.06	0.74	51.41	2.31	0.013	0.0021		0.273	0.0062	0.0073		50
NCS DC 14017b	Limestone			0.85	0.61	54.11	0.79	0.0074	0.0017		0.182	0.0038	0.021		50
NCS DC 14018b	Dolomite			0.77	0.23	31.96	19.92	0.031	0.0023		0.010	0.030	0.033		50
NCS DC 14020b	Dolomite			4.21	0.92	35.73	15.28	0.022	0.0032		0.030	0.017	0.015		50
NCS DC 14028d	Magnetite Concentrate	64.37	20.96	2.95	1.10	1.17	1.30		0.013		0.371	0.036	0.017		100

		Zn	Fe_2O_3	L.O.I	Ti	Sr	Mn
NCS DC 14009a	Sintered Ore	0.011					
NCS DC 14014b	Limestone		0.341	43.53	0.0010	0.025	
NCS DC 14015b	Limestone		0.838	41.79	0.0071	0.023	
NCS DC 14017b	Limestone		0.319	42.79	0.0021	0.024	
NCS DC 14018b	Dolomite		0.269	46.24	0.011	0.0081	
NCS DC 14020b	Dolomite		0.533	42.69	0.025	0.026	
NCS DC 14028d	Magnetite Concentrate				0.294		0.147

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	P	S	Cu	Mn	Ti	K_2O	Na_2O	(in g)
NCS DC 14202	Sintering ore	52.77	6.55	7.51	2.54	11.33	2.02	0.060	0.033	0.012	0.199	0.062	0.078	0.033	50
NCS DC 14203	Sintering ore	57.63	10.80	5.38	1.37	8.17	1.65	0.102	0.025	0.0063	0.174	0.113	0.065	0.046	50
NCS DC 14204	Sintering ore	54.62	9.26	7.94	1.49	9.29	1.74	0.039	0.024	0.014	0.193	0.092	0.046	0.019	50
NCS DC 14205	Sintering ore	53.99	9.34	6.61	2.69	10.28	2.31	0.061	0.017	0.0087	0.190	0.099	0.078	0.037	50
NCS DC 14206	Sintering ore	51.13	9.22	8.58	2.44	9.46	4.40	0.066	0.059	0.007	0.179	0.094	0.080	0.040	50
NCS DC 14208	Iron Ore	65.56	26.01	6.09	0.28	0.11	0.11	0.0155	0.0045	0.001	0.135	0.283	0.009	0.006	50

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	S	P	MnO	TiO_2	V_2O_5	K_2O	Na_2O	(in g)
NCS DC14201a	Sintered Ore	50.71	10.363	5.03	1.907	10.899	3.366	0.11	0.161	0.669	0.112	0.024	0.114	0.0963	50
NCS DC14202a	Sintered Ore	53.364	9.133	5.646	2.119	8.606	2.783	0.0373	0.0727	0.549	0.133	0.0313	0.1071	0.0326	50
NCS DC14203a	Sintered Ore	54.58	18.76	5.85	1.269	8.578	1.98	0.0269	0.0383	0.415	0.109	0.0319	0.0919	0.0265	50
NCS DC14204a	Sintered Ore	54.21	10.606	4.53	0.93	9.604	2.965	0.0443	0.0852	0.716	0.0756	0.0229	0.102	0.0973	50
NCS DC14205a	Sintered Ore	50.967	7.832	5.504	1.351	11.065	2.577	0.0371	0.0616	0.495	0.11	0.0316	0.106	0.111	50
NCS DC14206a	Sintered Ore	57.61	23.435	3.637	1.039	7.464	1.929	0.0316	0.0956	0.505	0.09	0.0259	0.083	0.0683	50
NCS DC14208a	Iron Ore	66.53	26.34	6.062	0.31	0.097	0.039	0.008	0.015	0.279	0.5	0.231	0.015	0.007	50

		Cu	Pb	As	Zn	Cr_2O_3
NCS DC14201a	Sintered Ore	0.072	0.046	0.0136	1.519	0.02
NCS DC14202a	Sintered Ore	0.0581	0.034	0.011	1.155	0.0224
NCS DC14203a	Sintered Ore	0.038	0.0152	0.0084	0.4296	0.0245
NCS DC14204a	Sintered Ore	0.0716	0.0431	0.0124	1.651	0.0241
NCS DC14205a	Sintered Ore	0.0507	0.0282	0.0102	1.016	0.0198
NCS DC14206a	Sintered Ore	0.0436	0.0185	0.0073	0.645	0.0269
NCS DC14208a	Iron Ore	0.001				

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Number	Name	Chemical Composition(Percent)													Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	S	P	MnO	TiO_2	V_2O_5	K_2O	Na_2O	(in g)
NCS DC14217	Sintered Ore	50.53	9.867	4.84	1.12	10.811	4.03	0.0474	0.0826	0.667	0.0758	0.0225	0.106	0.0983	50
NCS DC14218	Sintered Ore	57.57	4.8	6.293	2.329	3.534	2.324	0.0261	0.0343	0.209	0.196	0.05	0.176	0.0911	50
NCS DC14219	Sintered Ore	54.63	9.305	5.03	1.284	8.322	2.845	0.0422	0.07	0.588	0.102	0.0319	0.122	0.0978	50

		Cu	Pb	As	Zn	Cr_2O_3
NCS DC14217	Sintered Ore	0.0698	0.0438	0.0137	1.483	0.0235
NCS DC14218	Sintered Ore	0.0272	0.0113	0.0036	0.117	0.0193
NCS DC14219	Sintered Ore	0.0647	0.0376	0.011	1.242	0.0231

Number	Name	Chemical Composition(Percent)									Unit Size
		SiO_2	Al_2O_3	Fe_2O_3	CaO	MgO	K_2O	Na_2O	TiO_2	P_2O_5	L.O.I	(in g)
NCS DC14220	Bauxite	26.56	63.53	1.97	0.98	1.93	0.35	0.21	2.59	0.26	1.39	50
NCS DC14221	Bauxite	10.07	83.61	1.71	0.45	0.18	0.2	0.036	3.27	0.22	0.098	50
NCS DC14222	Bauxite	6.01	87.5	1.61	0.58	0.12	0.087	0.15	3.14	0.13	0.61	50
NCS DC14223	Bauxite	6.97	88.34	1.24	0.29	0.4	0.078	0.28	1.57	0.11	0.66	50
NCS DC14224	Corundum	0.68	96	0.21	0.31	0.28	0.048	0.014	2.28	0.024	(0.04)	50
NCS DC14225	Corundum	0.061	99.04	0.043	0.029	0.012	0.002	0.45	0.024	0.016	0.29	50
NCS DC14226	Corundum	0.061	99.02	0.04	0.028	0.013	0.003	0.43	0.02	0.013	0.34	50

Number	Name	Chemical Composition(%)													Unit Size
		Zn	Cu	Pb	As	MgO	Bi	Sb	F	Cd	S	Fe	Mn	SiO_2	(in g)
NCS DC11049	Zinc concentrate	41.72	0.13	0.74	1.8	0.418	0.00017	0.19	0.012	0.314	29.47	14.03	0.114	4.13	50
NCS DC11050	Zinc concentrate	44.05	1.216	0.088	0.74	0.059	0.019	0.009	0.054	0.242	31.37	15.77	0.069	0.81	50
NCS DC11051	Zinc ore	37.08	1.04	0.077	1.75	0.264	0.017	0.0097	0.43	0.203	27.43	15.33	0.067	8.02	50
NCS DC11052	Zinc ore	31.23	0.88	0.067	2.8	0.46	0.015	0.011	0.8	0.17	24.08	14.78	0.063	15.15	50
NCS DC11053	Zinc ore	25.87	0.73	0.06	3.69	0.62	0.015	0.012	1.15	0.144	21.47	14.72	0.062	21.04	50
NCS DC11054	Zinc ore	20.33	0.59	0.048	4.46	0.76	0.014	0.013	1.38	0.107	18.12	14.36	0.063	25.96	50
NCS DC11055	Zinc ore	10.38	0.32	0.032	6.18	1.06	0.012	0.014	1.92	0.059	12.55	13.78	0.054	36.84	50
NCS DC11056	Zinc ore	15.3	0.46	0.04	5.46	0.92	0.013	0.013	1.66	0.085	15.38	14	0.057	31.71	50
NCS DC11057	Zinc ore	0.31	0.047	0.013	7.91	1.38	0.0101	0.017	2.48	0.0019	6.8	12.99	0.047	48.03	50

		K_2O	Na_2O	CaO	Al_2O_3	Sn	Ag	Co	Au	Hg	Se	Ge
NCS DC11049	Zinc concentrate	0.037	0.009	0.69	0.24	0.026	0.021	0.0051	(0.000005)	0.003	(0.0003)	(0.00007)
NCS DC11050	Zinc concentrate	0.059	0.013	0.81	0.21	0.065	0.009	0.0009	0.000027	(0.00015)	(0.0004)	(0.00003)
NCS DC11051	Zinc ore	0.55	0.09	1.06	1.51	0.058	0.0076	0.0022	0.000027	0.00015	(0.0004)	(0.00005)
NCS DC11052	Zinc ore	0.97	0.163	1.35	2.66	0.052	0.0067	0.0032	0.000027	0.00013	(0.0004)	(0.00005)
NCS DC11053	Zinc ore	1.33	0.24	1.52	3.64	0.05	0.0058	0.0043	0.000026	0.00011	(0.0004)	(0.00006)
NCS DC11054	Zinc ore	1.68	0.29	1.76	4.56	0.044	0.0047	0.0052	0.000027	0.00009	(0.0003)	(0.00006)
NCS DC11055	Zinc ore	2.4	0.39	2.15	6.55	0.037	0.003	0.007	0.000024	0.00004	(0.0003)	(0.00007)
NCS DC11056	Zinc ore	2.07	0.35	1.93	5.57	0.041	0.0039	0.0062	0.000025	0.00007	(0.0003)	(0.00007)
NCS DC11057	Zinc ore	3.07	0.52	2.55	8.52	0.025	0.0012	0.0089	0.000024	0.000011	(0.0002)	(0.00007)

Number	Name	Chemical Composition(%)													Unit Size
		Cu	As	Pb	Zn	MgO	Bi	Sb	F	Cd	S	Fe	Mn	SiO_2	(in g)
NCS DC11058	Copper Concentrate	26.96	0.71	1.53	5.77	0.031	0.072	0.12	0.05	0.033	33.29	27.72	0.0099	0.55	50
NCS DC11059	Copper Concentrate	23.92	1.56	1.35	5.05	0.187	0.072	0.108	0.36	0.029	30.09	25.84	0.0137	6.28	50
NCS DC11060	Copper Concentrate	20.67	2.36	1.21	4.4	0.327	0.056	0.096	0.63	0.025	26.54	23.82	0.0179	11.27	50
NCS DC11061	Copper Ore	18.63	2.79	1.04	3.89	0.427	0.049	0.084	0.8	0.023	24.23	22.65	0.021	14.6	50
NCS DC11062	Copper Ore	14.37	3.89	0.83	3.17	0.64	0.041	0.07	1.17	0.018	20.73	20.63	0.027	22.03	50
NCS DC11063	Copper Ore	12.16	4.43	0.7	2.73	0.73	0.037	0.061	1.36	0.016	18.3	19.23	0.029	25.58	50
NCS DC11064	Copper Ore	9.59	5.55	0.57	2.24	0.88	0.03	0.049	1.57	0.014	16.44	18.65	0.035	30.35	50

		K_2O	Na_2O	CaO	Al_2O_3	Sn	Ag	Co	Au	Hg	Se	Ge
NCS DC11058	Copper Concentrate	0.045	0.011	0.073	0.17	1.02	0.144	0.0006	0.000065	(0.00006)	0.0014	(0.0001)
NCS DC11059	Copper Concentrate	0.42	0.068	0.37	1.12	0.9	0.126	0.00162	0.000061	(0.00004)	0.0012	(0.0001)
NCS DC11060	Copper Concentrate	0.76	0.13	0.63	2.06	0.78	0.111	0.0024	0.000058	(0.00004)	0.0012	(0.0001)
NCS DC11061	Copper Ore	0.95	0.16	0.81	2.61	0.69	0.095	0.003	0.000051	0.000032	0.0011	(0.00008)
NCS DC11062	Copper Ore	1.43	0.24	1.2	3.9	0.56	0.076	0.0042	0.000049	-0.00003	0.0010	(0.00008)
NCS DC11063	Copper Ore	1.62	0.27	1.36	4.43	0.47	0.064	0.005	0.000043	-0.00003	(0.0007)	(0.00009)
NCS DC11064	Copper Ore	1.97	0.34	1.66	5.4	0.37	0.051	0.0063	0.000042	-0.00004	(0.0007)	(0.00010)

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Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	SiO_2	Al_2O_3	CaO	MgO	P	S	K_2O	Na_2O	TMn	TiO_2	MnO_2	As	(in g)
NCS DC 14209	Manganese Ore	8.83	21.83	5.57	12.70	0.60	0.199	0.115	1.04	0.046	18.26	0.20	25.41	0.031	50
NCS DC 14210	Manganese Ore	9.66	28.05	7.47	2.46	1.67	0.171	0.100	1.11	0.061	22.09	0.26	30.28	0.034	50
NCS DC 14211	Manganese Ore	10.96	21.85	6.91	2.30	0.74	0.163	0.084	0.99	0.059	26.25	0.24	36.87	0.051	50
NCS DC 14212	Manganese Ore	10.16	19.80	6.48	1.87	0.65	0.149	0.079	0.86	0.058	29.40	0.22	42.13	0.059	50
NCS DC 14213	Manganese Ore	10.28	13.04	3.77	2.47	0.75	0.104	0.053	0.40	0.056	35.71	0.14	53.06	0.107	50

Number	Name	Chemical Composition(Percent)											Unit Size
		SiO_2	Al_2O_3	Fe_2O_3	CaO	MgO	P_2O_5	MnO	K_2O*	Na_2O	TiO_2	L.O.I	(in g)
NCS DC 14214	Magnesia	0.595	0.507	0.53	1.24	96.75	0.058	0.052	0.005	0.025	0.019	0.19	50
NCS DC 14215	Magnesia	2.09	0.26	0.819	1.63	94.1	0.125	0.052	0.005	0.009	0.018	0.89	50
NCS DC 14216	Magnesia	6.55	0.714	0.799	2.42	87.26	0.037	0.051	0.009	0.034	0.027	2.07	50

Number	Name	Chemical Composition(Percent)										Unit Size
		TFe	SiO_2	Al_2O_3	MnO	P	S	Cu	TiO_2	MgO	CaO	(in g)
NCS DC 15001	Iron Ore	62.52	4.88	2.66	0.061	0.056	0.0152	0.0016	0.104	0.044	0.023	100
NCS DC 15002a	Iron Ore	55.81	13.00	1.93	0.026	0.011	0.469	0.134	0.083	0.36	1.10	50
NCS DC 15004	Zhao-Cheng Iron Ore	47.86	27.95	1.12	0.082	0.032	0.235	0.0023	0.068	0.96	1.72	100

		K_2O	Na_2O	FeO	As	Pb	Zn
NCS DC 15002a	Iron Ore	0.433	0.33	1.86	0.23	0.319	0.161
NCS DC 15004	Zhao-Cheng Iron Ore	0.062	0.043	21.99			

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	SiO_2	Al_2O_3	Mn	P	S	MgO	FeO	CaO	MnO	TMn	B_2O_3	Acid insoluble	(in g)
NCS DC 16002	Iron Concentrate	71.79	0.36	0.069	0.053	0.0022	0.055	0.038	28.69						100
NCS DC 16004	Manganese ore	3.65	10.76	1.21		0.314		1.11		15.95	44.24	30.16			60
NCS DC 16005	Iron ore	52.98	4.51			0.016	1.242	11.64	26.13	0.149			5.65	4.72	100
NCS DC 16006	Limestone		3.72	0.885		0.0054	0.101	4.55		65.20	0.013				15

		K_2O	Na_2O	Fe_2O_3	L.O.I
NCS DC 16006	Limestone	0.19	0.021	0.46	25.06

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	SiO_2	Al_2O_3	MnO	FeO	P	S	TiO_2	MgO	CaO	CaO	As	Zn	(in g)
NCS DC 18011	Iron Ore	61.80	4.52	3.05	0.170	0.30	0.076	0.022	0.134	0.102	0.051	9.25			100
NCS DC 18017	Sintering ore	48.44	8.40	2.98	0.81	11.17	0.065	0.155	0.23	2.32		15.52	0.030	0.13	100
NCS DC 18018	Sintering ore	54.90	5.81	2.34	0.29	7.87	0.064	0.036	0.50	2.41		10.36			100
NCS DC 18019	Sintering ore	54.03	6.11	2.57	0.70	7.98	0.073	0.027	0.24	2.71		10.50	0.021		100
NCS DC 18020	Sintering ore	41.81	10.21	3.23	1.80	21.87	0.159	0.302	0.50	4.85		18.30	0.051	0.223	100

		Pb
NCS DC 18015	Iron Ore	
NCS DC 18017	Sintering ore	0.061
NCS DC 18018	Sintering ore	
NCS DC 18019	Sintering ore	
NCS DC 18020	Sintering ore	0.208

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Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		TFe	SiO_2	Al_2O_3	MnO	P	TiO_2	MgO	CaO					
NCS DC 19013	Iron Ore	42.89	22.08	4.1	1.66	0.099	0.26	0.51	0.124					50

Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		SiO_2	Al_2O_3	CaO	MgO	V_2O_5	FeO	MnO	TFe	K_2O	Cr_2O_3	P	S	Zn	
NCS DC19008a	V-Ti Magnetite	28.36	11.11	10.71	11.79	0.158	13.92	0.268	18.54	0.189		0.108	0.285		100
NCS DC 19003b	V-Ti Iron Concentrate	1.4	3.36	0.055	1.34	0.78	26.53	0.43	59.51		0.042	0.0049	0.013	0.028	70
NCS DC 19003c	V-Ti-Iron Concentrate	2.96	3.33	0.326	3.14	0.708	33.43	0.434	56.68	0.012	0.033	0.0042	0.406		100
NCS DC 19016	V-Ti Pellet	6.43	3.07	1.08	1.88	0.51	1.01	0.199	55.23	0.123	0.34	0.037	0.0087	0.033	100
NCS DC 19017	Titanium concentrate	5.99	1.64	1.75	5.18	0.09	32.56	0.709	29.12		0.014	0.117	0.008		100
NCS DC 19018	Titanium concentrate	11.73	4.47	3.14	6.88	0.101	29.7	0.524	27.3		0.0085	0.558	0.028		100
NCS DC 19019	Titanium concentrate	0.578	0.53	0.028	0.32	0.137	25.05	1.55	34.56		0.054	0.0048	0.01		100
NCS DC 19020	V-Ti sintered Ore	5.50	3.28	9.94	3.05	0.481	7.76	0.426	49.42	0.166		0.028	0.026		100

		Co	Ni	TiO_2	Na_2O	Co*	Cu*	Ni*	Cr*
NCS DC19008a	V-Ti Magnetite			7.56	0.735	0.010	0.012	0.008	0.002
NCS DC 19003b	V-Ti Iron Concentrate	0.015	0.014	10.21					
NCS DC 19003c	V-Ti-Iron Concentrate		0.025	10.25	0.036				
NCS DC 19016	V-Ti Pellet	0.01	0.021	7.69	0.173				
NCS DC 19017	Titanium concentrate			45.71					
NCS DC 19018	Titanium concentrate			33.94					
NCS DC 19019	Titanium concentrate			49.78					
NCS DC 19020	V-Ti sintered Ore			7.12	0.061				

Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		TFe	SiO_2	Al_2O_3	MnO	P	S	TiO_2	MgO	CaO	L.O.I			
NCS DC 21001	Serpentinite	5.47	41.37	3.34	0.131	0.012	0.066	0.180	34.25	2.97	8.86			50

Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		TFe	SiO_2	Al_2O_3	P	S	MgO	CaO	Cr_2O_3	Ca	Al	Fe	Mn	Ti	
NCS DC 25002	Chromite	9.71	11.71	10.97	0.0072	0.0017	20.59	0.82	36.31						100
NCS DC 25007	Silicon used in Industry									0.34	0.24	0.39			50
NCS DC 25008	Manganese Ores		9.51	6.81	0.091		0.077	0.071				3.21	45.47	0.087	50

		B
NCS DC 25008	Manganese Ores	0.0018

Number	Name	Chemical Composition(Percent)													Unit Size (in g)
		TMn	TFe	SiO_2	P	CaO	MgO	Al_2O_3	MnO_2	Ti	Zn	Pb	Co	Cu	
NCS DC 26701	Manganese ore	44.95	10.50	5.41	0.033	7.53	1.05	0.37	(32.31)	0.010	0.013	0.013	0.008	0.009	50
NCS DC 26702	Manganese ore	48.53	4.93	5.56	0.080	0.37	0.25	3.28	(72.64)	0.102	0.016	0.012	0.014	0.005	50
NCS DC 26703	Manganese ore	58.80	1.45	5.63	0.009	0.37	0.17	0.74	(62.07)	0.025	0.219	0.018	0.0014	0.024	50
NCS DC 26704	Manganese ore	45.2	6.03	5.55	0.127	0.103	0.097	6.88	(67.71)	0.092	0.052	(0.007)	0.096	0.033	50
NCS DC 26705	Ilmenite concentrate		31.40	1.98	0.045	0.16	0.84	0.75							40
NCS DC 26706	Nickel Iron Ore		47.72	5.16	0.0027	0.13	2.34	4.65					0.14		25

		Ni	C	S	TiO_2	FeO	MnO	V_2O_5	Cr_2O_3	Mn	Cr
NCS DC 26701	Manganese ore	(0.002)	1.22	0.18							
NCS DC 26702	Manganese ore	0.012	0.085	0.017							
NCS DC 26703	Manganese ore	0.0024	0.034	0.003							
NCS DC 26704	Manganese ore	0.039	0.09	0.028							
NCS DC 26705	Ilmenite concentrate		0.043	0.004	51.35	23.81	0.90	0.22	(0.07)		
NCS DC 26706	Nickel Iron Ore	1.05	0.25	0.12						0.89	2.34

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Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	SiO_2	Al_2O_3	MnO	FeO	P	S	TiO_2	K_2O	Na_2O	MgO	CaO	As	(in g)
NCS DC 28002a	Iron ore	60.37	7.40	3.54	0.236	21.03	0.043	0.016	0.751	0.090	0.102	1.23	1.49	0.0012	50
NCS DC 28003a	Iron ore	62.65	4.20	0.39	0.113	24.53	0.011	0.114	0.117	0.040	0.013	4.73	0.71		50
NCS DC 28003b	Iron ore	63.07	3.38	0.64	1.08	23.93	0.016	0.024	0.224	0.025	0.016	4.82	0.71		50
NCS DC 28005a	Iron ore	66.18	2.90	0.54	0.103	27.01	0.0067	0.059	0.077	0.054	0.031	2.64	0.74		50
NCS DC 28005b	Iron ore	67.84	5.32	0.45	0.030	29.72	0.0025	0.106	0.097	0.055	0.018	0.202	0.155		50
NCS DC 28005c	Iron ore	68.38	2.25	0.58	0.086	28.80	0.0035	0.034	0.057	0.050	0.026	1.15	0.78		50

		Cu	Zn	Cr
NCS DC 28002a	Iron ore	0.0080	0.016	0.068
NCS DC 28003a	Iron ore	0.0071	0.0085	
NCS DC 28003b	Iron ore		0.055	
NCS DC 28005a	Iron ore	0.0050	0.0070	
NCS DC 28005b	Iron ore		0.0020	0.0075
NCS DC 28005c	Iron ore	0.0037	0.0055	

Number	Name	Chemical Composition(Percent)												Unit Size
		SiO_2	Al_2O_3	MnO	P	S	TiO_2	K_2O	Na_2O	MgO	CaO	Fe_2O_3	SrO	L.O.I	(in g)
NCS DC 28007a	Limestone	0.132	0.045	0.01	0.0014	0.025	0.0041	0.0076	0.0044	0.5	55.31	0.14	0.048	43.7	50
NCS DC 28008a	Limestone	1.07	0.36	0.0061	0.0032	0.004	0.022	0.125	0.006	8.96	44.42	0.3	0.023	44.32	50
NCS DC 28009b	Limestone	2.92	0.473	0.004	0.0029	0.034	0.022	0.28	0.008	4.42	48.69	0.195	0.02	42.85	50
NCS DC 28010a	Limestone	3.42	0.5	0.0047	0.003	0.018	0.022	0.308	0.008	8.08	44.02	0.24	0.018	43.16	50
NCS DC 28011a	Limestone	7.62	1.9	0.02	0.016	0.012	0.097	0.47	0.0083	4.51	44.3	1.01	0.012	39.86	50

Number	Name	Chemical Composition(Percent)												Unit Size
		SiO_2	CaO	MgO	Fe_2O_3	Al_2O_3	MnO	P	TiO_2	SrO	K_2O	Na_2O	S	L.O.I	(in g)
NCS DC 28013a	Dolomite	2.65	31.12	19.1	0.504	0.73	0.011	0.0034	0.034	0.0064	0.13	0.034	0.007	45.49	50
NCS DC 28014a	Dolomite	2.97	31.46	18.6	0.472	0.81	0.012	0.0061	0.041	0.0058	0.29	0.021	0.019	44.94	50
NCS DC 28015a	Dolomite	4.89	33.6	15.5	0.641	1.4	0.0085	0.011	0.074	0.006	0.35	0.019	0.013	43.24	50

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	P	TiO_2	S	K_2O	Na_2O	Cu	(in g)
NCS DC 28020a	Pellet Ore	63.07	(0.04)	5.22	1.47	1.34	0.96	0.303	0.028	0.258	0.0084	0.078	0.103	0.0089	50
NCS DC 28020b	Pellet Ore	61.81	(0.18)	6.88		1.3	1	0.31	0.032	0.251	0.0055	0.066	0.099	0.0089	50
NCS DC 28020c	Pellet Ore	60.46	0.33	6.12	0.76	0.75	5.15	0.13	0.013	0.154	0.029	0.081	0.036	0.01	50
NCS DC 28023a	Sintered Ore	53.1	7.49	6.49	2.76	11.78	2.69	0.74	0.059	0.144	0.042	0.079	0.049		50
NCS DC28023c	Sintered Ore	53.96	8.2	5.72	1.08	13.5	3.24		0.018	0.064	0.062	0.05	0.041	0.0062	50

		Zn	V	As	Pb	Cr	C	Co	Mn
NCS DC 28020a	Pellet Ore	0.012							
NCS DC 28020b	Pellet Ore	0.012	0.155						
NCS DC 28020c	Pellet Ore	0.012							
NCS DC 28023a	Sintered Ore								
NCS DC 28023c	Sintered Ore	0.0075	0.0058	0.0027	0.0008	0.0036	0.056	0.0033	0.073

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	P	TiO_2	S	K_2O	Na_2O	Cu	(in g)
NCS DC 28046a	Sintered Ore	55.49	7.93	4.85	1.84	11.66	2.83	0.289	0.045	0.109	0.04	0.045	0.034	0.0034	50

		Zn
NCS DC 28046a	Sintered Ore	0.0078

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Number	Name	Chemical Composition(Percent)													Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	Ni	Cr	Co	TiO_2	Mn	P	S	(in g)
NCS DC 28064	High Cr, Ni Iron ore	51.48	0.25	2.30	5.65	0.014	0.70	0.72	1.80	0.10	0.15	0.70	0.0045	0.17	50
NCS DC 28065	High Cr, Ni Iron ore	39.68	0.10	10.00	9.98	0.30	2.54	1.30	1.71	0.085	0.14	0.59	0.010	0.23	50
NCS DC 28067	High Cr, Ni Iron ore	51.36	0.26	3.11	4.16	0.022	1.05	0.94	2.00	0.098	0.091	0.80	0.0055	0.095	50
NCS DC 28068	High Cr, Ni Iron ore	16.83	0.10	34.93	2.06	0.16	21.32	1.74	0.81	0.064	0.043	0.40	0.0018	0.025	50
NCS DC 28069	High Cr, Ni Iron ore	34.18	0.11	18.28	2.39	0.12	12.12	1.50	1.48	0.13	0.030	0.78	0.0015	0.082	50
NCS DC 28070	High Cr, Ni Iron ore	19.43	10.20	28.78	7.10	20.02	11.58	1.07	0.81	0.055	0.24	0.50	0.024	0.35	50
NCS DC 28071	High Cr, Ni Iron ore	25.15	20.15	29.18	6.68	11.80	12.48	1.41	1.16	0.066	0.17	0.54	0.017	0.22	50

Number	Name	Chemical Composition(Percent)												Unit Size
		S	Ni	Ti	TFe	SiO_2	Al_2O_3	CaO	MgO	Cr	Cu	Mn	Co	Zn	(in g)
NCS DC 28072	Nickel ore	2.51	5.71	0.15	23.73	21.1	3.91	6.47	1.14	0.015	0.27	0.037	0.042	4.65	50
NCS DC 28073	Nickel ore	0.024	1.17	0.024	18.57	37.41	2.9	0.82	20.75	0.95	0.0049	0.327	0.042	0.019	50
NCS DC 28074	Nickel ore	0.288	0.892	0.145	46.99	2.52	10.29	0.033	0.51	1.84	0.012	0.149	0.014	0.023	50
NCS DC 28075	Nickel ore	0.014	1.7	0.039	14.92	38.77	2	0.385	21.05	0.8	0.0025	0.294	0.043	0.019	50
NCS DC 28076	Nickel ore	0.016	1.86	0.015	15.2	34.7	1.04	0.1	25.7	0.92	0.0017	0.282	0.065	0.021	50
NCS DC 28077	Nickel ore	0.016	1.97	0.017	14.84	36	1.03	0.14	25.49	0.823	0.0016	0.263	0.06	0.021	50
NCS DC 28078	Nickel ore	0.034	2.18	0.027	14.89	39.2	1.59	0.46	21.28	0.76	0.0058	0.254	0.055	0.079	50
NCS DC 28079	Nickel ore	1.41	3.98	0.098	20.74	27.48	3.55	4.54	8.67	0.364	0.169	0.147	0.041	2.85	50
NCS DC 28080	Nickel ore	0.18	1.3	0.092	34.55	15.48	6.53	0.07	10.54	1.38	0.0071	0.192	0.033	0.022	50

		Pb	P	Cd
NCS DC 28072	Nickel ore	0.04	1.61	0.047
NCS DC 28073	Nickel ore	0.0024	<0.007	<0.0015
NCS DC 28074	Nickel ore	0.0023	0.03	<0.0020
NCS DC 28075	Nickel ore	0.0013	0.0043	<0.0015
NCS DC 28076	Nickel ore	0.0016	<0.007	<0.0015
NCS DC 28077	Nickel ore	0.0015	0.0043	<0.0015
NCS DC 28078	Nickel ore	0.002	0.029	<0.0015
NCS DC 28079	Nickel ore	0.03	1.08	0.028
NCS DC 28080	Nickel ore	0.0019	0.02	<0.0025

Number	Name	Chemical Composition(Percent)													Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	P	TiO_2	S	K_2O	Na_2O	As	(in g)
NCS DC 28081	Iron ore	57.41	1.89	7.31	5.11	0.34	0.142	0.228	0.054	0.23	0.018	0.15	0.045	0.0014	50
NCS DC 28082	Iron ore	49.53	0.05	7.44	7.45	0.032	0.107	3.39	0.083	0.370	0.029				50
NCS DC 28082a	Iron ore	48.00	0.05	12.74	3.44	0.15	0.268	3.40	0.076	0.146	0.111				50
NCS DC 28082b	Iron ore	51.98	0.15	9.35	3.4	0.27	0.27		0.068	0.093	0.041	0.304	0.076	0.011	50
NCS DC 28083	Iron ore	50.98	8.92	9.40	5.03		1.05	0.306	0.963	0.125	0.112				50
NCS DC 28091	Iron ore	44.95	0.2	13.18	3.81	4.02	1.53		0.08	0.139	0.122	0.421	0.141	0.0095	50
NCS DC 28092	Iron ore	52.85	14.34	14.13	2.76	2.38	1.77		0.049	0.635	0.144	0.333	0.33	0.0033	50
NCS DC 28093	Iron ore	60.15	14.74	5.34	1.2	2.23	2.63		0.14	0.082	0.271	0.13	0.109	0.0028	50
NCS DC 28094	Iron ore	54.41	3.19	8.1	2.7	0.88	0.98		0.09	0.092	0.108	0.25	0.086	0.0089	50
NCS DC 28095	Iron ore	58.67	14.71	7.09	1.51	2.29	2.42		0.12	0.198	0.247	0.172	0.151	0.0031	50

		Cu	Zn	Cr	C	Pb	V	Co	Mn
NCS DC 28081	Iron ore	0.0038	0.0027	0.032					
NCS DC 28082	Iron ore				0.071				
NCS DC 28082a	Iron ore		0.49		0.072	0.283			
NCS DC 28082b	Iron ore	0.037	0.028	0.0036	0.203	0.02	0.0073	0.0041	1.12
NCS DC 28083	Iron ore				0.89				
NCS DC 28091	Iron ore	0.062	0.015	0.0056	1.05	0.0073	0.012	0.0052	1.54
NCS DC 28092	Iron ore	0.014	0.034	0.027	0.474	0.0056	0.087	0.0044	0.248
NCS DC 28093	Iron ore	0.01	0.0026	0.0013	0.46	0.0005	0.036	0.0073	0.047
NCS DC 28094	Iron ore	0.03	0.02	0.0029	0.278	0.014	0.015	0.0051	0.8
NCS DC 28095	Iron ore	0.011	0.0089	0.0072	0.457	0.0015	0.045	0.0067	0.085

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Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	FeO	SiO_2	CaO	MgO	Al_2O_3	Ti	Mn	P	S	K_2O	Na_2O	Cu	(in g)
NCS DC 28024	Iron Ore	61.53	0.24	3.43	0.118	0.109	2.12	0.052	0.276	0.068	0.038	0.026	0.034	0.0014	50
NCS DC 28025	Iron Ore	62.11	0.58	2.92	0.021	0.101	2.06	0.051	0.65	0.067	0.013	0.023	0.013	0.0018	50
NCS DC 28026	Iron Ore	62.27	0.59	4.2	0.144	0.156	2.39	0.055	0.17	0.078	0.02	0.023	0.024	0.0015	50
NCS DC 28027	Iron Ore	66.34	0.07	1.02	0.02	0.063	1.42	0.057	0.48	0.034	0.0071	0.013	0.0055	0.0085	50
NCS DC 28028	Iron Ore	66.47	0.58	1.79	0.028	0.091	1.36	0.046	0.137	0.055	0.0066	0.014	0.005	0.0014	50
NCS DC 28029	Iron Ore	72.01	28.63	0.158	0.025	0.042	0.095	0.028	0.043	0.0013	0.0028	0.0068	0.0008	0.0007	70
NCS DC 28030	Iron Ore	60.82	0.21	3.45	0.035	0.112	2.27	0.056	0.298	0.073	0.041	0.022	0.026		70
NCS DC 28031	Iron Ore	61.82	0.55	2.94	0.024	0.085	2.26	0.054	0.61	0.073	0.012	0.024	0.012		70
NCS DC 28032	Iron Ore	68.29	0.24	0.85	0.074	0.025	0.74	0.050	0.096	0.028	0.0028	0.0063	0.015		70
NCS DC 28034	Iron Ore	53.42	15.27	5.22	0.31	11.21	0.57	0.044	0.065	0.018	0.192	0.086	0.25		70
NCS DC 28035	Iron Ore	65.66	0.54	1.92	0.056	0.102	1.64	0.048	0.135	0.060	0.022	0.018	0.007		70
NCS DC 28036	Iron Ore	59.71	0.62	5.18	0.317	0.233	2.76	0.066	0.192	0.078	0.090	0.042	0.086		70
NCS DC 28037	Iron Ore	66.54	0.21	0.962	0.031	0.054	1.43	0.051	0.482	0.034	0.0071	0.012	0.015		70
NCS DC 28038	Iron Ore	55.19	6.23	6.79	9.19	2.22	1.83	0.123	0.222	0.057	0.028	0.070	0.057		70
NCS DC 28039	Iron Ore	72.02	28.78	0.14	0.026	0.043	0.095	0.029	0.043	0.0016	0.0030	0.0064	0.0008		70
NCS DC 28040	Iron Ore	58.04	3.11	5.06	4.41	1.17	2.04	0.084	0.269	0.063	0.038	0.048	0.039		70
NCS DC 28041	Manganese Ores	0.85		56.03	2.07	0.6	8.25			0.011	0.012	3.74	0.48		50
NCS DC 28042	Manganese Ores	10.62		24.73	6.2	3.14	2.8			0.074	0.044	0.83	0.049		50
NCS DC 28043	Manganese Ores	10.68		17.3	1.15	0.7	6.4			0.171	0.1	0.65	0.058		50
NCS DC 28044	Manganese Ores	6.9		17.7	3.3	1.29	2.08			0.105	0.021	0.49	0.076		50
NCS DC 28045	Manganese Ores	2.75		16	0.195	0.182	2.35			0.23	0.0086	1.48	0.034		50

		Co	As	Pb	Cr	Zn	B_2O_3	TMn	MnO_2	TiO_2	BaO	Ni	V
NCS DC 28024	Iron Ore	0.0009	0.0011	0.0008	0.0054	0.002							
NCS DC 28025	Iron Ore	0.0015	0.0011	0.0008	0.0038	0.0026							
NCS DC 28026	Iron Ore	0.001	0.0013	0.0004	0.0027	0.0026							
NCS DC 28027	Iron Ore	0.0009	0.0004	0.0013	0.0015	0.0032							
NCS DC 28028	Iron Ore	0.0008	0.0012	0.0013	0.003	0.0044							
NCS DC 28029	Iron Ore	0.0008	0.00012	0.0002	0.0062	0.0026							
NCS DC 28034	Iron Ore						3.62						
NCS DC 28041	Manganese Ores		0.013	0.0025		0.015		14.45	20.66	0.177	0.064		
NCS DC 28042	Manganese Ores		0.032	0.0066	0.0023	0.012		22.18	18.35	0.123	0.164	0.0044	0.0044
NCS DC 28043	Manganese Ores		0.089	0.11	0.013	0.235		30.99	45.61	0.215	1.11	0.083	0.019
NCS DC 28044	Manganese Ores		0.039	0.0083	0.0018	0.027		36.31	45.01	0.085	0.41	0.01	0.0075
NCS DC 28045	Manganese Ores		0.042	0.011	0.038	0.07		44.97	67.67	0.105	0.058	0.079	0.018

Number	Name	Chemical composition(percent)												Unit Size
		TFe	SiO_2	Sb	S	Cu	MgO	As	Pb	Zn	Bi	Ag	WO_3	Sn	(in g)
NCS DC 35001	Tin Concentrate	21.33		0.024	0.183			0.574	2.89	0.264	0.034	0.00255		45.80	100
NCS DC 35002	Tin Concentrate	9.53	0.930	0.016	0.090	0.043		0.306	1.62	0.120	0.020		0.182	62.49	100
NCS DC 35008	Tin Ore	22.62		0.013		0.037		0.084	2.07	0.51		19.8(g/t)		0.125	60
NCS DC 35011	Sn Ore					0.077		0.046							70
NCS DC 35012	Sn Ore					0.109		0.097							70
NCS DC 35014	Tin Concentrate		(1.10)	0.019		0.067	(0.13)	0.414	2.20	0.196	0.028				100
NCS DC 35015	Manganese Ore	3.97				0.006		0.015	0.015	0.0036					80

		Fe	Ni	Co	MnO_2	TMn
NCS DC 35014	Tin Concentrate	14.77				
NCS DC 35015	Manganese Ore		0.014	0.025	68.28	49.00

Number	Name	Chemical composition(percent)								Unit Size
		Zn	Pb	Fe	Cd	As	SiO_2	CaO	MgO	(in g)
NCS DC 35017	Zinc Concentrate	46.93	1.69	0.432	0.199	0.013	6.65	2.65	1.46	50

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Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	Mn	Ti	P	S	K_2O	Na_2O	(in g)
NCS DC 28046	Sintered Ore	56.14	9.17	5.54	2.07	10.35	2.21	0.227	0.076	0.064	0.032	0.125	0.048	70
NCS DC 28047	Sintered Ore	50.04	8.07	7.6	2.11	13.72	2.08	0.39	0.067	0.028	0.125	0.091	0.53	70
NCS DC 28048	Sintered Ore	54.16	8.52	6.04	2.23	10.93	3.05	0.21	0.075	0.068	0.052	0.076	0.19	70
NCS DC 28049	Sintered Ore	52.16	8.06	6.92	2.17	13.05	1.63	0.44	0.067	0.024	0.096	0.082	0.38	70
NCS DC 28050	Sintered Ore	53.26	9.53	6.24	2.24	11.31	2.7	0.286	0.082	0.049	0.075	0.084	0.44	70
NCS DC 28051	Pellet Iron Ore	63.56	0.35	4.57	0.926	1.12	1.48	0.134	0.071	0.018	0.015	0.13	0.07	70
NCS DC 28052	Pellet Iron Ore	64.53	0.28	5.65	0.77	0.3	0.32	0.075	0.122	0.025	0.0053	0.038	0.054	70
NCS DC 28053	Pellet Iron Ore	61.68	0.24	10.32	0.84	0.33	0.38	0.042	0.063	0.017	0.02	0.071	0.046	70

Number	Name	Chemical Composition(Percent)												Unit Size
		Cu	S	MgO	As	Zn	Pb	Ag(g/t)	Sb	Au(g/t)	Fe	Mn	Cd	Ni	(in g)
NCS DC 28054	Copper Ore	6.78	0.082	12.51	0.209	0.456	0.106	126.1		0.05	15.39	0.124	0.0021	<0.005	50
NCS DC 28055	Copper Ore	12.79	1.54	0.18	4.68	0.64	0.037	85.9	0.25	0.04	3.22	0.11	0.0067	0.017	50
NCS DC 28056	Copper Ore	8.46	0.86	7.04	2.14	0.503	0.087	109.9	0.22	0.05	10.44	0.169	0.0064	0.011	50
NCS DC 28057	Copper Concentrate	10.71	25.05	4.01	0.034	0.052	0.019	12		6.16	29.34	0.084	<0.001	0.072	20
NCS DC 28058	Copper Concentrate	20.56	22.87	7.63	0.012	0.194	0.015	17.1		4.68	24.7	0.013	<0.001	0.093	20
NCS DC 28059	Copper Concentrate	16.6	23.92	5.81	0.02	0.131	0.017	14.8		5.1	26.39	0.044	<0.001	0.082	20

		F	Bi
NCS DC 28054	Copper Ore	1.15	0.283
NCS DC 28055	Copper Ore	0.028	0.023
NCS DC 28056	Copper Ore	0.53	0.19
NCS DC 28057	Copper Concentrate	0.036	
NCS DC 28058	Copper Concentrate	0.056	
NCS DC 28059	Copper Concentrate	0.052	

Number	Name	Chemical Composition(Percent)												Unit Size
		TMn	TFe	SiO_2	Al_2O_3	CaO	MgO	K_2O	Na_2O	S	P	MnO_2		(in g)
NCS DC 28060	Manganese Ore	18.22	5.86	38.94	10.39	1.22	0.84	2.34	0.054	0.025	0.082	27.06		50
NCS DC 28061	Manganese Ore	22.93	6.71	31.42	9.88	1.11	0.94	1.95	0.053	0.23	0.073	33.45		50
NCS DC 28062	Manganese Ore	34.67	8.05	10.7	9.97	0.48	0.87	1.14	0.063	0.011	0.05	51.64		50
NCS DC 28063	Manganese Ore	27.45	8.1	20.96	10.05	0.99	1.16	1.57	0.064	0.6	0.059	39.38		50

Number	Name	Chemical Composition(Percent)												Unit Size
		CaF_2	SiO_2	$CaCO_3$	Fe_2O_3	S	P	K_2O	Na_2O	MgO	Al_2O_3	Mn		(in g)
NCS DC 28084	Fluorspar	46.59	28.89	9.08	0.52	0.071	0.0071	0.34	0.061	5.51	0.99	0.051		50
NCS DC 28085	Fluorspar	60.16	27.17	3.73	1.32	0.52	0.021	0.41	0.067	1.99	1.29	0.034		50
NCS DC 28086	Fluorspar	73.73	19.27	2.06	0.87	0.28	0.023	0.38	0.054	0.73	1.07	0.027		50
NCS DC 28087	Fluorspar	83.12	13.74	1.06	0.36	0.05	0.018	0.28	0.031	0.14	0.69	0.0099		50
NCS DC 28088	Fluorspar	96.87	1.76	0.14	0.173	0.092	0.015	0.036	0.019	0.015	0.14	0.04		50

Number	Name	Chemical Composition(Percent)												Unit Size
		SiO_2	CaO	MgO	Fe_2O_3	Al_2O_3	MnO	P_2O_5	TiO_2	SrO	K_2O	Na_2O	S	L.O.I	(in g)
NCS DC 28089	Magnesite	4.13	1.52	43.45	1.74	1.14	0.095	0.036	0.041	0.0013	0.037	0.018	0.015	47.35	50
NCS DC 28089a	Magnesite	4.95	1.26	43.44	1.66	1.46	0.083	0.037	0.048	0.0014	0.044	0.02	0.015	46.57	50
NCS DC 28090	Magnesite	0.32	0.53	46.4	0.65	0.1	0.016	0.013	0.006	0.0005	0.005	0.017	0.0027	51.58	50

Number	Name	Chemical Composition(Percent)												Unit Size
		TiO_2	TFe	FeO	SiO_2	CaO	MgO	Al_2O_3	MnO	S	P_2O_5	K_2O	Na_2O	Cr_2O_3	(in g)
NCS DC28096	Titanium concentrate	14.12	50.2	24.52	6.88	0.7	2.45	3.29	0.52	0.089	0.144	0.052	1.09	0.058	50
NCS DC28097	Titanium concentrate	45.1	33.49	36.43	2.97	1.17	1.53	1.79	0.68	1.13	0.188	0.025	0.053	0.051	50
NCS DC28098	Titanium concentrate	36.78	34.87	35.49	6.78	1.13	2.92	3.2	0.65	0.39	0.22	0.079	0.11	0.079	50
NCS DC28099	Titanium concentrate	25.78	27.53	24.22	16.25	4.5	2.34	6.28	0.46	2.21	1.82	0.24	1.52	0.079	50
NCS DC28100	Titanium concentrate	44.93	32.9	18.52	2.34	1.1	0.79	1.44	1.01	0.011	0.25	0.06	0.033	1.96	50

		V_2O_5	Cu	Ni	C
NCS DC28096	Titanium concentrate	0.5	0.0059	0.009	0.18
NCS DC28097	Titanium concentrate	0.086	0.016	0.022	0.32
NCS DC28098	Titanium concentrate	0.136	0.0047	0.015	0.26
NCS DC28099	Titanium concentrate	0.14	0.033	0.048	0.37
NCS DC28100	Titanium concentrate	0.2	0.0041	0.0081	0.037

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Number	Name	Chemical Composition(Percent)											Unit Size (in g)
		S	Pb	Cu	Zn	TFe	As	Ag(g/t)	SiO_2	Al_2O_3	MgO	CaO	
NCS DC28178	Lead Concentrate	3.94	42.84	0.35	1.53	15.38	0.816	933	6.55	2.01	0.412	1.73	25
NCS DC28179	Lead Concentrate	15.71	57.44	0.29	2.33	3.08	0.019	240	3.52	1.13	0.374	4.86	25
NCS DC28180	Lead Concentrate	14.22	73.42	0.058	2.68	1.7	0.0013	250	1.81	0.54	0.042	0.3	25

		Mn	Cd
NCS DC28178	Lead Concentrate	0.345	0.005
NCS DC28179	Lead Concentrate	0.427	0.019
NCS DC28180	Lead Concentrate	0.57	0.022

Number	Name	Chemical Composition(Percent)							Unit Size (in g)
		St	Sa	As	F	Pb	Zn	Co	
NCS DC28181-1	Pyrites and Pyrites concentrate	39.52	38.74	7.8	0.064	0.712	0.075		5
NCS DC28181-2	Pyrites and Pyrites concentrate	19.68	17.25	0.018	0.055	<0.005	0.014	0.377	5
NCS DC28181-3	Pyrites and Pyrites concentrate	29.95	29.16	0.267	0.068	0.225	0.106		5
NCS DC28181-4	Pyrites and Pyrites concentrate	35.21	34.48	4.96	0.06	0.479	0.088		5
NCS DC28181-5	Pyrites and Pyrites concentrate	28.38							5
NCS DC28181-6	Pyrites and Pyrites concentrate	28.4	47.24	0.3	0.036	0.469	1.61	0.034	5

Number	Name	Chemical Composition(Percent)										Unit Size (in g)
		Mo	F	C	S	SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	
NCS DC28182	Molybdenum Ore	0.24	0.14	0.23	1.74	72.6	9.76	2.93	0.91	1.41	4.71	1.34	50g
NCS DC28183	Molybdenum concentrate	45.34	0.17	0.62	35.5	8.35	1.52	5.62	0.25	0.91	0.4	0.068	50g
NCS DC28184	Molybdenum concentrate	54.29	0.034	0.35	36.88	4.52	1.35	0.964	0.16	0.43	0.18	0.078	50g
NCS DC28185	Molybdenum Ore	2.04	0.14	0.24	3	71.32	9.53	3.08	0.86	1.52	4.43	1.28	50g
NCS DC28186	Molybdenum Ore	5.67	0.14	0.27	5.73	66.5	8.69	3.29	0.83	1.42	4.27	1.22	50g

		W	P	As	Cu	Pb	Zn	Co	Ni	Sn	Cr	TiO_2	Mn
NCS DC28182	Molybdenum Ore	0.0019	0.038	0.0054	0.312	<0.008	0.011	0.0011	0.0012	0.0014	0.0008	0.212	0.036
NCS DC28183	Molybdenum concentrate	0.0046	0.013	0.004	0.354	0.432	0.088	0.0014	0.0016	<0.004	0.0029	0.048	0.03
NCS DC28184	Molybdenum concentrate	0.0071	0.0044	0.0075	0.251	0.057	0.018	0.001	<0.0020	0.0013	0.0006	0.019	0.0064
NCS DC28185	Molybdenum Ore	0.0019	0.034	0.0049	0.322	0.016	0.014	0.0008	0.0008	0.0013	0.0018	0.237	0.037
NCS DC28186	Molybdenum Ore	0.0019	0.036	0.0049	0.329	0.032	0.019	0.0011	0.0006	0.0011	0.0015	0.21	0.032

		Re	Bi	Sb
NCS DC28183	Molybdenum concentrate	0.0022	0.029	0.0004
NCS DC28184	Molybdenum concentrate	0.0022	0.0008	0.0002

Number	Name	Chemical Composition(Percent)											Unit Size (in g)
		Cu	Au(g/t)	Ag(g/t)	S	CaO	MgO	SiO_2	Al_2O_3	K_2O	Na_2O	F	
NCS DC28187	Copper Concentrate	22.5	15	21	33.81	0.56	2.05	3.72	0.27	0.015	0.008	0.012	50
NCS DC28188	Copper Concentrate	31.05	9	330	24.52	4.54	1.04	8.17	0.72	0.081	0.054	0.012	50
NCS DC28189	Copper Concentrate	9.88	9	141	24.91	1.93	0.77	14.03	5.11	1.44	0.19	0.044	50
NCS DC28190	Copper Concentrate	16.92	10	186	38	0.38	0.46	3.73	1.32	0.38	0.045	0.012	50
NCS DC28191	Copper Concentrate	20.12	10	17	24.62	1.41	6.4	12.53	0.49	0.037	0.025	0.028	50
NCS DC28192	Copper Concentrate	24.4	12	181	31.22	2.1	1.27	5.28	0.71	0.13	0.036	0.012	50

		Fe	Mn	Pb	Zn	Cd	Ni	Co	As	Bi	Sb	Hg(μg/g)*
NCS DC28187	Copper Concentrate	31.37	0.013	0.011	0.45	0.0003	0.19	0.24	0.007	0.0004	0.0006	0.3
NCS DC28188	Copper Concentrate	22.19	0.027	0.15	0.075	0.001	0.008	0.012	0.024	0.11	0.003	1.4
NCS DC28189	Copper Concentrate	25.18	0.14	0.26	0.069	0.0005	0.006	0.008	0.018	0.038	0.003	0.2
NCS DC28190	Copper Concentrate	34.12	0.068	0.13	0.034	0.0002	0.009	0.013	0.011	0.061	0.0005	0.1
NCS DC28191	Copper Concentrate	26.02	0.023	0.012	0.5	0.0002	0.13	0.14	0.007	0.0003	0.0003*	0.3
NCS DC28192	Copper Concentrate	28.46	0.032	0.097	0.2	0.0005	0.074	0.096	0.013	0.052	0.0015	1.3

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Number	Name	Chemical Composition(g/T)		Unit Size (in g)
		Au	Ag	
NCS DC 28101	Gold ore	1.7	4.2	500
NCS DC 28102	Gold ore	2.5	2.2	500
NCS DC 28103	Gold ore	1.8	3.1	500
NCS DC 28104	Gold ore	63.4	62.2	250
NCS DC 28105	Gold ore	5	5.8	500
NCS DC 28106	Gold ore	11	11	500
NCS DC 28107	Gold ore	20	20.4	250

Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		TFe	FeO	SiO_2	S	P	Ti	TiO_2	Al_2O_3	MgO	K_2O	Na_2O	Mn	Cu	
NCS DC 28108	MAGNETIC IRON ORE	46.93	19.95	14.75	0.637	0.039	0.067	0.112	2.05	5.54	0.33	0.22	0.058	0.119	70
NCS DC 28109	MAGNETIC IRON ORE	66.52	27.91	3.26	0.064	0.0062	0.037	0.061	0.62	1.96	0.091	0.032	0.07	0.01	70
NCS DC 28110	MAGNETIC IRON ORE	62.63	23.21	3.15	0.255	0.017	0.096	0.16	1.19	5.21	0.068	0.023	0.17	0.018	70
NCS DC 28111	MAGNETIC IRON ORE	50.94	20.67	13.83	0.43	0.033	0.065	0.108	1.42	3.95	0.204	0.14	0.098	0.305	70
NCS DC 28112	MAGNETIC IRON ORE	56.23	24.15	7.81	0.369	0.023	0.62	1.03	1.39	4.89	0.133	0.07	0.132	0.527	70
NCS DC 28113	MAGNETIC IRON ORE	64.42	27	3.56	0.381	0.011	0.315	0.522	0.9	3.28	0.099	0.034	0.109	0.047	70
NCS DC 28114	MAGNETIC IRON ORE	65.71	27.14	2.07	0.158	0.013	0.418	0.697	0.83	3.33	0.048	0.015	0.127	0.016	70
NCS DC 28115	MAGNETIC IRON ORE	68.29	28.25	2.08	0.041	0.0047	0.034	0.057	0.43	1.25	0.06	0.021	0.061	0.0065	70
NCS DC 28116	LEAD ORE	6.78		7.92	19.26				2.56	1.28			0.029	0.85	25

		Zn	As	CaO	Pb	Ag	Cd	Sb	Bi
NCS DC 28108	MAGNETIC IRON ORE	0.0038		7.12					
NCS DC 28109	MAGNETIC IRON ORE	0.0052		1.1					
NCS DC 28110	MAGNETIC IRON ORE	0.01		1.09					
NCS DC 28111	MAGNETIC IRON ORE	0.017	0.083	4.85					
NCS DC 28112	MAGNETIC IRON ORE	0.037	0.167	2.73					
NCS DC 28113	MAGNETIC IRON ORE	0.0096	0.013	1.06					
NCS DC 28114	MAGNETIC IRON ORE	0.008		0.72					
NCS DC 28115	MAGNETIC IRON ORE	0.0037		0.7					
NCS DC 28116	LEAD ORE	1.44	0.068	17.16	15.09	0.022	0.0097	0.0084	0.085

Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		St,d	Ad	Vd	SiO_2	Fe_2O_3	CaO	MgO	Al_2O_3	TiO_2	MnO	K_2O	Na_2O	P_2O_5	
NCS DC 28117	Graphite	0.17	3.47	1.33	1.76	0.46	0.19	0.18	0.63	0.014	0.005	0.17	0.009	0.004	50
NCS DC 28118	Graphite	0.49	11.45	1.87	5	1.98	0.91	1	1.92	0.085	0.021	0.19	0.088	0.007	50
NCS DC 28119	Graphite	0.02	29	2.88	15.66	2.09	0.23	0.55	8.13	0.44	0.032	1.33	0.28	0.087	50
NCS DC 28120	Graphite Ore	1.06	95.62	2.22	52.73	5.34	11.81	8.79	10.93	0.39	0.048	2.39	1.5	0.083	50
NCS DC 28121	Graphite Ore	0.99	90.65	2.48	50.28	5	11.12	8.43	10.72	0.36	0.047	2.32	1.38	0.083	50

Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		TFe	TiO_2	SiO_2	Al_2O_3	CaO	MgO	S	P	V_2O_5	Cr_2O_3	FeO	MnO	Ni	
NCS DC 28122	Vanadium-titanium-Magnetic Iron Ore	56.26	14.48	1.72	2.73	0.42	2.22	0.014	0.061	0.56	0.076	29.22	0.546	0.0058	70
NCS DC 28123	Vanadium-titanium-Magnetic Iron Ore	54.89	9.63	7.44	1.20	4.06	0.83	0.203	0.081	0.251	0.018	26.56	0.331	0.0041	70
NCS DC 28124	Vanadium-titanium-Magnetic Iron Ore	55.23	11.71	5.15	1.80	2.54	1.42	0.118	0.074	0.368	0.040	27.48	0.421	0.0044	70
NCS DC 28125	Vanadium-titanium-Magnetic Iron Ore	50.16	13.92	7.16	3.33	1.69	2.78	0.015	0.080	0.623	0.068	26.05	0.50	0.0063	70
NCS DC 28126	Vanadium-titanium-Magnetic Iron Ore	58.18	12.24	1.59	2.18	0.366	1.90	0.016	0.052	0.834	0.055	29.06	0.481	0.0053	70
NCS DC 28127	Vanadium-titanium-Magnetic Iron Ore	52.26	10.32	8.10	2.98	1.88	2.50	0.014	0.092	0.715	0.040	25.80	0.411	0.0058	70

		Cu	Co	Zn
NCS DC 28122	Vanadium-titanium-Magnetic Iron Ore	0.0048	0.010	0.061
NCS DC 28123	Vanadium-titanium-Magnetic Iron Ore	0.0070	0.0066	0.0085
NCS DC 28124	Vanadium-titanium-Magnetic Iron Ore	0.0061	0.010	0.028
NCS DC 28125	Vanadium-titanium-Magnetic Iron Ore	0.0065	0.015	0.055
NCS DC 28126	Vanadium-titanium-Magnetic Iron Ore	0.0042	0.015	0.050
NCS DC 28127	Vanadium-titanium-Magnetic Iron Ore	0.0058	0.012	0.040

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Number	Name	Chemical Composition(Percent)												Unit Size
		Cr_2O_3	TFe	SiO_2	Al_2O_3	CaO	MgO	S	P	Ti	V	Mn	Ni	K_2O	(in g)
NCS DC 28128	Chromite Ore	27.55	9.76	12.55	18.94	1.27	20.48	0.035	0.0029	0.145	0.077	0.114	0.169	0.043	50
NCS DC 28129	Chromite Ore	33.00	12.90	12.19	13.94	1.00	17.27	0.021	0.0030	0.136	0.089	0.180	0.162	0.035	50
NCS DC 28130	Chromite Ore	46.74	20.34	0.79	14.53	0.053	9.79	0.003	0.0027	0.373	0.215	0.156	0.092	0.014	50
NCS DC 28131	Chromite Ore	45.10	19.66	2.93	13.70	0.18	10.37	0.0029	0.0033	0.344	0.207	0.150	0.094	0.015	50
NCS DC 28132	Chromite Ore	36.50	14.83	7.70	16.22	0.69	15.32	0.022	0.0028	0.244	0.143	0.133	0.134	0.033	50
NCS DC 28133	Chromite Ore	40.20	16.74	4.73	15.97	0.46	13.41	0.017	0.0037	0.294	0.162	0.142	0.121	0.023	50

		Co	Zn
NCS DC 28128	Chromite Ore	0.016	0.049
NCS DC 28129	Chromite Ore	0.027	0.102
NCS DC 28130	Chromite Ore	0.025	0.071
NCS DC 28131	Chromite Ore	0.025	0.065
NCS DC 28132	Chromite Ore	0.022	0.058
NCS DC 28133	Chromite Ore	0.022	0.065

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	TiO_2	SiO_2	Al_2O_3	CaO	MgO	S	P	V_2O_5	Cr_2O_3	FeO	MnO	Ni	(in g)
NCS DC 28134	Titanium Ore	14.85	7.11	38.43	8.67	12.39	6.33	0.196	0.883	0.062	0.0084	12.45	0.216	0.0037	50
NCS DC 28135	Titanium Ore	15.07	6.14	42.61	8.82	9.87	6.78	0.021	0.232	0.092	0.0095	12.77	0.187	0.0098	50
NCS DC 28136	Titanium Ore	26.50	27.23	14.41	2.31	9.49	2.34	4.77	1.07	0.066	0.0078	23.62	0.802	0.013	50
NCS DC 28137	Titanium Ore	30.31	40.66	9.21	1.35	4.78	1.30	1.52	0.117	0.068	0.0064	33.33	1.20	0.0084	50
NCS DC 28138	Titanium Ore	34.79	47.82	2.65	0.68	0.68	2.11	0.184	0.0076	0.095	0.014	39.14	0.652	0.0029	50
NCS DC 28139	Titanium Ore	22.04	55.68	1.54	2.30	0.070	1.09	0.025	0.047	0.266	2.80	9.15	1.26	0.0007	50
NCS DC 28140	Titanium Ore	33.02	45.73	4.85	0.95	2.23	1.68	0.74	0.048	0.203	0.012	36.68	0.882	0.0051	50
NCS DC 28141	Titanium Ore	33.58	45.61	4.16	0.867	1.65	1.74	0.536	0.047	0.188	0.0067	37.51	0.799	0.0046	50
NCS DC 28142	Titanium Ore	30.23	50.06	2.04	1.30	0.68	1.52	0.172	0.048	0.700	0.84	28.85	0.875	0.0021	50
NCS DC 28143	Titanium Ore	29.29	35.60	10.41	1.65	6.25	1.55	2.76	0.476	0.505	0.0077	29.34	1.02	0.011	50

		Cu	Co	Zn
NCS DC 28134	Titanium Ore	0.0082	0.0052	0.019
NCS DC 28135	Titanium Ore	0.016	0.0079	0.018
NCS DC 28136	Titanium Ore	0.038	0.015	0.015
NCS DC 28137	Titanium Ore	0.022	0.010	0.014
NCS DC 28138	Titanium Ore	0.0056	0.0087	0.016
NCS DC 28139	Titanium Ore	0.0093	0.0026	0.017
NCS DC 28140	Titanium Ore	0.013	0.051	0.016
NCS DC 28141	Titanium Ore	0.011	0.0098	0.015
NCS DC 28142	Titanium Ore	0.0073	0.011	0.017
NCS DC 28143	Titanium Ore	0.027	0.013	0.016

Number	Name	Chemical Composition(g/T)												Unit Size
		CaO	MgO	Fe_2O_3	SiO_2	Al_2O_3	MnO	S	P_2O_5	K_2O	Na_2O	TiO_2	L.O.I	(in g)
NCS DC 28144	Potassium Feldspar	1.05	0.329	1.04	69.12	13.84	0.03	0.584	0.02	3.84	4.72	0.089	1.61	50
NCS DC 28145	Potassium Feldspar	5.77	3.39	0.88	59.33	12.14	0.026	0.41	0.017	3.46	4.05	0.071	8.13	50

Number	Name	Chemical Composition(g/T)												Unit Size
		CaF_2	SiO_2	$CaCO_3$	Fe_2O_3	S	P	K_2O	Na_2O	MgO	Al_2O_3	MnO	TiO_2	(in g)
NCS DC 28146	Fluorspar	94.39	4.65	0.14	0.28	0.13	0.0036	0.012	0.006	0.003	0.113	0.005	0.0019	50
NCS DC 28147	Fluorspar	90.28	8.34	0.15	0.34	0.155	0.0041	0.064	0.008	0.0049	0.317	0.0046	0.003	50
NCS DC 28148	Fluorspar	96.31	3	0.17	0.163	0.025	0.0043	0.014	0.008	0.0022	0.09	0.0024	(0.001)	50
NCS DC 28149	Fluorspar	87.45	10.03	0.21	0.38	0.198	0.0052	0.153	0.009	0.012	0.63	0.0049	0.0054	50
NCS DC 28150	Fluorspar	80.3	15.52	0.25	0.47	0.184	0.0076	0.57	0.03	0.03	1.69	0.0094	0.014	50
NCS DC 28151	Fluorspar	79.24	15.8	0.98	0.59	0.103	0.011	0.54	0.078	0.096	1.71	0.044	0.025	50

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Number	Name	Chemical Composition(g/T)													Unit Size
		CaO	MgO	Fe_2O_3	SiO_2	Al_2O_3	MnO	S	P	K_2O	Na_2O	SrO	TiO_2	L.O.I	(in g)
NCS DC 28152	Limestone	46.71	6.55	0.25	2.42	0.374	0.0046	0.042	0.0017	0.05	0.011	0.016	0.023	43.22	50
NCS DC 28153	Limestone	41.81	10.37	0.417	2.35	0.543	0.007	0.05	0.0032	0.074	0.011	0.014	0.031	43.81	50
NCS DC 28154	Limestone	50.61	2.88	0.289	3.02	0.622	0.0054	0.055	0.0028	0.164	0.026	0.024	0.032	41.92	50
NCS DC 28155	Limestone	46.09	5.98	0.187	4.6	0.283	0.0046	0.033	0.0016	0.038	0.01	0.02	0.015	42.55	50
NCS DC 28156	Limestone	51.22	2.43	0.181	3.32	0.34	0.0042	0.03	0.0019	0.094	0.0074	0.021	0.02	42.26	50
NCS DC 28157	Limestone	53.79	1.17	0.151	1.32	0.225	0.0037	0.02	0.0027	0.066	0.0058	0.018	0.014	43.22	50
NCS DC 28158	Limestone	48.56	4.31	0.302	3.99	0.657	0.0055	0.044	0.0044	0.184	0.028	0.022	0.051	41.7	50
NCS DC 28159	Limestone	51.95	1.23	0.296	2.36	0.811	0.0077	0.016	0.0017	0.165	0.009	0.02	0.036	42.39	50
NCS DC 28160	Limestone	54.2	0.82	0.146	0.96	0.328	0.0049	0.019	0.0019	0.084	0.006	0.018	0.016	43.27	50
NCS DC 28161	Limestone	53.76	1.5	0.143	0.835	0.242	0.0058	0.018	0.0012	0.048	0.006	0.017	0.011	43.37	50
NCS DC 28162	Dolomite	28.73	19.76	0.475	8.42	1.2	0.02	0.072	0.0028	0.039	0.033	0.019	0.036	40.56	50
NCS DC 28163	Dolomite	30.22	20.85	0.244	1.87	0.205	0.015	0.038	0.0015	0.018	0.012	0.013	0.0079	45.31	50
NCS DC 28164	Dolomite	30.15	20.91	0.248	2.16	0.25	0.016	0.039	0.0013	0.027	0.011	0.013	0.012	45.04	50
NCS DC 28165	Dolomite	29.5	20.43	0.357	5.22	0.706	0.018	0.056	0.002	0.033	0.023	0.016	0.021	43.07	50

Number	Name	Chemical Composition(Percent)												Unit Size
		Al_20_3	SiO_2	Fe_2O_3	P_2O_5	MnO	TiO_2	CaO	MgO	K_2O	Na_2O	C	S	Cr	(in g)
NCS DC 28166	Bauxite	44.5	5.17	22.16	0.075	0.026	1.66	0.18	0.03	0.03	0.015	0.21	0.043	0.019	50
NCS DC 28167	Bauxite	43.38	7.45	22.69	0.057	0.044	1.35	0.52	0.051	0.023	0.025	0.22	0.058	0.014	50
NCS DC 28168	Bauxite	45.75	4.88	19.43	0.183	0.028	3.96	0.087	0.035	0.025	0.023	0.203	0.014	0.062	50

		V	Ga	L.O.I	Zr	Sc	Zn
NCS DC 28166	Bauxite	0.06	0.0028	25.35	0.011	0.0047	<0.005
NCS DC 28167	Bauxite	0.059	0.0027	23.59	0.0057	0.0052	0.0051
NCS DC 28168	Bauxite	0.1	0.0071	25	0.038	0.0021	0.0018

Number	Name	Chemical Composition(Percent)											Unit Size
		Zn	S	Fe	SiO_2	Pb	Cu	As	Cd	Ag	CaO	MgO	(in g)
NCS DC 28169	Zinc Concertrate	43.46	26.7	6.79	5.95	2.66	0.265	0.0014	0.309	0.0048	2.05	0.158	25

Number	Name	Chemical Composition(g/T)												Unit Size
		SiO_2	CaO	MgO	Fe_2O_3	Al_2O_3	MnO	P	TiO_2	SrO	K_2O	Na_2O	S	L.O.I	(in g)
NCS DC 28171	Limestone	2.20	43.96	8.84	0.290	0.47	0.0064	0.0035	0.024	0.020	0.196	0.0080	0.006	43.82	50
NCS DC 28174	Limestone	0.66	53.08	2.24	0.103	0.18	0.0052	0.0012	0.0080	0.020	0.044	0.005	0.024	43.75	50
NCS DC 28175b	Limestone	0.76	41.91	11.15	0.316	0.272	0.013	0.0023	0.011	0.0066	0.041	0.003	0.002	44.86	50
NCS DC 28176	Limestone	0.86	48.92	5.40	0.241	0.360	0.0051	0.0029	0.022	0.029	0.125	0.008	0.008	43.90	50
NCS DC 28177	Limestone	1.25	54.43	0.50	0.179	0.195	0.0070	0.0018	0.010	0.024	0.048	0.007	0.012	43.10	50

Number	Name	Chemical Composition(%)											Unit Size
		SiO_2	Al_2O_3	Fe_2O_3	CaO	MgO	TiO_2	P_2O_5	MnO	Li_2O	K_2O	Na_2O	SrO	(in g)
NCS DC28193	Alumina-silica Refractory	47.85	46.3	2.34	0.46	0.2	1.78	0.21	0.022	0.062	0.63	0.086	0.036	30g

Number	Name	Chemical Composition(g/T)												Unit Size
		TFe	CaO	MgO	SiO_2	Al_2O_3	S	P	MnO	TiO_2	Mn	Cu	Cr_2O_3	V_2O_5	(in g)
NCS DC 28241	V-Ti magnetite	63.97	0.94	1.74	3.98	1.09	0.04	0.017	0.197	2.59			0.42	0.55	100
NCS DC 28242	Hematite	53.34	0.43	0.13	8.71	1.78	1.88	0.126		0.087	0.199	0.076			100
NCS DC 28243	Hematite	55.71	0.3	0.1	6.97	1.07	0.98	0.121		0.049	0.143	0.068			100

Number	Name	Chemical Composition(g/T)											Unit Size
		CaO	MgO	SiO_2	Al_2O_3	Fe_2O_3	S	P	MnO	TiO_2	SrO	L. O. I	(in g)
NCS DC 28244	Limestone	51.32	2.94	1.49	0.39	0.171	0.0082	0.0022	0.0026	0.018	0.018	43.47	50
NCS DC 28245	Limestone	53.4	1.9	0.37	0.17	0.125	0.014	0.0015	0.0092	0.0085	0.024	43.93	50
NCS DC 28246	Limestone	54.92	0.37	0.47	0.203	0.107	0.01	0.0017	0.0081	0.0092	0.017	43.54	50
NCS DC 28247	Limestone	47.82	6.13	0.7	0.222	0.201	0.014	0.0066	0.0095	0.013	0.018	44.46	50
NCS DC 28248	Limestone	45.88	7.68	0.76	0.24	0.229	0.016	0.0078	0.01	0.014	0.018	44.51	50

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Number	Name	Chemical Composition(Percent)												Unit Size
		SiO_2	CaO	MgO	Fe_2O_3	Al_2O_3	MnO	P	S	L.O.I	TiO_2	SrO		(in g)
NCS DC 28201	Dolomite	6.75	30.62	20.53	0.085	0.0048	0.0072	0.0012	0.0019	41.00				50
NCS DC 28202	Dolomite	2.12	30.79	20.73	0.275	0.203	0.026	0.0013	0.016	45.22				50
NCS DC 28203	Dolimite	1.45	34.74	17.16	0.404	0.286	0.012	0.016	0.028	45.58				50
NCS DC 28204	Limestone	0.83	50.72	3.96	0.208	0.18	0.012	0.0076	0.016	43.70	0.006	0.046		50
NCS DC 28205	Limestone	2.17	52.42	1.92	0.197	0.39	0.0054	0.0019	0.012	42.53	0.0093	0.023		50
NCS DC 28206	Limestone	4.64	41.66	11.31	0.112	0.16	0.005	0.0032	0.0093	41.70	0.0056	0.015		50
NCS DC 28207	Dolomite	1.26	30.33	20.88	0.44	0.27	0.013	0.018	0.033	46.11				50
NCS DC 28208	Dolomite	0.99	30.8	20.79	0.32	0.23	0.019	0.0013	0.022	46.2				50

Number	Name	Chemical Composition(Percent)												Unit Size
		TMn	MnO_2	TFe	SiO_2	Al_2O_3	CaO	MgO	TiO_2	Cu	Zn	Ni	S	P	(in g)
NCS DC 28209	Manganese	27.76	21	12	17.54	1.77	5.44	4.08	0.085	0.0066	0.0071	0.0025	0.0067	0.069	50
NCS DC 28210	Manganese	44.76	66.46	5.72	4.62	7.28	0.24	0.257	0.34	0.062	0.088	0.057	0.014	0.099	50
NCS DC 28211	Manganese	32.7	32.32	10.47	14.4	3.3	4.21	3.04	0.16	0.02	0.027	0.016	0.009	0.087	50

Number	Name	Chemical Composition(Percent)										Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	TiO_2	S	P	(in g)
NCS DC 28212	Iron Ore	56.25	26.9	8.86	2.53	8.04	1.96	0.289	0.208	0.197	0.032	50
NCS DC 28213	Iron Ore	50.92	19.9	13.68	3.28	6.9	3.4	0.943	0.241	0.13	0.05	50
NCS DC 28214	Iron Ore	65.97	27	5.02	0.7	0.43	0.45	0.094	0.541	0.291	0.013	50
NCS DC 28216	Iron Ore	62.01	26.9	6.74	1.46	3.65	1.1	0.176	0.388	0.258	0.02	50
NCS DC 28217	Iron Ore	64.82	24.5	4.91	1.3	0.85	0.31	0.088	0.949	0.011	0.053	50
NCS DC 28218	Iron Ore	64.81	25.4	5.04	0.8	0.65	1.78	0.084	0.477	0.035	0.026	50
NCS DC 28219	Iron Ore	68.55	23	3.21	0.54	0.21	0.2	0.052	0.116	0.027	0.0054	50
NCS DC 28220	Iron Ore	69.05	23.8	2.45	0.5	0.2	0.17	0.079	0.313	0.011	0.01	50

Number	Name	Chemical Composition(Percent)										Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	TiO_2	P	S	(in g)
NCS DC 28221	Iron Ore	67.84	28.8	2.34	0.6	0.63	1.4	0.07	0.0061	0.0046	0.041	50
NCS DC 28222	Iron Ore	66.64	0.11	27.9	2.96	0.76	0.86	1.62	0.091	0.07	0.0051	50
NCS DC 28223	Iron Ore	66.31	24.4	4.17	1.04	0.64	0.26	0.085	0.709	0.039	0.011	50
NCS DC 28224	Iron Ore	63.2	1.4	6.55	1.02	0.86	0.5	0.083	0.319	0.02	0.015	50
NCS DC 28225	Iron Ore	54.96	10.7	5.89	2.93	11.49	0.98	0.171	0.152	0.05	0.032	50

Number	Name	Chemical Composition(Percent)							Unit Size
		CaF_2	$CaCO_3$	SiO_2	TFe	Mn	S	P	(in g)
NCS DC 28226	Fluorite	77.33	0.20	18.04	0.31	0.014	0.068		50
NCS DC 28227	Fluorite	78.75	0.33	19.36	0.28	0.012	0.028		50
NCS DC 28228	Fluorite	94.81	0.99	2.76	0.26	0.010	0.107	0.076	50
NCS DC 28229	Fluorite	85.56	0.58	10.62	0.28	0.013	0.079	0.045	50
NCS DC 28230	Fluorite	90.72	0.87	7.68	0.25	0.012	0.084	0.063	50

Number	Name	Chemical Composition(Percent)												Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	TiO_2	P	S	Cu	C	(in g)
NCS DC 28231	Sintering Ore	56.53	22.9	5.57	1.90	11.46	1.75	0.202	0.103	0.027	0.063			50
NCS DC 28232	Iron Ore	67.42	27.40	1.80	0.78	0.61	2.43	0.132	0.069	0.0065	0.318			50
NCS DC 28233	Iron Ore	53.35	17.20	9.42	0.70	2.13	8.83	0.203	0.052	0.012	0.083			50
NCS DC 28234a	Iron Ore	45.17	15.10	15.55	1.33	4.74	9.82	0.167	0.090	0.023	0.104			50
NCS DC 28234b	Iron Ore	48.87	15.9	12.85	1.12	3.75	8.88	0.185	0.083	0.022	0.095	0.015	0.544	50
NCS DC 28234c	Iron Ore	49.64	21.1	11.54	1.87	5.85	5.81	0.112	0.105	0.040	0.504	0.156	0.798	50

Number	Name	Chemical Composition(Percent)											Unit Size
		TFe	SiO_2	Al_2O_3	CaO	MgO	Cr	Ni	Mn	Ti	Co	S	(in g)
NCS DC 28235	High Chromium - Nickel - Iron ore	38.38	15.21	2.89	0.20	8.16	1.50	1.36	0.67	0.042	0.114	0.012	50
NCS DC 28236	High Chromium - Nickel - Iron ore	49.05	3.60	6.53	0.51	0.64	1.66	1.02	0.51	0.075	0.069	0.112	50

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Number	Name	Chemical Composition(Percent)										Unit Size
		TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	TiO_2	P	S	(in g)
NCS DC 28237	Sinter Ore	55.24	13.80	6.45	2.80	10.80	1.22	0.205	0.157	0.048	0.068	50
NCS DC 28238	Sinter Ore	51.72	16.36	10.74	3.56	9.07	2.95	0.650	0.229	0.053	0.084	50
NCS DC 28239b	Pellet Ore	63.78	0.77	5.29	0.98	0.85	1.59	0.065	0.18	0.016	0.0086	50
NCS DC 28240a	Pellet Ore	66.18	0.78	3.81	0.43	0.51	0.79	0.040	0.048	0.010	0.0066	50

Number	Name	Chemical Composition									Unit Size
		Au(μg/g)	Ag(μg/g)	Cu(%)	Pb(%)	Zn(%)	As(%)	Sb(%)	Hg(mg/g)	Cd(%)	(in g)
NCS DC 29101	Gold ore	0.64									500
NCS DC 29102	Gold ore	4.3	37.4	0.3	1.61	0.22					500
NCS DC 29103	Gold ore	20	18	0.12	0.61	0.1					500
NCS DC 29104	Silver ore		50.3	0.19	*83.8	*84.9	0.027	0.012	(3.85)		50
NCS DC 29105	Silver ore		138.1	0.5	0.02	*67.6	0.073	0.032	(10.1)		50
NCS DC 29106	Silver ore		199	0.68	0.01	0.011	0.078	0.05	(18)		50
NCS DC 29107	Copper ore		6.1	0.29	*34.5	0.01	*41.4	*23.4	(0.15)		50
NCS DC 29108	Copper ore		14.9	0.9	*80	0.02	*76.6	*11.7	(0.028)		50
NCS DC 29109	Copper ore		59.9	3.84	0.024	0.083	0.046	*71	(0.043)	*5.68	50
NCS DC 29110	Copper ore		120	8.53	0.027	0.19	0.02	*35.3	(0.039)	*13.5	50
NCS DC 29111	Pb-Zn ore		12.9	0.02	0.48	4.94	*90	*9.0	(12.6)	0.019	50
NCS DC 29112	Pb-Zn ore		362	0.1	2.93	0.51	0.082	0.011	(0.233)		50
NCS DC 29113	Pb-Zn ore		103	0.075	2.19	1.54	0.04	*38.3	(0.074)		50
NCS DC 29114	Pb-Zn ore		367.9	0.071	22.96	16.22	0.138	0.044	(270)	0.066	50
NCS DC 29115	Pb-Zn ore		5.3	0.021	1.25	30.19	*95	*20.5	(84.8)	0.119	50

Number	Name	Chemical Composition									Unit Size
		Pt($x10^{-6}$)	Pd($x10^{-6}$)	Ru($x10^{-9}$)	Rh($x10^{-9}$)	Ir($x10^{-9}$)	Os($x10^{-9}$)	Cu($x10^{-2}$)	Ni($x10^{-2}$)		(in g)
NCS DC 29116	Platinum Group	2.43	1.68	1.5	1.9	1.6	1.9	3.58	1.78		500
NCS DC 29117	Platinum Group	10.61	0.6	4.2	3.6	4.4	3.7	3.01	1.76		500
NCS DC 29118	Platinum Group	0.9	0.7	3.5	3.2	3.2	3	3.25	1.76		500
NCS DC 29119	Platinum Group	4.44	1.33	0.71	1.4	1.9	1.6	0.62	0.053		500
NCS DC 29120	Platinum Group	0.38	0.4	7.8	18	23.6	8.2	0.11	0.22		500

Number	Name	μg/g									Unit Size
		Ag	As	B	Ba	Be	Bi	Cd	Ce	Co	Cr	(in g)
NCS DC36012	Perlite	0.053	0.59	26	164	8.5	0.18	0.07	37	0.33	-2.3	70
NCS DC36013	Sepiolite	0.15	2.3	6.9	72	3.6	0.18	-1.8	39	15	116	70

		μg/g									
		Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Hg	Ho	In
NCS DC36012	Perlite	13.8	-1.9	2	1.46	0.29	22	2	4.3	(3.4)**	0.44	0.04
NCS DC36013	Sepiolite	4	25	3.3	1.8	0.8	5.9	4	-1.2	0.16	0.66	0.027

		μg/g									
		La	Li	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	S
NCS DC36012	Perlite	21	8.3	0.31	4.8	30	12.4	1.5	46	3.9	334	-38
NCS DC36013	Sepiolite	30	55	0.26	-0.25	3.9	24	57	8.7	6	20	-136

		μg/g										
		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Th	Tm	U	V
NCS DC36012	Perlite	-0.08	3.4	2.3	2.2	118	3	0.34	35	0.25	19	-2.6
NCS DC36013	Sepiolite	-0.57	5.6	4.3	1.2	49	0.3	0.62	3.8	0.27	5.3	81

		μg/g						%				
		W	Y	Yb	Zn	Zr		SiO_2	Al_2O_3	TFe_2O_3	FeO	MgO
NCS DC36012	Perlite	1.9	14	1.8	40	91		72.72	12.69	0.62	0.07	0.25
NCS DC36013	Sepiolite	0.5	23	1.6	105	43		63.55	4.45	1.46	-0.1	18

		%									
		CaO	Na_2O	K_2O	TiO_2	P_2O_5	MnO	L.O.I.	TC	CO_2	H_2O+	
NCS DC36012	Perlite	0.82	3.03	4.65	0.079	0.004	0.051	4.97	0.028	-0.045	4.91	
NCS DC36013	Sepiolite	2.56	0.12	0.32	0.18	0.41	0.022	8.55	0.63	1.63	6.39	

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Number	Name	Chemical Composition(Percent)										Unit Size
		WO_3	SiO_2	S	Cu	Mn	Mo	P	As	Sn	Ca	(in g)
NCS DC35018	Black tungsten concentrate	70.5	1.94	0.72	0.019		0.011	0.038	0.028	0.02	4.93	50g
NCS DC35019	Black tungsten concentrate	69.19	1.7	0.21	0.038		0.01	0.021	0.052	0.13	1.94	50g
NCS DC35020	Black tungsten concentrate	67.18	1.98	0.25	0.044		0.012	0.024	0.083	0.14	1.62	50g
NCS DC35021	White tungsten concentrate	69.13		0.73	0.065	0.042	0.031	0.044				50g
NCS DC35022	White tungsten concentrate	66.02		0.35	0.0034	0.029	0.073	0.0079				50g
NCS DC35023	White tungsten concentrate	57.01		1.24	0.13	0.12	0.012	0.091				50g

Number	Name	Chemical Composition(Percent)									Unit Size
		SiO_2	Al_2O_3	Fe_2O_3	TiO_2	CaO	MgO	K_2O	Na_2O	CaF_2	L.O.I	(in g)
NCS DC 62001	Iron Ore	33.06	5.16	48.86	0.24	2.56	1.00	2.51	0.17		5.45	20
NCS DC 62002	Limestone	2.86	0.56	0.45	0.02	50.94	2.69	0.11	0.14		41.99	20
NCS DC 62003	Fluorite	23.52	2.50	0.63		0.50	0.03	1.21	0.32	67.22	0.62	20

Number	Name	Chemical Composition(Percent)													Unit Size
		SiO_2	Al_2O_3	Fe_2O_3	TiO_2	CaO	MgO	K_2O	Na_2O	MnO	P_2O_5	SO_3	Cl	$fSiO_2$	(in g)
NCS DC 60109a	Limestone	4.05	0.94	0.58	0.052	50.09	1.79	0.42	0.027	0.014	0.033	0.054	0.0062	2.02	50
NCS DC 60110a	Limestone	2.25	0.6	0.38	0.03	47.07	5.81	0.2	0.016	0.012	0.037	0.032	0.0054	1.21	50

		L.O.I	CO_2
NCS DC 60109a	Limestone	41.53	(41.32)
NCS DC 60110a	Limestone	43.22	(43.02)

Number	Name	Chemical Composition(Percent)													Unit Size
		SiO_2	Al_2O_3	Fe_2O_3	CaO	MgO	K_2O	Na_2O	TiO_2	MnO	P_2O_5	SO_3	H_2O^+	L.O.I	(in g)
NCS DC 60122a	Kaolin	43.41	34.77	1.5	0.038	0.069	0.78	0.045	0.25	0.002	0.21	5.51	13.24	17.31	50
NCS DC 60123a	Kaolin	45.3	37.7	0.35	0.064	0.021	0.042	0.045	0.06	0.0018	0.16	0.76	15.26	14.81	50

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Number	Name	Chemical Composition(Percent)													Unit Size (in g)
		Fe_2O_3	SiO_2	Al_2O_3	MnO	FeO	P_2O_5	S	SO_3	TiO_2	K_2O	Na_2O	MgO	CaO	
NCS DC 60102	Clay	10.55	49.98	26.27	0.052	(0.080)	0.14		0.049	0.70	0.79	0.060	0.46	0.13	50
NCS DC 60104	Clay	0.33	53.67	31.32	0.020	(0.052)	0.053		0.023	0.030	1.15	2.55	0.083	1.80	50
NCS DC 60105	Clay	4.64	66.64	13.28	0.088	(0.80)	0.106		0.027	0.66	2.50	1.81	1.84	3.23	50
NCS DC 60106a	Shale	5.67	69.53	14.82	0.024	(0.40)	0.043		0.028	0.68	3.76	0.20	0.67	0.22	50
NCS DC 60107a	Limestone	0.11	1.09	0.24	0.0067		0.0081		0.018	0.010	0.084	0.017	0.81	54.03	50
NCS DC 60108a	Limestone	0.17	2.09	0.33	0.0089		0.0061		0.016	0.015	0.17	0.017	2.25	51.61	50
NCS DC 60112	Gypsum	0.16	1.68	0.34					51.91	0.016	0.094	0.065	1.74	39.24	50
NCS DC 60115	Gypsum	0.11	0.63	0.14					40.72	0.010	0.026	0.014	2.47	32.30	50
NCS DC 60116a	Siliceous Sand Ore	0.093	98.51	0.84	(0.0016)		(0.0041)			0.020	0.061	0.021	0.066	0.077	50
NCS DC 60117a	Siliceous Sand Ore	0.21	95.74	2.36	(0.0033)		(0.0076)			0.036	0.67	0.25	0.098	0.17	50
NCS DC 60119	Graphite Ore	6.73	49.84	12.93	0.084		0.13	1.18		0.57	2.54	1.60	6.10	9.37	50
NCS DC 60120	Graphite Ore	6.99	49.34	13.03	0.054		0.14	2.59		0.64	2.17	1.56	5.35	5.34	50
NCS DC 60121	Graphite Ore	1.48	10.34	5.60	0.022		0.16	0.14		0.55	0.99	0.23	0.50	0.74	50
NCS DC 60122	Kaolin	0.50	54.55	31.41	0.0032	(0.026)	0.099		0.53	0.69	0.34	0.015	0.12	0.052	50
NCS DC 60123	Kaolin	0.72	44.55	38.62	0.0054	(0.33)	0.21		0.12	0.39	0.049	0.069	0.068	0.16	50
NCS DC 60124	Siliceous Lime	0.10	50.50	0.39	0.096	0.28	0.052	(0.010)		0.022	0.14	0.052	0.95	40.39	50
NCS DC 60125	Nephelimite	1.37	60.64	20.05	0.050	0.28	0.020	(0.011)		0.12	5.06	8.97	0.13	0.52	50
NCS DC 60126	Nephelimite	0.33	39.42	29.67	0.031	1.24	0.072		(0.064)	0.14	4.72	12.59	0.92	5.98	50
NCS DC 60127	Pyrophyllite	1.94	66.84	23.58	0.0037		0.20		0.61	0.70	0.38	0.34	0.087	0.17	50
NCS DC 60128	Pyrophyllite	0.22	70.34	22.20	0.0040		0.11		0.17	0.18	0.028	0.043	0.041	0.066	50
NCS DC 60129	Brucite	0.49	2.69	0.053	0.036		0.12				0.0041	0.0066	61.43	2.51	50
NCS DC 60130	Brucite	0.40	4.47	0.067	0.033		0.12				0.0066	0.013	56.21	6.18	50
NCS DC 60131	Talcum	0.29	62.03	0.082	0.0015		0.14			0.0052	0.009	0.022	31.89	0.38	50
NCS DC 60132	Talcum	2.64	47.71	7.62	0.021		0.11			0.52	0.026	0.049	29.50	2.39	50
		$fsio_2$*	CO_2	H_2O^+	Cl	L.O.I	SrO	Cr_2O_3	A.U.M*	Ash	Vdatile	Co			
NCS DC 60102	Clay		(0.041)	(9.64)	0.0041	10.62									
NCS DC 60104	Clay		(0.051)	(8.64)	0.0029	8.81									
NCS DC 60105	Clay		1.65	(3.38)	0.011	5.10									
NCS DC 60106a	Shale		0.13	(3.71)	0.014	4.17									
NCS DC 60107a	Limestone	0.67	(43.12)		0.0028	43.12									
NCS DC 60108a	Limestone	1.38	(42.59)		0.0066	42.84									
NCS DC 60112	Gypsum		(4.02)	0.39	0.033	4.55	(0.27)								
NCS DC 60115	Gypsum		(5.44)	17.95	0.0032	23.60	(0.096)								
NCS DC 60116a	Siliceous Sand Ore					0.24		0.00034							
NCS DC 60117a	Siliceous Sand Ore					0.35		0.00054							
NCS DC 60119	Graphite Ore		3.60	2.60								2.91			
NCS DC 60120	Graphite Ore		0.67	2.80								9.91			
NCS DC 60121	Graphite Ore		0.28	1.98						20.78	2.72	76.50			
NCS DC 60122	Kaolin		(0.026)	11.72		11.94									
NCS DC 60123	Kaolin		(0.06)	14.77		15.00									
NCS DC 60124	Siliceous Lime			2.34		6.93									
NCS DC 60125	Nephelimite			1.78											
NCS DC 60126	Nephelimite	2.97													
NCS DC 60127	Pyrophyllite			4.15		5.48									
NCS DC 60128	Pyrophyllite			5.17		6.34									
NCS DC 60129	Brucite		8.08	(25.24)											
NCS DC 60130	Brucite		9.95	(23.22)											
NCS DC 60131	Talcum		0.34	4.73		5.14			(92.78)						
NCS DC 60132	Talcum		2.17	7.34		9.40			(83.13)						

*$fsio_2$ is free SiO_2 ; A. U. M is acid-unsolvable material.

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Number	Name	Chemical Composition(Percent)												Unit Size
		Fe_2O_3	SiO_2	Al_2O_3	SO_3	TiO_2	K_2O	Na_2O	MgO	CaO	L.O.I	B_2O_3	F	(in g)
NCS DC 61101	Soff Clay	0.86	55.90	28.57		1.21	1.54	1.74	0.30	0.70	8.72			50
NCS DC 61102	Potassium Feldspar	0.19	66.26	18.63		0.048	9.60	3.69	0.054	0.76	0.86			50
NCS DC 61103	Na-Ca-Si Glass	0.18	71.25	2.56	0.17	0.057	1.10	13.77	3.98	6.37	0.44			50
NCS DC 61104	Boron Silicate Glass	0.34	53.98	14.50		0.19	0.59	0.096	4.40	16.54	0.26	8.87	0.54	50
NCS DC 61105	Alumine	1.18	8.17	85.07		3.76	0.44	0.080	0.21	0.24	0.29			50
NCS DC 61106	Albite Cement	0.10	67.96	19.62		0.054	0.098	11.26	0.015	0.48	0.36			50

Number	Name	Chemical Composition(Percent)											Unit Size
		SiO_2	Al_2O_3	Fe_2O_3	TiO_2	CaO	MgO	SO_3	K_2O	Na_2O	I.R	L.O.I	(in g)
NCS DC 62101d	Porland	20.88	4.48	2.64	0.32	62.76	2.05	2.98	0.66	0.11	0.75	3.00	20
NCS DC 62102g	Cement	21.19	5.31	3.17	0.32	58.67	2.91	2.33	0.91	0.14		4.50	20
NCS DC 62103j	Cement Clinker	21.91	4.80	4.12	0.24	64.42	1.81	0.39	1.07	0.14	0.16	0.80	20
NCS DC 62104c	Cement Black Raw Meal	14.26	3.70	2.45	0.24	38.70	1.61	0.39	0.70	0.28		37.40	20
NCS DC 62105l	Cement raw meal	11.77	3.27	2.09	0.19	43.94	1.58	0.10	0.59	0.10		36.18	20

Number	Name	Chemical Composition(Percent)									Adhered	Crystallized	Indissoluble	Unit Size
		L.O.I	SiO_2	Al_2O_3	Fe_2O_3	TiO_2	CaO	MgO	SO_3	K_2O	Na_2O	water	water	material	(in g)
NCS DC 62106d	Gypsum	24.48	6.37	1.87	0.57	0.10	29.32	6.26	30.36	0.38	0.08	micro	11.56	9.01	20

Number	Name	Chemical Composition(Percent)												Unit Size
		SiO_2	Al_2O_3	Fe_2O_3	TiO_2	CaO	MgO	K_2O	Na_2O	L.O.I	SO_3	S	I.R	(in g)
NCS DC 62107b	Alumina	4.97	83.90	3.91	4.19	0.99	0.46	0.38	0.11	0.44				20
NCS DC 62108d	Clay	65.00	15.48	6.16	0.77	1.47	1.60	2.40	1.10	5.55	0.06			20
NCS DC 62109	Portland pozzolanic cement	32.67	6.52	3.54	0.16	47.57	1.86	1.43	0.85	2.44	2.59			20
NCS DC 62110a	Portland blast-furnace slag cement	23.48	6.26	2.39	0.43	57.4	3.31	0.59	0.17	3.68	2.02			20
NCS DC 62111a	Portland flay ash cement	24.31	8.93	4.9	0.33	46.52	1.9	0.61	0.32	9.09	2.47			20
NCS DC 62112a	Aluminate cement	7.95	51.15	1.91	2.03	34.56	0.63	0.13	0.04	0.68		0.1		20
NCS DC 62113a	Granulated balst-furnace slag for cement	34.93	12.23	1.26	1.06	35.62	10.66	0.54	0.42	1.05	1.17	0.61		20
NCS DC 62114a	Pozzolana in cement industry	57.53	24.2	5.1	1.07	2.83	1.24	3.05	1.42	2.99	0.08			20
NCS DC 62115a	fly ash cement industry	48.93	36.62	4.37	1.46	4.42	0.84	0.57	0.17	1.76	0.35			20
NCS DC 62116a	Composite portland cement	16.34	4.01	2.22	0.22	57.86	2.28	0.55	0.11	13.86	2.3			20
NCS DC 62117	white portland cement	20.49	4.61	0.26	0.12	65.71	0.14	0.05	0.05	6.43	1.9			20
NCS DC 62118	moderate heat portland cement	21.73	4.75	4.12	0.23	60.99	4.37	0.43	0.12	0.81	2.27		1.18	20

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Number	Name	Chemical Composition(Percent) Pozzolana or coal ash	Slag	Limestone	CO_2 (not solved slag)	Cl-	Unit Size (in g)
NCS DC 62119c	Contet of mixed materials of ordinary portland cement	4.5	5.8	1.2	0.98		20
NCS DC 62120	Contet of mixed materials of portland blast-furnace slag cement	0.5	18.5	7	3.5	97.5	20
NCS DC 62121a	Chloride content of cement raw meal					0.029	20
NCS DC 62122c	Chloride content of cement					0.012	20

Number	Name	Chemical Composition(Percent) SiO_2	Al_2O_3	Fe_2O_3	TiO_2	CaO	MgO	SO_3	K_2O	Na_2O	L.O.I	F	CaF_2	Unit Size (in g)
NCS DC 62123	Sulphoaluminate cement clinker	8.56	32.6	2.21	1.51	43.4	1.37	9.55	0.22	0.09	0.41			20
NCS DC 62124	Sulphoaluminate cement raw meal	5.09	22.29	1.34	1.07	33.05	1.21	7.07	0.14	0.06	28.21			20
NCS DC 62125a	Cement contain F											0.18	(0.37)	20

Number	Name	Chemical Composition(Percent) Loss	$TCaCO_3$	CaO	Fe_2O_3	F	Unit Size (in g)
NCS DC 62126b	Black raw meal $CaCo_3$ titrmetric value	37.46	70.9	38.89	2.74	0.15	20

Number	Name	Chemical Composition(Percent) Remain after through 80 ymsieve	Blaine	Density	Unit Size (in g)
NCS DC 62127g	Portland Cement Fineness and Blaine Std	2.03%	354.7m^2/kg	3.16g/cm^3	200

Number	Name	Chemical Composition(Percent) SiO_2	Al_2O_3	Fe_2O_3	TiO_2	CaO	MgO	SO_3	K_2O	Na_2O	L.O.I	Unit Size (in g)
NCS DC 62128C1	Series of Cement for XRF Analysis	25.49	6.96	3.31	0.43	51.18	3.94	3.24	1.07	0.42	3.61	20
NCS DC 62128C2	Series of Cement for XRF Analysis	24.1	6.93	3.2	0.42	53.59	3.7	3.18	1.06	0.4	3.25	20
NCS DC 62128C3	Series of Cement for XRF Analysis	23.78	6.56	3.19	0.41	54.14	3.47	3.13	1	0.39	3.82	20
NCS DC 62128C4	Series of Cement for XRF Analysis	23.3	6.33	3.05	0.4	55.5	3.28	2.92	0.94	0.34	3.58	20
NCS DC 62128C5	Series of Cement for XRF Analysis	23.13	6.1	3	0.39	57.08	3.13	2.82	0.89	0.29	3.05	20
NCS DC 62128C6	Series of Cement for XRF Analysis	22.8	5.82	2.91	0.38	58.14	2.93	2.66	0.85	0.26	2.97	20
NCS DC 62128C7	Series of Cement for XRF Analysis	22.56	5.55	2.83	0.37	59.44	2.66	2.44	0.79	0.23	2.86	20
NCS DC 62128C8	Series of Cement for XRF Analysis	22.27	5.32	2.74	0.36	60.63	2.47	2.37	0.75	0.19	2.8	20
NCS DC 62128C9	Series of Cement for XRF Analysis	22.02	5.09	2.69	0.34	61.5	2.26	2.16	0.68	0.17	2.87	20
NCS DC 62128C10	Series of Cement for XRF Analysis	21.81	4.78	2.58	0.33	62.65	2.07	2.05	0.62	0.13	2.84	20
NCS DC 62128C11	Series of Cement for XRF Analysis	21.45	4.46	2.49	0.32	64.01	1.85	1.83	0.57	0.1	2.65	20

Number	Name	Chemical Composition(Percent) SiO_2	Al_2O_3	Mg	CaO	TiO_2	MnO	Na_2O	K_2O	S	Li	Rb	Ba	TFe (Fe_2O_3)	Unit Size (in g)
NCS DC 70001	Copper Ore	9.27	1.73	3.91	9.61	0.079	0.60	0.044	0.071	0.72				55.58	50
NCS DC 70002	Copper Ore	53.26	15.18	1.30	4.95	0.50	0.12	3.21	2.71	0.14			(0.08)	12.25	50
NCS DC 70003	Lead Ore	43.63	12.88	1.62	19.51	0.53	1.40	1.61	1.42	0.86				4.37	50
NCS DC 70004	Lead Ore	30.51	8.95	2.06	34.56	0.44	1.53	0.066	0.82	0.38				3.79	50
NCS DC 70005	Zinc Ore	82.95	2.80	0.082	1.91	0.017	0.026	0.56	0.99	2.87				3.50	50
NCS DC 70006	Molybdenum Ore	34.10	3.46	0.86	31.44	0.13	1.40	0.075	0.046	1.64				21.34	50
NCS DC 70008	Tungsten Ore	13.27	8.24	1.45	37.73	0.079	0.97	0.16	1.94	3.12	(0.02)	(0.08)		7.79	50
NCS DC 70009	Tungsten Ore	71.27	11.15	0.14	4.17	0.044	0.090	0.12	1.58	1.90	(0.03)	(0.05)		5.60	50

		Cu	Pb	Zn	As	Sn	W	Mo	F
NCS DC 70001	Copper Ore	1.15		0.059					0.079
NCS DC 70002	Copper Ore	0.19		0.013					0.080
NCS DC 70003	Lead Ore	0.20	4.17	0.062					0.27
NCS DC 70004	Lead Ore	0.035	0.61	0.092					0.23
NCS DC 70005	Zinc Ore	0.71	0.25	2.75					1.20
NCS DC 70006	Molybdenum Ore						0.36	1.51	4.08
NCS DC 70008	Tungsten Ore	0.079	0.26	0.29	0.18	0.14	0.015		9.91
NCS DC 70009	Tungsten Ore	0.096		0.103		0.17	0.22	0.098	4.84

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Number	Name	Chemical Composition(μg/g)													
		Ag	As	Cu	Ga	Ge	Li	Pb	Sc	Zn	Cd	Sb	Ce	Dy	Eu
NCS DC 70001	Copper Ore	3.9	4.2		22.6	0.89	(9)	9.1	1.8		0.42	0.36	13.2	1.1	0.28
NCS DC 70002	Copper Ore	0.70	1.5		22.6	0.93	(15)	13.0	5.4		0.14	0.23	72.6	2.4	1.3
NCS DC 70003	Lead Ore	14.7	85.1		16.7	0.90	(19)		7.5		3.2	39.3	78.3	3.0	1.2
NCS DC 70004	Lead Ore	5.6	43.2		11.7	0.93	(18)		8.1		2.6	12.0	66.8	3.1	0.82
NCS DC 70005	Zinc Ore	13.5	12.4		8.0	1.4	(86)		0.33		29.3	1.1	2.3	0.47	0.06
NCS DC 70006	Molybdenum Ore	0.09	1.6	93.6	25.1	19.0	(3.2)	18.7	3.4	65.5	0.12	1.2	20.8	1.8	0.59
NCS DC 70008	Tungslen Ore	8.3			17.8	2.5			1.8		26.1	5.1	10.0	0.46	0.15
NCS DC 70009	Tungslen Ore	1.8	69.9		16.5	11.2		81.2	5.4		0.94	3.1	60.3	20.7	0.17

		Chemical Composition(μg/g)												
		Gd	Ho	La	Lu	Nd	Sm	Tb	Tm	Yb	Er	Pr	Y	Co
NCS DC 70001	Copper Ore	1.1	0.26	7.5	0.16	4.7	1.0	0.21	0.11	0.89	0.78	1.4	7.3	76.0
NCS DC 70002	Copper Ore	3.6	0.48	40.3	0.20	29.4	5.1	0.48	0.18	1.2	1.3	8.1	11.8	16.9
NCS DC 70003	Lead Ore	3.7	0.61	40.5	0.24	28.2	5.1	0.58	0.23	1.5	1.5	8.1	15.4	14.7
NCS DC 70004	Lead Ore	3.6	0.65	31.2	0.25	23.4	4.6	0.60	0.26	1.7	1.6	6.2	16.2	15.7
NCS DC 70005	Zinc Ore	0.31	0.13	1.3	0.08	0.92	0.36	0.10	0.05	0.42	0.28	0.30	4.5	8.7
NCS DC 70006	Molybdenum Ore	1.9	0.36	7.1	0.16	11.3	2.1	0.34	0.14	1.0	1.0	3.0	11.4	11.8
NCS DC 70008	Tungslen Ore	0.64	0.11	5.0	0.06	4.0	0.79	0.15	0.04	0.28	0.23	1.1	2.8	2.7
NCS DC 70009	Tungslen Ore	14.8	4.5	23.7	2.4	32.9	12.5	3.3	2.2	14.9	13.1	7.9	128	3.7

		Chemical Composition(μg/g)												
		Ni	Bi	Sn	W	Mo	In	Se	Te	Ti	Th	Cr	Rb	R_E
NCS DC 70001	Copper Ore	9.6	1.5	11.1	4.1	1.4	1.4	5.1	0.62	0.06	0.90	(7)		
NCS DC 70002	Copper Ore	5.6	0.43	3.8	3.9	2.4	0.25	0.89	0.13	0.36	8.8	(10)	(94)	
NCS DC 70003	Lead Ore	27.7	15.6	3.0	17.6	1.6	0.12	1.7	3.9	0.43	10.2	(29)	(55)	
NCS DC 70004	Lead Ore	34.5	12.5	2.9	30.6	1.3	0.09	0.81	1.2	1.0	10.5	(41)	(74)	
NCS DC 70005	Zinc Ore	5.5	56.4	6.1	3.4	2.8	0.23	2.3	0.17	0.49	(1.1)	(62)	(73)	
NCS DC 70006	Molybdenum Ore	17.8	2.2	86.7			2.9	2.1	0.40	0.06	2.3	(24)		(0.35)
NCS DC 70008	Tungslen Ore	4.1	110			4.2	8.7	0.39	0.66	5.0	2.2	(6.5)		(0.12)
NCS DC 70009	Tungslen Ore	2.8	680				1.3	0.96	2.9	1.8	28.3	(30)		(0.08)

		Chemical Composition(μg/g)
		Cs
NCS DC 70002	Copper Ore	(10)
NCS DC 70003	Lead Ore	(6)
NCS DC 70004	Lead Ore	(2.3)
NCS DC 70008	Tungslen Ore	(36)
NCS DC 70009	Tungslen Ore	(41)

Number	Name	Chemical Composition(Percent)									Unit Size
		SiO_2	Al_2O_3	Fe_2O_3	TiO_2	CaO	MgO	SO_3	K_2O	Na_2O	L.O.I	(in g)
NCS DC62004	Iron Tailings in Cement Industry	19.69	4.44	16.95	1.01	41.3	8.7	0.28	0.2	0.21	3.97	20
NCS DC62005	Sandstone in Cement Industry	78.07	5.14	4.74	0.28	4.51	0.69	0.03	1.02	0.25	3.46	20
NCS DC62006	Water-soluble Chromium(VI) content of Cement											1000
NCS DC62007	Sand in Cement Industry	98.13	0.43	1.02	(0.02)	(0.09)	(0.06)	(0.03)	(0.09)	(0.03)		20
NCS DC62008	Desulfurization Gypsum	11.35	3.75	1.08	0.22	29.46	5.06	26.96	0.64	0.56	19.59	20
NCS DC62009	Phosphorus Gypsum	13.3	0.42	0.12		27.94	0.02	39.01	0.11	0.06	18.69	20
NCS DC62010	Granulated electric furnace Phosphorous slag	39.47	3.85	0.95	0.33	47.03	0.72	1.02	0.44	0.08	0.07	20
NCS DC62011	Silica fume	91.85	0.93	0.61	0.02	0.83	1.07	0.53	1.43	0.66	1.85	15

		Cr^{6+}(mg/kg)	Adhered water	Crystallized water	SO_2	Cl	F	P_2O_5	Ss	F
NCS DC62006	Water-soluble Chromium(VI) content of Cement	5.33								
NCS DC62008	Desulfurization Gypsum		0.2	10.5	0.61	0.059	0.1	0.18		
NCS DC62009	Phosphorus Gypsum		0.12	17.3		0.002		0.99	0.1	(0.09)
NCS DC62010	Granulated electric furnace Phosphorous slag							3.68		

		Water soluble P_2O_5	Water soluble K_2O	Water soluble Na_2O	Water soluble F	pH
NCS DC62009	Phosphorus Gypsum	-0.393	-0.034	-0.038	-0.044	-4.6

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Number	Name	Chemical Composition(%) f-CaO	Unit Size (in g)
NCS DC62014	Free calcium in cement clinker	3.08	20

Number		Name	Chemical Composition(%) SiO_2	Al_2O_3	Fe_2O_3	TiO_2	CaO	MgO	SO_3	K_2O	Na_2O	Cl-	L.O.I	Unit Size (in g)
	R1	Cement raw meal	10.5	2.06	1.58	0.16	46	1.13	0.05	0.3	0.06	0.008	37.87	20
	R2	Cement raw meal	10.66	2.2	1.63	0.17	45.39	1.36	0.15	0.33	0.1	0.011	37.67	20
	R3	Cement raw meal	11.31	2.44	1.76	0.17	44.63	1.51	0.18	0.38	0.15	0.013	37.17	20
	R4	Cement raw meal	11.92	2.64	1.98	0.18	43.85	1.63	0.23	0.41	0.19	0.016	36.67	20
	R5	Cement raw meal	12.47	2.84	2.09	0.19	43.17	1.77	0.36	0.47	0.22	0.018	36.09	20
NCS DC62129	R6	Cement raw meal	13.56	3.14	2.46	0.2	41.91	1.83	0.39	0.52	0.26	0.019	35.29	20
	R7	Cement raw meal	14	3.33	2.51	0.22	41.16	2.06	0.41	0.57	0.3	0.021	35.13	20
	R8	Cement raw meal	14.52	3.48	2.64	0.23	40.44	2.25	0.53	0.62	0.34	0.023	34.67	20
	R9	Cement raw meal	15.33	3.73	2.84	0.24	39.37	2.41	0.67	0.67	0.39	0.027	34.11	20
	R10	Cement raw meal	16.23	3.96	3.17	0.25	38.3	2.56	0.7	0.72	0.43	0.029	33.33	20
	R11	Cement raw meal	16.71	4.16	3.16	0.26	37.61	2.74	0.7	0.75	0.46	0.031	33.13	20

Number	Name	Chemical Composition(μg/g) Ag	As	Au*	B	Ba	Be	Bi	Br	Cd	Cl	Co	Cr	Cs	Unit Size (in g)
NCS DC 70317	Rock	0.32	37.3	6.2	30.0	369	2.67	1.22	0.9	0.57	69.1	9.8	39.8	17.2	60
NCS DC 70318	Rock	0.06	18.0	1.4	30.6	437	3.32	0.49	0.9	0.10	207	6.7	47.6	20.2	60
NCS DC 70319	Rock	0.21	19.6	1.2	66.2	470	2.31	0.80	1.4	0.19	244	7.6	22.6	15.0	60
NCS DC 70320	Rock	0.14	12.3	1.1	41.5	483	2.56	0.70	1.1	0.17	152	7.3	24.4	13.0	60

		Cu	F	Ga	Ge	Hf	Hg	Li	Mn	Mo	Nb	Ni	P	Pb
NCS DC 70317	Rock	247	424	14.4	1.19	5.7	0.034	29.7	614	6.6	12.0	20.8	389	127
NCS DC 70318	Rock	16.2	456	16.3	1.33	6.7	0.030	36.6	422	0.59	14.7	16.9	420	35.8
NCS DC 70319	Rock	151	459	15.8	1.13	9.5	0.028	26.1	527	7.0	16.1	9.5	484	46.8
NCS DC 70320	Rock	49.0	505	16.9	1.12	5.5	0.012	25.6	451	2.7	10.5	11.1	564	45.4

		Pb	Sc	Sb	Se	Sn	Sr	Ta	Te	Th	Ti(%)	Tl	U	V
NCS DC 70317	Rock	141	6.5	4.44	0.19	3.3	185	1.1	0.21	17.5	0.217	0.96	3.4	45.7
NCS DC 70318	Rock	180	7.3	0.84	0.05	3.8	165	1.8	(0.03)	25.1	0.253	1.0	4.8	52.5
NCS DC 70319	Rock	154	6.2	2.70	0.18	2.7	256	1.8	0.10	25.5	0.344	1.1	4.8	74.7
NCS DC 70320	Rock	136	6.0	1.27	0.11	2.0	404	1.2	0.07	16.7	0.274	0.91	3.6	59.4

		W	Zn	Zr	I	In	Pd*	Pt*	S	La	Ce	Pr	Nd	Sm
NCS DC 70317	Rock	9.2	116	188	(0.4)	(0.07)	(0.3)	(0.4)	(117)	37.9	72.0	7.89	29.0	5.39
NCS DC 70318	Rock	4.1	54.1	225	(0.3)	(0.04)	(0.4)	(0.3)	(48)	47.8	89.6	9.78	35.8	6.62
NCS DC 70319	Rock	9.3	62.9	299	(0.3)	(0.04)	(0.3)	(0.3)	(400)	42.6	78.1	8.57	30.6	5.42
NCS DC 70320	Rock	4.2	61.1	184	(0.3)	(0.04)	(0.3)	(0.3)	(183)	32.5	60.5	6.94	25.7	4.49

		Eu	Gd	Tb	Dy	Ho	Er	Tm	Yo	Lu	Y	SiO_2*	Al_2O_3*	Fe_2O_3(T)*
NCS DC 70317	Rock	0.96	4.90	0.76	4.24	0.83	2.47	0.38	2.46	0.36	23.0	64.22	10.84	3.07
NCS DC 70318	Rock	1.07	5.83	0.91	4.92	0.97	2.90	0.46	2.83	0.44	26.5	73.37	12.73	3.19
NCS DC 70319	Rock	0.97	4.57	0.70	3.91	0.79	2.39	0.38	2.55	0.39	21.6	71.23	13.22	4.11
NCS DC 70320	Rock	0.96	3.74	0.54	2.94	0.58	1.64	0.25	1.63	0.25	15.3	70.36	13.95	3.20

		MgO*	CaO*	Na_2O*	K_2O*	TiO_3*	MnO*	P_2O_5*
NCS DC 70317	Rock	0.87	8.19	1.74	2.86	0.366	0.079	0.090
NCS DC 70318	Rock	1.07	1.32	2.09	3.56	0.422	0.055	0.097
NCS DC 70319	Rock	0.70	1.40	2.72	3.65	0.589	0.069	0.111
NCS DC 70320	Rock	0.93	2.40	3.26	3.18	0.461	0.059	0.129

Value with * is in percent

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Number	Name	Chemical Composition(μg/g)													Unit Size (in g)
		Ag	As	Au*	B	Ba	Be	Bi	Br	Cd	Cl	Co	Cr	Cs	
NCS DC 70323	Rock	0.10	54.6	2.9	134	475	3.88	0.48	1.3	0.08	71	13.2	59.0	42.5	60
NCS DC 70324	Rock	0.07	24.9	1.4	143	472	5.62	0.45	0.9	0.08	63	10.3	55.2	16.6	60
		Ou	F	Ga	Ge	Hf	Hg	Li	Mn	Mo	Nb	Ni	P	Pb	
NCS DC 70323	Rock	44.0	555	17.1	1.66	6.3	0.066	69.8	608	0.66	15.5	37.2	542	27.7	
NCS DC 70324	Rock	27.7	457	17.6	1.63	7.4	0.053	66.8	392	0.65	17.2	27.8	625	32.1	
		Pb	Sc	Sb	Se	Sn	Sr	Ta	Te	Tn	Ti(%)	Tl	U	V	
NCS DC 70323	Rock	110	10.5	10.4	0.39	4.6	327	1.2	0.15	15.6	0.339	0.66	2.1	85.0	
NCS DC 70324	Rock	131	9.3	1.55	0.33	6.4	157	1.4	0.07	14.9	0.364	0.69	2.3	77.3	
		W	Zn	Zr	l	ln	Pd*	Pt*	S	La	Ce	Pr	Nd	Sm	
NCS DC 70323	Rock	6.5	77.1	210	(0.5)	(0.07)	(0.8)	(0.6)	(528)	42.6	90.1	10.1	36.3	7.19	
NCS DC 70324	Rock	2.6	76.4	247	(0.5)	(0.06)	(7)	(0.4)	(160)	40.0	84.4	9.42	34.8	6.69	
		Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	La	Y	SiO_2*	Al_2O_3*	Fe_2O_3(T)*	
NCS DC 70323	Rock	1.40	6.58	1.01	5.56	1.06	2.98	0.44	2.67	0.38	29.5	60.95	11.89	5.47	
NCS DC 70324	Rock	1.29	6.05	0.93	5.10	0.99	2.75	0.41	2.57	0.37	25.9	70.16	12.79	4.82	
		MgO*	CaO*	Na_2O*	K_2O*	TiO_2*	MnO*	P_2O_5*							
NCS DC 70323	Rock	0.78	7.77	1.09	2.01	0.558	0.078	0.124							
NCS DC 70324	Rock	0.62	2.29	1.48	2.67	0.616	0.051	0.142							
Value with * is in percent															

Section 4 Mineral & Geology(Powder)

Number	Elements (10-6)										Unit Size (in g)
	Ag	As	Bi	Cd	Co	Cu	Ga	Ge	In	Mo	
DC70325	103±6	0.111*±0.007*	71.4±2.8	0.021*±0.001*	79.5±3.8	3.40*±0.07*	11.68±0.96	1.41Δ 1.05–1.5	5.60±0.42	54.8±3.0	50
DC70326	8.77±0.96	0.050*±0.007*	5.67±0.48	2.18±0.22	0.140*±0.007*	1.25*±0.05*	6.03±0.72	1.02±0.12	0.35±0.03	12.4±1.2	50
DC70327	125±8	0.055*±0.007*	1.78*±0.11*	44.5±4.4	18.1±0.8	0.211*±0.014*	15.32±0.72	2.76±0.26	6.11±0.40	0.361*±0.019*	50
DC70328	43.2±2.6	0.92*±0.05*	0.033*±0.003*	31.0±3.2	2.62±0.22	0.229*±0.011*	13.2±1.1	1.22±0.08	36.7±3.2	75±4	50
	Ni	Pb	Sb	Sc	Se	Sn	Te	Th	Tl	U	
DC70325	23.8±1.2	2.96*±0.07*	0.014*±0.002*	3.82±0.34	29.6±1.8	15.4±0.7	7.01±0.39	4.96±0.46	1.84±0.16	3.18±0.20	
DC70326	5.30*±0.19*	(78)	35.7±3.4	9.08±0.62	59.5±5.2	2.49±0.38	4.27±0.36	1.31±0.17	0.92±0.11	0.32±0.04	
DC70327	0.065*±0.004*	0.68*±0.05*	34.5±1.4	17.8±1.1	45.6±1.7	0.056*±0.008*	82.9±4.6	18.86±0.96	10.0±1.2	68.5±3.6	
DC70328	10.2±1.1	2.08*±0.04*	0.012*±0.001*	0.91±0.09	3.78±0.36	9.56*±0.40*	0.34±0.11	0.83±0.09	0.45±0.04	29.8±1.2	
	W	Zn*	Zr	Re	La	Ce	Pr	Nd	Sm	Eu	
DC70325	15.7±1.6	3.47±0.06	96±4		15.74±0.96	30.8±2.6	3.42±0.17	13.14±0.72	2.49±0.19	0.58±0.07	
DC70326	7.7±1.1	0.023±0.002	42.2±3.4		5.93±0.42	12.9±1.3	1.49±0.12	6.4±0.7	1.34±0.11	0.34±0.03	
DC70327	7.96*±0.32*	0.248±0.008	101±6	0.35±0.03	29.8±2.0	(58.1)	8.58±0.38	34.1±1.8	9.26±0.54	0.79±0.08	
DC70328	0.032*±0.007*	0.640±0.024	50±5		10.4±0.8	16.9±1.1	1.84±0.13	5.9±0.5	1.10±0.09	0.14±0.01	
	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y		
DC70325	2.20±0.14	0.33±0.03	1.78±0.12	0.35±0.03	1.01±0.06	0.15±0.02	0.98±0.06	0.15±0.02	9.26±0.42		
DC70326	1.20±0.09	0.20±0.02	1.14±0.09	0.23±0.02	0.61±0.05	0.09±0.01	0.54±0.05	0.09±0.01	5.75±0.46		
DC70327	7.44±0.72	1.55±0.13	10.3±0.5	2.06±0.14	6.53±0.34	1.14±0.06	9.28±0.60	1.36±0.16	66.3±4.6		
DC70328	0.96±0.13	0.14±0.02	0.70±0.05	0.13±0.01	0.39±0.03	0.065±0.007	0.44±0.03	0.073±0.008	3.60±0.34		
	Main content (10-2)										
	SiO_2	Al_2O_3	TFe_2O_3	MgO	CaO	Na_2O	K_2O	TiO_2	MnO	P_2O_5	
DC70325	38.15±0.98	5.78±0.16	20.10±0.42	1.12±0.05	5.44±0.26	0.648±0.022	1.12±0.05	0.263±0.014	0.31±0.02	0.055±0.008	
DC70326	27.9±1.8	4.03±0.28	30.0±1.7	9.67±0.64	3.49±0.24	0.485±0.032	0.320±0.024	0.327±0.024	0.070±0.009	0.067Δ 0.055-0.096	
DC70327	48.2±1.7	8.43±0.34	8.44±0.36	1.06±0.05	9.18±0.40	0.96±0.04	1.85±0.07	0.222±0.016	1.20±0.06	0.153±0.014	
DC70328	0.98±0.06	0.45±0.04	68.7±2.6	0.35±0.02	1.69±0.13	0.023±0.007	0.017±0.003	0.046±0.007	0.47±0.04	0.052±0.005	
	F	S									
DC70325	0.074±0.003	13.99±0.32									
DC70326	0.021±0.003	17.36±0.60									
DC70327	2.37±0.14	2.40±0.11									
DC70328	0.036±0.004	4.12±0.12									

Value with * is in percent

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Number	Elements (10-6)										Unit Size (in g)
	Ag	As	Bi	Cd	Co	Cu	Ga	Ge	In	Mo	
DC70329	0.67±0.08	15.22*±0.96*	12.86±0.94	2.18±0.22	2.01±0.28	162±11	1.45±0.17	0.39±0.06	2.37±0.28	18.2±1.8	50
DC70330	94.6±4.6	0.056*±0.003*	3.10±0.38	0.012*±0.001*	17.69±0.94	0.044*±0.003*	30.7±1.9	15.35±0.75	0.77±0.09	0.012*±0.001*	50
DC70331	7.01±0.66	55.0±3.6	27.2±1.8	2.02±0.36	33.2±1.7	0.29*±0.02*	15.4±0.9	1.82±0.11	1.29±0.32	9.09*±0.28*	50
DC70332	2.61±0.38	0.212*±0.014*	5.56±0.58	1.45±0.13	26.7±1.7	52.3±2.6	7.10±0.64	2.23±0.16	0.038±0.008	10.3±1.8	50
	Ni	Pb	Sb	Sc	Se	Sn	Te	Th	Tl	U	
DC70329	10.0±0.6	0.015*±0.002*	0.050*±0.004*	1.02±0.14	45.3±4.4	0.051*±0.008*	0.51±0.07	0.52±0.06	8.7±1.0	3.02±0.32	
DC70330	16.8±1.4	7.90*±0.15*	0.011*±0.001*	4.85±0.36	1.96±0.34	16.7±0.7	0.34±0.05	4.53±0.62	0.97±0.07	2.99±0.34	
DC70331	51.1±3.2	(97.8)	2.97±0.58	9.24±0.52	7.55±0.38	12.12±0.58	1.09±0.46	5.11±0.60	1.37±0.16	3.20±0.30	
DC70332	17.4±2.6	(97)	8.55*±0.36*	4.38±0.28	94.5±8.2	2.04±0.22	0.44±0.19	3.27±0.54	0.50±0.05	1.23±0.13	
	W	Zn*	Zr	Re	La	Ce	Pr	Nd	Sm	Eu	
DC70329	11.7±1.2	0.040±0.003	4.15±0.36		1.91±0.17	3.62±0.28	0.43±0.05	1.58±0.15	0.34±0.05	0.073±0.008	
DC70330	0.028*±0.002*	4.72±0.12	(79.8)		16.7±1.4	31.8±2.4	3.69±0.23	13.43±0.86	2.59±0.24	0.58±0.08	
DC70331	0.037*±0.007*	0.027±0.002	102±11	10.9±0.7	24.4±1.9	44.3±3.8	5.59±0.26	20.0±1.5	3.52±0.50	0.88±0.12	
DC70332	0.031*±0.003*	0.027±0.003	53.5±5.2		14.8±1.7	25.8±1.8	3.18±0.20	12.29±0.74	2.52±0.17	0.50±0.07	
	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y		
DC70329	0.29±0.04	0.042±0.008	0.20±0.02	0.035±0.004	0.12±0.03	0.017±0.003	0.10±0.02	0.019±0.004	1.09±0.11		
DC70330	2.28±0.18	0.33±0.03	1.86±0.10	0.37±0.03	1.08±0.04	0.16±0.02	1.08±0.08	0.17±0.02	10.09±0.46		
DC70331	3.13±0.28	0.46±0.05	2.37±0.28	0.48±0.04	1.37±0.13	0.20±0.03	1.35±0.09	0.21±0.03	13.73±0.98		
DC70332	2.13±0.19	0.36±0.03	2.21±0.18	0.45±0.04	1.30±0.11	0.20±0.02	1.27±0.11	0.20±0.03	12.3±1.0		
	Main content (10-2)										
	SiO_2	Al_2O_3	TFe_2O_3	MgO	CaO	Na_2O	K_2O	TiO_2	MnO	P_2O_5	
DC70329	2.30±0.16	0.44±0.08	3.87±0.26	12.20±0.82	23.9±1.6	0.022±0.003	0.049±0.005	0.020±0.005	0.027±0.002	0.025±0.003	
DC70330	43.2±1.2	7.04±0.26	13.17±0.32	1.20±0.06	6.24±0.22	1.11±0.04	1.83±0.07	0.276±0.022	0.170±0.008	0.077±0.004	
DC70331	52.7±1.8	11.05±0.38	6.43±0.28	2.04±0.09	3.85±0.18	2.14±0.09	2.28±0.10	0.41±0.04	0.110±0.008	0.169±0.028	
DC70332	65.4±3.6	4.94±0.30	2.22±0.14	2.17±0.15	4.24±0.26	0.089±0.009	1.55±0.11	0.180±0.017	0.112±0.010	0.070±0.006	
	F	S									
DC70329	0.015±0.002	7.18±0.19									
DC70330	0.45±0.03	11.45±0.24									
DC70331	0.37±0.08	7.97±0.22									
DC70332	0.060±0.004	3.59±0.15									

Value with * is in percent

Number	Name	Chemical Composition (Percent)													Unit Size (in g)
		SiO_2	Al_2O_3	Fe_2O_3	FeO	MgO	CaO	TiO_2	P_2O_3	MnO	Na_2O	K_2O	H_2O	CO_2	
NCS DC 71301	Rock	54.48	17.72	6.04	1.23	0.65	1.39	0.48	0.018	0.12	7.16	7.48	2.38	0.26	50
NCS DC 71302	Rock	63.06	16.1	4.51	0.19	0.84	2.47	0.8	0.36	0.089	3.06	5.17	1.79	1.03	50
NCS DC 71303	Rock	59.68	16.56	2.64	3.08	2.81	4.72	0.77	0.34	0.094	4.05	3.50	0.88	0.15	50
NCS DC 71304	Rock	35.69	14.14	9.90	13.36	5.25	9.86	7.69	0.028	0.193	2.11	0.15	1.09	0.12	50
NCS DC 71305	Rock	72.78	12.96	1.14	1.86	0.16	0.59	0.30	0.045	0.14	2.57	5.43	1.18	0.52	50
NCS DC 71306	Rock	0.62	0.10	0.04	0.15	21.8	30.02	0.015	0.006	0.010	(0.003)	0.038	(0.34)	46.77	50
		S	Cl	F	C(T)										
NCS DC 71301	Rock	0.011	0.059	0.048	(0.093)										
NCS DC 71302	Rock	0.023	0.016	0.112	(0.29)										
NCS DC 71303	Rock	0.011	0.023	0.084	(0.057)										
NCS DC 71304	Rock	0.37	0.006	0.006	(0.039)										
NCS DC 71305	Rock	0.009	(0.002)	0.13	(0.15)										
NCS DC 71306	Rock		0.012	0.014	(12.88)										

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Number	Name	Chemical Composition(μg/g)													Unit Size (in g)
		Ta	Te	Th	Tl	U	Ag	As	W	B	Ba	Cu	Zr	Ga	
NCS DC 71301	Rock	1.96	0.012	79.3	0.76	14.6	(0.033)	6.27	1.24	31.8	251	11.8	0.154*	35.8	
NCS DC 71302	Rock	1.42	(0.007)	16.7	1.02	3.04	0.17	5.96	1.62	10.8	1053	9.1	335	19.8	
NCS DC 71303	Rock	0.62	0.011	10.9	0.39	1.40	0.066	0.4	0.19	3.92	0.190*	8.8	224	20.8	
NCS DC 71304	Rock	(0.56)	0.010	(0.28)	0.07	(0.086)	0.05	(0.21)	(0.10)	1.84	86.2	28.3	29	23.7	
NCS DC 71305	Rock	2.41	(0.0009)	(27.1)	0.83	4.83	0.08	0.7	1.10	3.5	506	10.9	403	20.5	
NCS DC 71306	Rock	(0.18)	(0.012)	0.11	(0.070)	0.16	0.04	0.23	0.11	20.5	44.3	30.2	3.0	(0.21)	
		Ge	Hg	Li	Pb	Sc	Sr	Zn	Br	Cd	Sb	Ce	Dy	Eu	V
NCS DC 71301	Rock	0.95	0.005	32.9	196	2.22	0.016*	112	1.21	0.07	0.15	242	4.70	2.35	179
NCS DC 71302	Rock	1.11	0.014	17.5	97.7	7.52	318	164	(0.55)	0.61	1.34	117	5.32	1.96	64.3
NCS DC 71303	Rock	1.00	0.035	16.2	19.8	10.3	1198	85.4	(0.34)	0.08	0.06	112	3.20	1.91	104
NCS DC 71304	Rock	1.06	(0.005)	1.94	(5.16)	22.5	612	118	(0.32)	0.09	(0.04)	4.2	1.11	0.74	768
NCS DC 71305	Rock	1.17	0.005	12.7	33.3	5.15	43.0	86.3	(0.25)	0.14	0.38	163	8.19	1.18	3.8
NCS DC 71306	Rock	0.15	(0.004)	2.30	(4.44)	0.098	27.0	11.7	0.84	0.07	(0.04)	3.58	0.19	0.05	(21)
		Gd	Ho	La	Lu	Nd	Sm	Tb	Tm	Yb	Er	Pr	Y	Be	
NCS DC 71301	Rock	7.0	0.96	14.9	0.43	65.1	9.7	1.02	0.46	2.56	2.48	22.5	24.7	17.2	
NCS DC 71302	Rock	6.54	1.10	62.5	0.49	47.2	8.63	0.99	0.5	3.15	2.93	13.2	28.0	3.64	
NCS DC 71303	Rock	5.09	0.60	60.5	0.24	48.1	7.74	0.68	0.26	1.56	1.57	13.2	15.5	2.11	
NCS DC 71304	Rock	1.31	0.20	1.71	0.06	4.10	1.22	0.20	0.09	0.36	0.47	0.84	4.9	(0.98)	
NCS DC 71305	Rock	9.47	1.64	82.7	0.67	64.5	11.7	1.51	0.73	4.51	4.31	18.4	42.5	4.09	
NCS DC 71306	Rock	0.18	0.04	1.34	0.019	1.39	0.25	0.05	(0.040)	0.09	0.09	(0.44)	(1.40)	(0.22)	
		Bi	Co	Cr	Cs	Hf	I	In	Mo	Nb	Ni	Pb	Se	Sn	
NCS DC 71301	Rock	0.37	4.59	3.6	2.05	34.0	0.14	0.15	0.26	66.9	1.75	130	0.05	6.50	
NCS DC 71302	Rock	0.09	7.9	7.7	7.16	7.5	0.07	0.11	0.95	20.8	12.6	183	0.03	3.12	
NCS DC 71303	Rock	0.05	15.6	37.6	0.97	5.2	(0.078)	0.08	0.47	10.6	24.4	70.1	0.03	1.44	
NCS DC 71304	Rock	0.04	93.0	14.5	(0.17)	0.65	0.08	0.12	(0.94)	9.3	69	(4.79)	0.26	0.89	
NCS DC 71305	Rock	0.06	2.40	7.3	3.34	10.8	(0.093)	0.09	2.46	34.3	64.5	213	0.040	3.35	
NCS DC 71306	Rock	0.03	3.88	2.6	0.07	(0.10)	0.23	(0.066)	(0.024)	(2.77)	241	(1.42)	0.08	0.53	

Number	Name	Chemical Composition (Percent)													Unit Size (in g)
		Ag	Cd	Cu	Fe	S	Sb	Sn	Zn	Pb					
NCS DC 71307	Sulfied Mineral				46.08	52.72									5
NCS DC 71309	Sulfied Mineral	0.97				13.30	0.43	0.11		84.26					5
NCS DC 71310	Sulfied Mineral		0.15	0.10	2.14	32.33			62.51	0.099					5
		Chemical Composition (μg/g)													
		Ag	As	Bi	Cd	Co	Ga	Ge	In	Sb	Se	Sn	Te	Zn	
NCS DC 71307	Sulfied Mineral	0.59	(14.4)	2.9	0.71	(3.9)	0.44	(0.2)		1.1	5.8	(2.7)	0.95	219	
NCS DC 71309	Sulfied Mineral		5.3	1.4	16.5	(0.4)	(0.3)	1.47	0.29				(0.07)	533	
NCS DC 71310	Sulfied Mineral	5.0	(3.3)	6.1		491	251	6.0	21.0	249	(3.0)	(0.2)	(0.3)		
		Ti	Mn	Ni	Pb	Cu	Fe								
NCS DC 71307	Sulfied Mineral		28.9	34.0	(23.4)	431									
NCS DC 71309	Sulfied Mineral	0.65				62.4	127								
NCS DC 71310	Sulfied Mineral		169	43.2											

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Number	Name	Chemical Composition(Percent)											Unit Size (in g)
		Al_2O_3	CaO	FeO	K_2O	Na_2O	MgO	Mn	P_2O_5	SiO_2	Fe_2O_3	TiO_2	LOI	
NCS DC 71312	Rock	3.73	12.64	3.71	0.49	(0.10)	17.56	0.09	0.30	35.88	6.53	0.71	20.73	70
NCS DC 71313	Rock	13.19	(0.10)	(0.04)	6.22	1.6	0.13	0.013	0.18	76.40	0.24	0.61	1.27	70

		CO_2	Cl	F	H_2O^+	SO_3	Ba
NCS DC 71312	Rock	(16.78)	(0.04)	(0.11)	(4.47)	0.68	0.177
NCS DC 71313	Rock	(0.05)		(0.03)	(1.02)	0.07	

		Chemical Composition(μg/g)											
		Ag	As	B	Ba	Be	Bi	Cd	Ce	Co	Cr	Cs	Cu
NCS DC 71312	Rock	(0.06)	3.5	(31.8)		1.3	(0.10)	0.46	12.7	40.0	776	5.2	26.2
NCS DC 71313	Rock	(0.09)	3.1	(1.9)	728	1.3	(0.07)	0.15	(5.0)	(1.5)	4.8	1.8	4.2

		Dy	Er	Eu	Ga	Gd	Ge	Hf	Hg	Ho	La	Li	Lu
NCS DC 71312	Rock	2.6	1.2	1.6	7.1	4.7	0.89	4.9	0.010	0.49	69.8	75.7	0.16
NCS DC 71313	Rock	0.20	0.12	(0.16)	13.5	0.22	1.48	(0.80)	(0.008)	(0.04)	(3.3)	14.4	0.03

		Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sb	Sc	Se	Sm	Sn
NCS DC 71312	Rock	1.4	56.8	49.0	542	20.7	13.8	28.4	(0.22)	10.9	0.10	6.5	1.7
NCS DC 71313	Rock	0.29	14.6	1.51	(1.6)	34.6	0.48	155	0.64	(2.85)	(0.015)	(0.24)	3.5

		Sr	Ta	Tb	Th	Tm	U	V	W	Y	Yb	Zn	Zr
NCS DC 71312	Rock	262	3.9	0.54	10.8	0.17	2.2	89.4	2.4	11.6	1.1	190	175
NCS DC 71313	Rock	45.5	1.3	(0.04)	0.66	(0.02)	(0.75)	(44.5)	3.2	1.6	0.21	20.3	22.6

Number	Name	Chemical Composition(Percent)										
		No_2O_3	K_2O	SiO_2	ZnO	PbO	B_2O_3	Al_2O_3	MgO	TiO_2	Fe_2O_3	CaO
NCS DC 71401	Zinc Oxide for EPMA			(0.04)	99.80			(0.10)				
NCS DC 71402	Potassium Niobat for EPMA	74.10	25.89									
NCS DC 71403	Lead Glass for EPMA		3.12	32.70		64.4						
NCS DC 71404	Boron Glass for EPMA			37.11			(11.21)	35.24	10.28	(0.42)	(0.44)	(0.77)
NCS DC 71405	Kyanite for EPMA			37.06				62.70				
NCS DC 71406	Pyrite for EPMA											
NCS DC 71407	Olivine for EPMA			40.73					50.05			(0.04)
NCS DC 71408	Feldspar for EPMA		4.51	65.97				19.88	(0.02)			0.89
NCS DC 71409	Chromite for EPMA			(0.15)				(7.36)	12.38			
NCS DC 71410	Quartz for EPMA			99.98								
NCS DC 71411	Garnet for EPMA			36.31				20.05	0.08			10.21

		Na_2O	Cr_2O_3	MnO	Fe_2O_3	TFe_2O_3	FeO	S	P_2O_5
NCS DC 71404	Boron Glass for EPMA	(1.27)							(0.025)
NCS DC 71405	Kyanite for EPMA								
NCS DC 71406	Pyrite for EPMA							53.19	
NCS DC 71407	Olivine for EPMA			(0.17)			8.67		
NCS DC 71408	Feldspar for EPMA	7.08							
NCS DC 71409	Chromite for EPMA		64.34	(0.10)	(1.68)		14.04		
NCS DC 71410	Quartz for EPMA						(0.02)		
NCS DC 71411	Garnet for EPMA			29.71		(15.25)	13.4		

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Number	Name	Chemical Composition(%)												Unit Size
		Li_2O	Al_2O_3	CaO	FeO	K_2O	LOI	MgO	MnO	Na_2O	P_2O_5	SiO_2	TFe_2O_3	(in g)
NCS DC 71320	Spodumene	6.3	25.35	0.14	(0.26)	0.17	0.97	0.06	0.16	1.15	0.027	64.2	0.75	50g
NCS DC 71321	Spodumene	6.23	25.28	0.07	(0.16)	0.22	(0.73)	0.035	0.15	1.23	0.025	64.36	0.62	50g
NCS DC 71322	Spodumene	1.3	15.88	0.27	(0.14)	2.38	(1.02)	0.048	0.087	3.81	0.23	74.27	0.36	50g
		Chemical Composition(mg/g)												
		Ba	Be	Bi	Ce	Cs	Hf	La	Nb	Ni	Rb	S	Sc	Sr
NCS DC 71320	Spodumene	12.3	39.6	5.45	(0.69)	70	2.92	(0.34)	11.4	2.03	98	(70)	(0.44)	6.8
NCS DC 71321	Spodumene	3.21	0.106*	2.97	(0.22)	0.081*	(3.1)	(0.1)	10.8	1.23	145	(50)	(0.38)	3.9
NCS DC 71322	Spodumene	4.8	144	1.21	0.6	113	4.79	0.357	76	(0.87)	0.098*	(60)	(0.46)	45
		Chemical Composition(mg/g)												
		Ta	Th	Ti	U	V	W	Y	Yb	Zn	Zr			
NCS DC 71320	Spodumene	12.9	1.39	96	0.75	(4.1)	2.47	(1.8)	(0.035)	114	84			
NCS DC 71321	Spodumene	15.8	1.07	67	0.77	(2.4)	1.88	(1.7)	(0.016)	70	76			
NCS DC 71322	Spodumene	51	0.71	47.3	9.6	(3)	2	2.94	(0.028)	80	112			

Number	Name	Chemical Composition(Percent)												Unit Size
		Pb	S	Zn	Hg	BaO	SO_3	PbO	CO_2	WO_3	CaO	Nb_2O_3	Ta_2O_3	(in g)
NCS DC 71412	Galena for EPMA	86.35	13.44											
NCS DC 71413	Sphalerite for EPMA		32.76	66.33										
NCS DC 71414	Cinnabar for EPMA		13.63		86.00									
NCS DC 71415	Barite for EPMA					65.56	34.28							
NCS DC 71416	Cerusite for EPMA							83.36	(16.82)					
NCS DC 71417	Scheelite for EPMA									80.45	19.39			
NCS DC 71418	Manganocolumbite for EPMA											54.74	25.92	
		FeO	MnO											
NCS DC 71418	Manganocolumbite for EPMA	6.65	12.47											

Number	Name	Chemical Composition(Percent)										Unit Size
		Cd	Te	Se	Ga	As	Zn	In	Sb	P		(in g)
NCS DC 71419	Cadmium Telluride for EPMA	46.87	53.39									
NCS DC 71420	Cadmium Selenide for EPMA	58.48		40.88								
NCS DC 71421	Cadmium Arsenide for EPMA				48.07	51.95						
NCS DC 71422	Zinc Selenide for EPMA			54.44			45.38					
NCS DC 71423	Indium Antimonide for EPMA							48.59	51.45			
NCS DC 71424	Indium Phosphide for EPMA							78.51		21.12		
NCS DC 71425	Indium Arsenide for EPMA					39.60		60.97				

Number	Name	Chemical Composition(Percent)											Unit Size
		P_2O_5	Sc_2O_3	La_2O_3	Ce_2O_3	Pr_2O_3	Nd_2O_3	Sm_2O_3	Gd_2O_3	Ho_2O_3	Yb_2O_3	Lu_2O_3	(in g)
NCS DC 71426	Sc P 5014 for EPMA	85.6	16.42										
NCS DC 71427	La P 5014 for EPMA	67.70		31.25									
NCS DC 71428	Ce P 5014 for EPMA	68.32			31.7								
NCS DC 71429	Pr P 5014 for EPMA	68.67				31.83							
NCS DC 71430	Nd P 5014 for EPMA	68.12					32.2						
NCS DC 71431	Sm P 5014 for EPMA	68.87						32.07					
NCS DC 71432	Gd P 5014 for EPMA	66.6							33.71				
NCS DC 71433	Ho P 5014 for EPMA	65.37								34.52			
NCS DC 71434	Yb P 5014 for EPMA	64.1									35.88		
NCS DC 71435	Lu P 5014 for EPMA	63.44										36.08	

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Number	Name	Chemical Composition(%)												Unit Size (in g)
		Al_2O_3	SiO_2	Fe_2O_3	TiO_2	L.O.L	K_2O	Na_2O	CaO	MgO	P_2O_5	H_2O+	S	
NCS DC 71314	Bauxite	71.06	7.8	1.82	3.08	14.62	0.2	(0.06)	0.40 ▲	0.14	0.25	13.81	0.039	50
NCS DC 71315	Bauxite	54.94	15.24	9.04	2.46 ▲	15.01	0.31 ▲	(0.07)	2.22	0.26	0.21	13.07	0.046	50
NCS DC 71316	Bauxite	63.17	16.62	0.68	3.28	13.67	1.00 ▲	0.1	0.17 ▲	0.33	0.25	13.17	0.038	50
NCS DC 71317	Bauxite	42.97	39.03	0.41	2.06	14.35	0.19	(0.04)	(0.12)	0.31	0.14 ▲	13.96	0.027	50
NCS DC 71318	Bauxite	90.63	3.2	1.31	3.80 ▲	0.12	0.06 ▲	(0.05)	0.14	(0.08)	0.19			50
NCS DC 71319	Bauxite	75.13 ▲	19.44	1.24	3.22	0.17	0.17	(0.06)	0.16	0.1	0.16			50

		MnO	Li	Cu	Pb	Zn	Sr	Zr	V	Ga	Cr
NCS DC 71314	Bauxite	190	80.6	30.6	116	24	691	886	198	70	215
NCS DC 71315	Bauxite	340	111	44	107	34.5	619 ▲	643	209	65 ▲	193
NCS DC 71316	Bauxite	(18)	342 ▲	48	224	26.2 ▲	948	649	90	46.3	90
NCS DC 71317	Bauxite	(20)	567	26.4	101	35.8	512	436	73.6	26.9	76
NCS DC 71318	Bauxite	(40)	35.1	19.5	26.7	7.4	345	0.116*	210	82	267
NCS DC 71319	Bauxite	(30)	147	24.8	35.7	17.7	292	986	216	72	233

Number	Name	Chemical Composition(%)												Unit Size (in g)
		SiO_2	Al_2O_3	TFe_2O_3	CaO	MgO	K_2O	Na_2O	TiO_2	MnO	P_2O_5	Cr_2O_3	LOI	
NCS DC71325	Quartzite	92.93	2.43	0.62	1.2	0.29	0.6	0.28	0.1	0.015	0.025	0.0077	1.35	80
NCS DC71326	Quartzite	95.97	1.33	0.61	0.59	0.15	0.28	0.13	0.059	0.008	0.018	0.0083	0.69	80
NCS DC71327	Quartzite	99.18	0.29	0.16	0.036	0.022	0.05	0.01	0.014	0.0049	0.0036	0.0053	0.14	80

		Chemical Composition(mg /g)												
		As	Ba	Be	Bi	Cd g	Ce	Cl	Co	Cu	Hg	La	Li	Mo
NCS DC71325	Quartzite	0.89	84.2	0.41	0.036	0.037	16.7	(34)	1.8	14.6	(0.003)	8.8	3.4	1.6
NCS DC71326	Quartzite	1.3	56.8	0.21	0.05	0.025	19.3	(38)	1.4	13.4	(0.002)	9.3	2.7	2.1
NCS DC71327	Quartzite	0.48	17.4	0.09	0.034	0.015	1.1	(15)	1.6	8.9	(0.002)	0.54	2.5	3.8

		Chemical Composition(mg /g)										
		Ni	Pb	Rb	Sb	Sr	Th	U	V	W	Zn	Zr
NCS DC71325	Quartzite	21.5	39.7	16.7	0.2	33.9	2.9	0.58	11.9	0.47	11.2	93
NCS DC71326	Quartzite	23.9	69.4	10.3	0.22	20	1.8	0.48	7.4	0.27	7.8	53
NCS DC71327	Quartzite	15.8	31.7	3	0.2	3	0.14	0.1	1.8	0.19	3.7	(1.7)

Number	Name	Chemical Composition(%)												Unit Size (in kg)
		Al_2O_3	SiO_2	TFe_2O_3	TiO_2	CaO	MgO	K_2O	Na_2O	MnO	P_2O_5	SO_3	LOI	
NCS DC72001	Kaolin	36.53	44.67	0.63	0.14	0.17	0.14	0.7	0.11	0.005	0.17	3.13	16.09	1
NCS DC72002	Kaolin	27.16	58.47	0.8	0.3	1.01	0.29	0.9	0.19	0.019	0.22	0.43	10.11	1

		pH (25°C)	Ture density (g/cm^3)	Dried whiteness (%)	Oil absorption (%)	Specific area (m^2/g)	Liquid limit (%)	Plastic limit (%)
NCS DC72001	Kaolin	4.64	2.6	82.3	38.5	26.5	50.1	32
NCS DC72002	Kaolin	7.52	2.63	76.5	39.2	12.8	37.5	25.6

		Plastic index
NCS DC72001	Kaolin	18.1
NCS DC72002	Kaolin	11.9

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Number	Name	Chemical Composition(%)												Unit Size
		Al_2O_3	SiO_2	TFe_2O_3	TiO_2	CaO	MgO	K_2O	Na_2O	MnO	P_2O_5	SO_3	LOI	(in kg)
NCS DC 72003	Bentonite	18.11	59.71	2.64	0.34	4.34	3.51	0.6	0.37	0.12	0.11	0.06	10.08	1
NCS DC 72004	Bentonite	23.35	56.21	4.6	1	0.95	3.04	0.31	0.11	0.035	0.054	0.025	10.25	1
NCS DC 72005	Bentonite	17.06	67.63	3.36	0.24	0.99	1.99	1.37	2.4	0.023	0.036	0.024	4.72	1
NCS DC 72006	Bentonite	14.24	72.73	1.97	0.13	0.89	2.57	0.6	1.9	0.02	0.026	0.29	4.65	1

		pH (25°C)	Decolourization capacity	Ture density (g/cm^3)	Methylene blue index (mmol/100g)	Colloid index (mL/15g)	Swell capacity (mL/g)	Water absorption (%)
NCS DC 72003	Bentonite	8.64	18	2.63	122.8	52	8	180
NCS DC 72004	Bentonite	4.49	120	2.68	96.9	39	4	165
NCS DC 72005	Bentonite	10.09	14.6	2.72	68.4		15	452
NCS DC 72006	Bentonite	10.04	20.8	2.7	82.5		43	684

		E (1/2 Ca^{2+}) (mmol/100g)	E (1/2 Mg^{2+}) (mmol/100g)	E (Na^+) (mmol/100g)	E (K^+) (mmol/100g)
NCS DC 72003	Bentonite	78.7	3.91	0.96	0.37
NCS DC 72004	Bentonite	28.4	9.42	1.71	0.85
NCS DC 72005	Bentonite	8.04	2.45	40.2	1.14
NCS DC 72006	Bentonite	12.7	3.74	42.2	0.91

Number	Name	Chemical Composition(%)												Unit Size
		Al_2O_3	SiO_2	TFe_2O_3	TiO_2	CaO	MgO	K_2O	Na_2O	MnO	P_2O_5	CO_2	LOI	(in kg)
NCS DC72007	Attapulgite Clay	10.2	56.29	4.41	0.62	6	7.11	1.16	0.16	0.31	0.16	5.17	13.32	1
NCS DC72008	Attapulgite Clay	8.86	60.02	4.48	0.6	1.27	11.55	0.87	0.071	0.068	0.49	0.68	11.59	1

		pH (25°C)	Decolourization capacity	Ture density (g/cm^3)	Methylene blue index (mmol/100g)	Dried whiteness (%)	Oil absorption (%)	Water absorption (%)
NCS DC72007	Attapulgite Clay	8.64	79.7	2.64	36.3	48.5	69.2	210
NCS DC72008	Attapulgite Clay	8.4	74.7	2.56	15.7	59.6	103.1	211

		E (1/2 Ca_2+) (mmol/100g)	E (1/2 Mg_2+) (mmol/100g)	E (Na+) (mmol/100g)	E (K+) (mmol/100g)
NCS DC72007	Attapulgite Clay	14.8	8.54	0.69	1.01
NCS DC72008	Attapulgite Clay	6.62	3.28	0.36	0.44

Number	Name	Chemical Composition (Percent)														Unit Size
		TFe	SiO_2	Al_2O_3	FeO	MgO	CaO	Na_2O	K_2O	H_2O^+	S	P	Ti	Mn	Cu	(in g)
NCS DC 73001	Iron ore	20.17	60.86	3.57	(7.49)	1.68	2.84	0.28	0.53	(1.18)	0.051	0.045	0.085	0.168	0.0028	50
NCS DC 73002	Iron ore	30.34	43.68	3.43	5.8	1.44	2.17	0.18	0.85	(2.08)	0.066	0.094	0.091	0.200	0.0023	50
NCS DC 73003	Iron ore	40.51	33.93	2.27	(14.5)	2.22	2.00	0.16	0.27	(1.37)	0.95	0.032	0.067	0.122	0.028	50
NCS DC 73004	Iron ore	49.50	16.30	2.58	7.66	0.98	0.91	0.035	0.92	(2.1)	0.065	0.138	0.083	0.198	0.0014	50
NCS DC 73005	Iron ore	56.60	11.48	0.99	20.05	3.62	1.36	0.058	0.071	(1.63)	2.44	0.017	0.043	0.076	0.068	50
NCS DC 73006	Iron ore	61.46	6.65	1.68	(0.35)	0.77	0.52	0.081	0098	(0.046)	0.0067	0.019	1.12	0.072	0.0028	50
NCS DC 73007	Iron ore	62.51	10.93	1.02	21.54	0.28	0.18	0.016	0.038	(0.41)	0.0058	0.11	0.059	0.061	(0.0015)	50
NCS DC 73009	Iron ore	66.87	5.05	0.99	23.14	0.22	0.14	0.012	0.030	(0.44)	0.0055	(0.011)	0.059	0.071	0.0015	50

Number	Name	Chemical Composition(Percent)													Unit Size
		Cr_2O_3	SiO_2	Al_2O_3	Fe_2O_3	FeO	MgO	CaO	Na_2O	K_2O	H_2O^+	CO_2	S	Ni	Co	(in g)
NCS DC 73010	Chromite	17.59	20.30	11.86	10.52	(8.68)	28.12	0.44	(0.13)	0.046	(10.7)	(0.6)	0.037	0.188	0.0124	50
NCS DC 73011	Chromite	34.44	12.24	11.37	11.81	(8.5)	23.32	0.32	0.073	0.026	(6.4)	(0.46)	0.024	0.175	0.14	50
NCS DC 73012	Chromite	46.56	5.06	11.60	15.34	(12.0)	17.92	0.46	0.018	(0.010)	2.5	(1.2)	0.076	0.134	0.016	50
NCS DC 73013	Chromite	57.80	1.10	10.53	13.70	(8.3)	16.45	(0.13)	(0.016)	(0.004)	(0.59)	(0.14)	(0.005)	0.16	0.016	50

		P	Ti	Mn	V
NCS DC 73010	Chromite	0.0031	0.085	0.088	0.043
NCS DC 73011	Chromite	0.0020	0.100	0.090	0.044
NCS DC 73012	Chromite	(0.0013)	0.070	0.135	0.064
NCS DC 73013	Chromite	(0.0012)	0.122	0.097	0.048

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Number	Name	Chemical Composition(μg/g)									Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	Ce	
NCS DC 73014	Stream Sediment	0.14±0.01	14.3±0.9	53±7	455±9	2.2±0.1	0.51±0.03	0.8±0.2	0.34±0.02	47±2	70
NCS DC 73015	Stream Sediment	0.050±0.007	3.6±0.4	48±6	600±20	3.6±0.4	0.48±0.03	0.61±0.13	0.093±0.009	24±2	70
NCS DC73016a	Stream sediments	0.79±0.09	53±4	84±11	698±24	3.0±0.3	2.1±0.2	4.8±0.7	4.9±0.4	63±4	
		Chemical Composition(μg/g)									
		Cl	Co	Cr	Cs	Cu	Dy	Er	Eu	F	
NCS DC 73014	Stream Sediment	53±5	10.2±0.4	61±4	5.8±0.3	132±5	4.1±0.3	2.5±0.2	1.20±0.06	550±21	
NCS DC 73015	Stream Sediment	33±3	4.4±0.2	21±33	7.2 ± 0.2	7.2±0.52	1.7±0.1	0.93±0.09	0.62±0.03	279±8	
NCS DC73016a	Stream sediments	78±11	9±1	34±4	6.1±0.5	32±2	5.0±0.4	3.0±0.4	1.0±0.2	450±41	
		Chemical Composition(μg/g)									
		Ga	Gd	Ge	Hf	Hg	Ho	I	In	La	
NCS DC 73014	Stream Sediment	14.6±0.6	4.1±0.2	1.87±0.14	3.8±0.8	0.018±0.006	0.83±0.08	0.47±0.08	0.14±0.01	24±1	
NCS DC 73015	Stream Sediment	12.4±0.5	1.7±0.1	1.64 ±0.14	2.1±0.4	(0.007)	0.33±0.02	0.27±0.08	0.018±0.004	13.9±1.0	
NCS DC73016a	Stream sediments	17±2	5.3±0.5	1.2±0.2	5.6±0.8	0.12±0.01	1.0±0.2	2.1±0.3	0.15±0.03	35±2	
		Chemical Composition(μg/g)									
		Li	Lu	Mn	Mo	N	Nb	Nd	Ni	P	
NCS DC 73014	Stream Sediment	20.7±2.0	0.42±0.04	0.142±0.004*	0.94±0.04	150	9.4 ± 07	22±1	18.9±0.7	568±17	
NCS DC 73015	Stream Sediment	40 ± 2	0.16±0.02	290±7	0.33±0.04	79	5.1±0.7	9.8±0.4	7.0±0.6	335±15	
NCS DC73016a	Stream sediments	24±1	0.50±0.06		1.4±0.2		12±2	30±1	16±1	0.108±0.006	
		Chemical Composition(μg/g)									
		Pb	Pr	Rb	S	Sb	Sc	Se	Sm	Sn	
NCS DC 73014	Stream Sediment	210±6	5.9±0.4	96±4	432±60	1.18±0.07	11.4±0.3	0.47 ± 0.10	4.5±0.2	2.5±0.4	
NCS DC 73015	Stream Sediment	31±23	2.9±0.3	118±3	87±10	0.16±0.03	4.9±0.4	0.053±0.013	1.9±0.1	2.3±0.2	
NCS DC73016a	Stream sediments	267±9	8.0±0.7	138±7	692±80	2.0±0.2	7.1±0.6	0.36±0.04	5.8±0.3	11.5±1.0	
		Chemical Composition(μg/g)									
		Sr	Ta	Tb	Te	Th	Ti(%)	Tl	Tm	U	
NCS DC 73014	Stream Sediment	171±5	0.65±0.07	0.68±0.05	(0.05)	8.3±0.9	0.23±0.01	0.91±0.07	0.4±0.04	2.2±0.2	
NCS DC 73015	Stream Sediment	253±13	0.72±0.10	0.29±0.02	(0.02)	4.1±0.6	0.146±0.011	0.83±0.08	0.16±0.02	1.9±0.1	
NCS DC73016a	Stream sediments	148±5	1.1±0.2	0.84±0.07	-0.064	10.9±1.0		1.6±0.2	0.5±0.1	4.8±0.3	
		Chemical Composition(μg/g)									
		V	W	Y	Yb	Zn	Zr	Mn*	N*	Ti*	
NCS DC 73014	Stream Sediment	77±3	2.0±0.1	23±2	2.6±0.3	209±6	132±4				
NCS DC 73015	Stream Sediment	31±1	0.66±0.08	9.7±0.7	1.0±0.1	27±2	71±7				
NCS DC73016a	Stream sediments	48±5	3.6±0.5	30±2	3.2±0.4	962±42	187±7	0.17±0.01	0.25±0.02	0.249±0.010	
		Chemical Composition(%)									
		SiO_2	Al_2O_3	TFe_2O_3	$C_{org.}$	L.O.I.					
NCS DC 73014	Stream Sediment	69.40±0.29	11.06±0.13	7.00±0.10							
NCS DC 73015	Stream Sediment	74.33±0.23	11.65±0.13	1.79±0.05							
NCS DC73016a	Stream sediments	62.72±0.37	12.97±0.34	3.90±0.16	-3.82	10.66±0.54					
		Chemical Composition(%)									
		FeO	MgO	CaO	Na_2O	K_2O	H_2O+	CO_2	Corg	TC	
NCS DC 73014	Stream Sediment	(1.83)	1.70±0.03	2.96±0.04	1.40±0.02	2.35±0.03	2.31±0.09	(0.76)	0.28±0.03	(0.48)	
NCS DC 73015	Stream Sediment	(0.57)	0.71±0.04	2.85±0.08	2.85±0.04	2.96±0.05	0.98±0.13	(1.34)	(0.08)	(0.46)	
NCS DC73016a	Stream sediments	-2.16	1.70±0.06	1.26±0.04	2.02±0.07	3.28±0.11	-3.71			4.29±0.17	

Note:value with*is in percent; value with **is calculated value; value in ( )is for reference only. Value behind"±"is uncertainty

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Number	Name	Chemical Composition(μg/g)													Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	Ce	Cl	Co	Cr	Cs	
NCS DC73035	Rock	0.046	4.7	11.5	605	0.99	0.061		0.071	52.0	72.9	7.6	27.7	1.8	
NCS DC73036	Rock	0.069	0.49		649	1.37			0.092	62.9	71.0	21.1	96.7	(0.28)	
NCS DC73037	Rock	0.085	1.8	4.7	277	1.99	0.031		0.098	104	51.0	38.7	98.1	0.52	
NCS DC73038	Rock	0.086	0.84	(11)	49.2	0.28	0.030		0.082	12.2	244	149	(0.49*)	1.4	
NCS DC73039	Rock	0.18	10.1	31.3	118	1.10	0.27	(1.4)	3.2	23.7	48.4	4.9	185	2.2	
NCS DC73040	Rock	0.24	6.1		35.9	0.13	0.10		(0.035)	42.9		2.3	20.6	0.43	
		Chemical Composition(μg/g)													
		Cu	Dy	Er	Eu	F	Ga	Gd	Ge	Hf	Hg**	Ho	I	In	
NCS DC73035	Rock	4.9	4.9	3.0	1.5	278	10.6	5.4	0.51	3.3	9.9	1.06		0.025	
NCS DC73036	Rock	33.5	3.7	2.0	1.6	424	21.5	4.9	0.95	4.7		0.75		0.049	
NCS DC73037	Rock	240	8.9	4.3	3.3	801	25.0	10.3	1.27	9.7	(5)	1.66		0.104	
NCS DC73038	Rock	75.6	1.2	0.63	0.38	197	4.9	1.2	0.92	1.1	3.5	0.23		0.023	
NCS DC73039	Rock	40.9	2.5	1.6	0.43	544	6.8	2.2	0.78	2.9	220	0.54	0.37	0.032	
NCS DC73040	Rock	8.6	0.88	0.55	0.17	(80)	(1.6)	0.66		1.4	12.2	0.18	1.03	0.015	
		Chemical Composition(μg/g)													
		La	Li	Lu	Mn	Mo	N	Nb	Nd	Ni	P	Pb	Pr	Rb	
NCS DC73035	Rock	30.0	15.2	0.40	0.21	0.33		(6)	26.6	13.5▲ 12.8~15.5	252	12.3	6.6	68.2	
NCS DC73036	Rock	29.4	12.1	0.30	816	0.64		7.0	33.4	44.8	0.11	7.4	8.5▲ 12.8~15.5	19.3	
NCS DC73037	Rock	48.0	11.3	0.51	0.14	1.19		45.1	56.6	69.7	0.19	6.2	13.7	27.1	
NCS DC73038	Rock	5.8	5.9	0.10	0.14	0.19		5.5	6.4	1269	227	(3.3)	1.6	6.9	
NCS DC73039	Rock	13.2	12.6	0.28	141	71.2	0.22	6.9	11.4	77.4	661	10.2	3.1	32.0	
NCS DC73040	Rock	3.5	0.59	0.12	67	0.67			2.9	8.1	(50)	15.1	0.87		
		Chemical Composition(μg/g)													
		S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	
NCS DC73035	Rock	(690)	0.093	6.7	0.040	5.4	1.1	252	0.42▲ 0.37~0.66	0.84		3.7	0.17	0.43	
NCS DC73036	Rock	326▲ 314~414	0.080	16.7	0.094	6.1	1.5	818		0.71	(0.02)	0.58	0.40	0.10	
NCS DC73037	Rock	115	0.23	26.6	(0.15)	11.6	3.2	271	3.2	1.63		5.5	2.44	(0.06)	
NCS DC73038	Rock	514	0.13	10.6	0.20	1.32▲ 1.29~1.58	(0.9)	37.9		0.21	(0.04)	0.95	0.25	(0.05)	
NCS DC73039	Rock	0.73*▲ 0.64~0.76*	2.01	5.4	29.7	2.3	1.6	156	0.48	0.39	(0.06)	4.1	0.13	1.80	
NCS DC73040	Rock	(76)	0.68	2.4	0.32	0.76	(1)			0.13		1.1	264	(0.05)	
		Chemical Composition(μg/g)													
		Tm	U	V	W	Y	Yb	Zn	Zr	SiO_2*	Al_2O_3*	TFe_2O_3	FeO*	MgO*	
NCS DC73035	Rock	0.43	68.0	33.2	0.54	31.1	2.4	33.4	114	46.40	8.88	1.69▲ 1.66~2.02	(0.5)	0.88	
NCS DC73036	Rock	0.32	(0.25)	115	0.15	17.8	1.8	86.2	173	58.47	17.14	6.85	3.89	3.26	
NCS DC73037	Rock	0.58	1.56	389	0.54	37.5	3.4	142	365	47.95	12.68	13.76	6.16	5.11	
NCS DC73038	Rock	0.10	0.32	70.3	(0.17)	5.9	0.58	89.0	39.2	37.24	2.80	13.27	4.76	32.26	
NCS DC73039	Rock	0.28	12.5	614	0.70	16.9	1.7	46.2	108	71.51	5.21	1.79		2.62	
NCS DC73040	Rock	0.11	1.9	28.1	0.53	5.6	0.74	11.7	53.3	94.34	1.87	0.66		(0.05)	
		Chemical Composition(μg/g)													
		CaO*	Na_2O	K_2O	H_2O^+*	CO_2	Corg*	TC*	LOI*						
NCS DC73035	Rock	20.13	1.19	2.27	(2.5)	15.03	(0.1)	4.25	17.48						
NCS DC73036	Rock	5.90	4.77	1.51			(0.1)	(0.15)	0.68						
NCS DC73037	Rock	7.58	3.61	1.19	2.79		(0.25)	(0.11)	2.55						
NCS DC73038	Rock	2.17		0.17	(8.6)	(1.3)	0.34	(0.42)	10.34						
NCS DC73039	Rock	4.11	0.70	0.78	(2)	5.25	4.82	5.97▲ 5.87~6.05	12.09						
NCS DC73040	Rock	(0.07)		(0.03)	(0.7)		1.56	1.67	2.56						

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Number	Name	Chemical Composition(μg/g)													Unit Size (in g)
		Ag**	As	B	Ba	Be	Bi	Br	Cd	Ce	Cl	Co	Cr	Cs	
NCS DC73041	Stream sediment	40	1.7	(3)	704	2.3	0.11	(0.8)	0.029	32	24	2.7	(3.7)	1.7	
NCS DC73043	Stream sediment	66	32.2	55.4	460	2.6	0.42	(1.3)	0.22	80	26	12.9	66	16.0	
NCS DC73045	Stream sediment	856	48.4	65.5	0.135	1.4	0.26		(32)	50	99	9.0	43.3	7.6	
		Chemical Composition(μg/g)													
		Cu	Dy	Er	Eu	F	Ga	Gd	Ge	Hf	Hg**	Ho	I	In	
NCS DC73041	Stream sediment	2.8	1.2	0.67	0.68	172	16.3	1.70	0.94	2.75	4.7	0.24	(0.21)	0.020	
NCS DC73043	Stream sediment	21	4.8	2.57	1.17	632	18.8	5.43	1.42	5.30	18.3	0.90	0.48	0.063	
NCS DC73045	Stream sediment	23.8	3.1	1.76	0.88	438	10.8▲ 10.4~14.3	3.43	1.31	5.98	111	0.61	0.34	0.036	
		Chemical Composition(μg/g)													
		La	Li	Lu	Mn	Mo	N	Nb	Nd	Ni	P	Pb	Pr	Rb	
NCS DC73041	Stream sediment	17.0	8.4	0.12	322	0.42	(130)	6.2	13.3	2.3	332	20.5	3.68	75.3	
NCS DC73043	Stream sediment	40.4	38.0	0.35	519	0.55	689	14.6	33.5	36.5	498	35.0	9.24	154	
NCS DC73045	Stream sediment	25.3	47.2	0.28	691	2.75	420	9.7	21.5	21.8	356	0.269	5.86	79.0	
		Chemical Composition(μg/g)													
		S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti*	Tl	
NCS DC73041	Stream sediment	(61)	0.13	1.99	0.038	2.14	1.21	413	0.48	0.25	(0.016)	6.30	0.128	0.47	
NCS DC73043	Stream sediment	122	2.52	12.7	0.146	6.25	3.46	78.0	1.18	0.86	0.040	16.6	0.368	0.90	
NCS DC73045	Stream sediment	0.552	1.22	6.87		3.92	2.01	0.343	0.78	0.56	0.032	8.39	0.265	6.18	
		Chemical Composition(μg/g)													
		Tm	U	V	W	Y	Yb	Zn	Zr	SiO_2*	Al_2O_3*	TFe_2O_3	FeO*	MgO*	
NCS DC73041	Stream sediment	0.11	1.11	19.8▲ 16.8~20.6	0.28	8.14	0.69	25.0	87.6	72.20	14.86	1.46	0.27	0.22	
NCS DC73043	Stream sediment	0.37	1.71	88.9	2.18	26.6	2.49	101	180	63.48	14.10	5.16	2.35	1.73	
NCS DC73045	Stream sediment	0.28	2.09	62.3	1.19	16.8▲ 16.1~19.5	1.80	0.260	223	69.66	8.84	3.52	0.82	1.25	
		Chemical Composition(μg/g)													
		CaO*	Na_2O*	K_2O*	H_2O^+*	CO_2*	Corg*	TC*	LOI*						
NCS DC73041	Stream sediment	1.35	4.99	3.22	0.80		(0.09)	(0.12)	(0.98)						
NCS DC73043	Stream sediment	3.78	0.83	3.04	3.48	3.02	0.57	1.33	6.84						
NCS DC73045	Stream sediment	5.07	0.58	1.85	(2.7)	(3.9)	0.46	1.30	7.16						

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Number	Name	Chemical Composition(μg/g)													Unit Size (in g)
		Ag**	As	B	Ba	Be	Bi	Br	Cd	Ce	Cl	Co	Cr	Cs	
NCS DC73046	Stream sediment	83	3.5	8.2	311	1.8	0.06		(0.2)	98	32	57.9	0.109	1.3	
NCS DC73047	Stream sediment	90	14.8	61.9	337	2.0	0.41	6.3	4.3	79	36	19.6	144	7.2	
NCS DC73048	Stream sediment	67	24.9	74.5	318	1.6	0.30	1.6	0.23	59	41	11.3	43.1	5.7	
NCS DC73049	Stream sediment	89	33.9	80.1	456	6.4	3.98	6.4	0.38	85	56	12.8	70.0	21.4	
		Chemical Composition(μg/g)													
		Cu	Dy	Er	Eu	F	Ga	Gd	Ge	Hf	Hg**	Ho	I	In	
NCS DC73046	Stream sediment	186	6.6	3.25	2.77	558	20.6	7.99	1.38	6.69	12.2	1.21	0.31	0.086	
NCS DC73047	Stream sediment	39.9	4.6	2.64	1.00	856	15.0	4.59	1.34	7.09	148	0.91	4.31	0.060	
NCS DC73048	Stream sediment	14.6	3.7	2.14	0.85	581	10.7	3.92	1.17	7.35	86.2	0.72	1.36	0.039	
NCS DC73049	Stream sediment	25.7	8.6	4.74	0.84	663	17.4	7.69	1.42	10.5	266	1.58	3.95	0.093	
		Chemical Composition(μg/g)													
		La	Li	Lu	Mn	Mo	N	Nb	Nd	Ni	P	Pb	Pr	Rb	
NCS DC73046	Stream sediment	49.8	14.7	0.40	0.141	0.67	229▲ 222~283	35.3	47.8	349	0.118	(12)	12.2	30.0	
NCS DC73047	Stream sediment	34.2	41.2	0.42	0.111	10.0	0.247	17.2	28.3	60.4	620	29.0	7.70	84.0	
NCS DC73048	Stream sediment	29.5	19.9	0.34	486	0.68	318	12.1	24.5	19.2	224	24.7	6.69	82.2	
NCS DC73049	Stream sediment	40.0	92.9	0.86	638	4.88	0.136	18.4	38.5	28.1	410	35.7	10.3	204	
		Chemical Composition(μg/g)													
		S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti*	Tl	
NCS DC73046	Stream sediment	(69)	0.22	29.5	0.089	8.97	2.42	363	2.40	1.23	(0.03)	4.96	1.71	~0.15	
NCS DC73047	Stream sediment	363	1.90	11.1	8.75	5.17	3.08	84.3	1.25	0.76	0.059	12.0	0.452	0.87	
NCS DC73048	Stream sediment	84	2.27	7.10	0.159	4.45	2.41	17.9	0.96	0.65	0.030	9.81	0.308	0.52	
NCS DC73049	Stream sediment	207	1.18	11.4	0.652	8.65	9.39	19.3	4.55	1.35	0.046	25.9	0.313	1.33	
		Chemical Composition(μg/g)													
		Tm	U	V	W	Y	Yb	Zn	Zr	SiO_2*	Al_2O_3*	TFe_2O_3	MgO*	CaO*	
NCS DC73046	Stream sediment	0.45	1.24	332	(0.5)	27.9	2.66	115	252	47.27	10.84	12.91	8.82	7.42	
NCS DC73047	Stream sediment	0.42	5.91	302	1.92	26.4	2.72	94.2	264	70.49	10.83	4.64	1.03	1.14	
NCS DC73048	Stream sediment	0.35	2.34	60.1	2.15	21.8	2.23	51.7	275	82.85	7.90	3.05	0.67	(0.13)	
NCS DC73049	Stream sediment	0.87	8.79	91.8	18.9	48.3	5.80	85.2	346	73.54	11.40	4.08	0.96	0.21	
		Chemical Composition(μg/g)													
		Na_2O*	K_2O*	FeO*	H_2O+*	CO_2*	Corg*	TC*	LOI*						
NCS DC73046	Stream sediment	1.62▲ 1.38~1.66	1.12	2.20	(5.6)		0.30	0.34	5.87						
NCS DC73047	Stream sediment	0.37	1.49	1.57	4.53	(0.3)	2.21	2.41	8.52						
NCS DC73048	Stream sediment	(0.08)	2.07	(0.33)	2.15		(0.17)	(0.21)	2.34						
NCS DC73049	Stream sediment	0.36	2.27	1.65	3.90		1.39	1.45	6.26						

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Number	Name	Chemical Composition(μg/g)													Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	Ce	Cl	Co	Cr	Cs	
NCS DC73054	Floodplain sediments	0.074	12.7	55	574	2.4	0.34	2.6	0.066	82	34	16.9	79	8.9	
NCS DC73055	Floodplain sediments	0.067	13.7	50	511	2.1	0.34	2.3	0.14	70	284	13.0	68	7.9	
		Chemical Composition(μg/g)													
		Cu	Dy	Er	Eu	F	Ga	Gd	Ge	Hf	Hg	Ho	I	In	
NCS DC73054	Floodplain sediments	26	5.4	3.1	1.4	548	18.9	6.0	1.49	7.4	0.026	1.10	3.8	0.063	
NCS DC73055	Floodplain sediments	25	5.0	2.8	1.3	610	16.3	5.3	1.31	6.4	0.019	1.00	1.02	0.058	
		Chemical Composition(μg/g)													
		La	Li	Lu	Mn	Mo	N	Nb	Nd	Ni	P	Pb	Pr	Rb	
NCS DC73054	Floodplain sediments	40	40	0.48	841	0.39	418	16.7	36	37	287	26	9.2	108	
NCS DC73055	Floodplain sediments	38	39	0.44	664	0.72	464	14.0	33	32	657	22	8.4	100	
		Chemical Composition(μg/g)													
		S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti*	Tl	
NCS DC73054	Floodplain sediments	77	1.08	13.3	0.11▲ 0.10~0.11	6.8	3.6	115	1.2	0.98	0.046	13.6	0.463	0.68	
NCS DC73055	Floodplain sediments	268	1.14	12.5	0.19	6.2	2.9	201	1.0	0.89	(0.043)	12.5	0.374	0.68	
		Chemical Composition(μg/g)													
		Tm	U	V	W	Y	Yb	Zn	Zr	SiO_2*	Al_2O_3*	TFe_2O_3	FeO*	MgO*	
NCS DC73054	Floodplain sediments	0.49	2.3	97	2.0	29	3.2	64	270	67.33	14.49	5.52	(0.36)	1.34	
NCS DC73055	Floodplain sediments	0.45	2.4	83	1.8	26	2.9	69	220	59.68▲ 59.61~59.77	12.62	4.73	1.20	2.24	
		Chemical Composition(μg/g)													
		CaO*	Na_2O*	K_2O*	H_2O^+*	CO_2	Corg*	TC*	LOI*						
NCS DC73054	Floodplain sediments	1.09	1.26	2.07	(5.2)		(0.3)	0.31	(5.6)						
NCS DC73055	Floodplain sediments	6.91	1.62	2.40	3.73	4.77	(0.4)	1.72	8.65						

Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		SiO_2	Al_2O_3	FeO	MgO	CaO	Na_2O	K_2O	H_2O^+	CO_2	$T_{Fe_2O_3}$	F		
NCS DC 73304	Rock	90.36	3.52	(0.62)	0.082	0.30	0.061	0.65	(0.99)	(0.18)	3.22	0.0183		70
NCS DC 73305	Rock	59.23	18.82	(1.38)	2.01	0.60	0.35	4.16	(5.6)	(0.077)	7.60	0.129		70
		org·C	LOI	P	Ti									
NCS DC 73304	Rock	(0.04)	(1.10)	0.0970	0.158									
NCS DC 73305	Rock	(0.15)	(5.95)	0.0690	0.395									

Number	Name	Chemical Composition(μg/g)												
		Ta	Te	Th	Ti	U	Ag	As	W	B	Ba	Cu	Zr	Ga	Ge
NCS DC 73304	Rock	(0.42)	0.038	7.0	(0.36)	2.1	0.062	9.1	1.16	34	143	19.0	214	5.3	1.16
NCS DC 73305	Rock	(1.0)	(0.022)	12.8	0.71	1.5	0.047	1.4	0.79	154	450	42	96	25.6	3.1
		Hg	Li	Pb	Sc	Sr	Zn	Mn	Cd	Sb	Ce	Dy	Eu	V	Gd
NCS DC 73304	Rock	(8.4)*	11.1	7.6	4.2	58	20	155	0.060	0.60	48	4.1	1.02	33.4	4.5
NCS DC 73305	Rock	9.7*	44	8.7	18.5	90	55	173	(0.003)	0.17	109	5.1	1.7	87	6.7
		Ho	La	Lu	Nd	Sm	Tb	Tm	Yb	Er	Pr	Y	Be	Bi	CO
NCS DC 73304	Rock	0.75	21	0.30	21	1.1	0.79	0.32	1.92	2.0	5.4	21.5	0.97	(0.18)	6.4
NCS DC 73305	Rock	0.98	62	0.41	48	2.0	1.02	0.43	2.6	2.7	13.6	26	3.0	0.23	21
		Cr	Cs	Hf	In	Mo	Nb	Ni	Rb	Se	Cl				
NCS DC 73304	Rock	20	1.8	6.6	(0.026)	0.76	5.9	16.6	29	(0.098)	(42)				
NCS DC 73305	Rock	99	14	2.9	(0.082)	0.35	14.3	36.8	205	(0.084)	(40)				

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Number	Name	Chemical Composition(μg/g)										Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	Ce	Cl	
NCS DC 73319a	Soil	0.81±0.04	33±3	69±4	700±40	3.3±0.3	1.4±0.2	4.1±0.6	2.5±0.2	71±5	-87	70
NCS DC 73320a	Soil	0.072±0.010	18±1	27±4	1187±38	2.6±0.2	0.29±0.05	4.6±0.6	0.20±0.02	123±6	-51	70
NCS DC 73321a	Soil	0.075±0.009	6.2±0.5	21±2	1117±32	1.7±0.1	0.21±0.04	3.8±0.4	0.079±0.012	45±4	-73	70
NCS DC 73322a	Soil	0.059±0.007	9.6±0.6	88±9	312±15	2.4±0.2	1.8±0.2	2.8±0.4	0.11±0.02	99±7	-30	70
NCS DC 73323a	Soil	4.6±0.3	242±16	108±8	343±15	1.8±0.2	23±2	-1.5	0.16±0.03	85±5	-31	70
NCS DC 73324a	Soil	0.24±0.04	88±5	28±4	181±21	6.9±0.4	89±5	-1.1	-0.5	85±11	110±14	70
NCS DC 73325a	Soil	0.080±0.012	-4.2	-19	237±24	2.9±0.3	-0.37	6.4±0.8	-0.23	113±13	-54	70
NCS DC 73326a	Soil	0.067±0.006	13.2±1.4	51±5	492±17	2.0±0.2	0.31±0.04	3.7±0.4	0.14±0.02	68±5	68±6	70
		Chemical Composition(μg/g)										
		Co	Cr	Cs	Cu	Dy	Er	Eu	F	Ga	Gd	
NCS DC 73319a	Soil	10.3±0.6	44±3	7.2±0.5	42±5	6.0±0.5	3.8±0.4	0.89±0.08	513±21	18.1±1.4	5.5±0.4	
NCS DC 73320a	Soil	11.1±0.5	52±4	4.7±0.3	20±2	4.5±0.4	2.5±0.4	1.8±0.2	723±39	14.8±0.9	6.2±0.4	
NCS DC 73321a	Soil	6.9±0.6	35±3	3.2±0.2	13.4±1.1	2.8±0.3	1.7±0.2	0.8±0.2	354±31	15.7±0.8	3.1±0.3	
NCS DC 73322a	Soil	20±1	81±4	12.5±0.9	43±2	4.4±0.4	2.5±0.3	1.2±0.2	1127±72	23±1	5.5±0.3	
NCS DC 73323a	Soil	18±2	113±7	18±2	147±10	5.1±0.4	3.2±0.3	1.0±024	601±25	25±1	4.5±0.6	
NCS DC 73324a	Soil	20±2	86±8	9.4±0.8	358±18	5.4±0.5	3.7±0.5	0.39±0.07	1526±82	40±4	4.2±0.5	
NCS DC 73325a	Soil	93±4	379±24	2.9±0.6	84±7	5.7±0.5	2.4±0.3	3.0±0.5	341±39	39±2	8.3±0.6	
NCS DC 73326a	Soil	12.3±1.0	65±4	7.3±0.5	24±2	4.9±0.4	2.7±0.3	1.2±0.2	555±26	15.1±0.7	5.5±0.5	
		Chemical Composition(μg/g)										
		Ge	Hf	Hg	Ho	I	In	La	Li	Lu	Mn*	
NCS DC 73319a	Soil	1.3±0.2	6.5±0.5	0.31±0.03	1.3±0.2	2.0±0.2	0.12±0.02	39±2	28±2	0.57±0.06	0.131±0.006	
NCS DC 73320a	Soil	1.2±0.1	6.3±0.5	0.017±0.004	0.9±0.1	2.6±0.3	0.048±0.005	61±3	22±1	0.38±0.04	0.092±0.003	
NCS DC 73321a	Soil	1.2±0.1	7.1±0.7	0.116±0.005	0.58±0.06	2.5±0.3	0.033±0.004	21±3	18±1	0.28±0.04	0.033±0.001	
NCS DC 73322a	Soil	1.7±0.2	6.9±0.7	0.072±0.006	0.85±0.08	4.0±0.3	0.095±0.006	54±4	27±2	0.40±0.07	0.030±0.001	
NCS DC 73323a	Soil	2.3±0.3	8.3±1.0	0.7±0.1	1.1±0.2	2.8±0.3	1.4±0.2	35±3	51±3	0.49±0.04	0.051±0.002	
NCS DC 73324a	Soil	6.2±0.5	6.5±1.0	0.086±0.008	1.1±0.2	13.2±2.7	4.1±0.9	31±2	43±2	0.80±0.11	0.23±0.01	
NCS DC 73325a	Soil	1.5±0.2	8.9±1.1	0.058±0.008	1.0±0.2	19.0±2.2	0.11±0.01	56±6	23±2	0.30±0.04	0.19±0.01	
NCS DC 73326a	Soil	1.3±0.1	6.9±0.8	0.027±0.005	0.98±0.12	1.6±0.2	0.053±0.005	35±3	33±2	0.42±0.04	0.063±0.002	
		Chemical Composition(μg/g)										
		Mo	N*	Nb	Nd	Ni	P	Pb	Pr	Rb	S	
NCS DC 73319a	Soil	2.0±0.2	0.32±0.03	15.3±1.4	30.8±1.3	16.9±1.5	0.23±0.02*	339±12	8.5±0.7	137±9	726±94	
NCS DC 73320a	Soil	1.6±0.1	0.075±0.006	35±4	55±3	24±2	512±30	27±2	14.8±1.2	95±4	316±23	
NCS DC 73321a	Soil	0.5±0.1	0.085±0.004	10.6±1.0	19±2	15±1	0.042±0.002*	28±2	4.9±0.4	85±6	-146	
NCS DC 73322a	Soil	0.70±0.06	0.073±0.004	16.1±1.2	40±3	36±2	0.031±0.003*	37±3	11.2±0.9	152±5	130±19	
NCS DC 73323a	Soil	2.3±0.2	0.059±0.005	20±2	27±3	38±2	353±40	245±14	7.3±0.6	142±6	839±37	
NCS DC 73324a	Soil	169±10	0.021±0.003	38±3	20±2	75±6	0.024±0.004*	478±16	5.6±0.7	118±13	534±73	
NCS DC 73325a	Soil	3.2±0.3	0.13±0.02	80±4	47±5	217±8	0.21±0.02*	18.3±2.1	11.7±1.7	28±3	432±45	
NCS DC 73326a	Soil	0.76±0.06	0.06±0.004	13.1±1.2	31±2	30±2	0.068±0.003*	21±2	8.0±0.6	96±5	187±21	
		Chemical Composition(μg/g)										
		Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	
NCS DC 73319a	Soil	2.4±0.3	8.3±0.3	-0.22	5.9±0.4	9.8±1.1	192±9	1.3±0.1	0.98±0.09	-0.06	13.1±0.9	
NCS DC 73320a	Soil	0.86±0.08	9.5±0.5	0.26±0.03	7.9±0.4	2.0±0.2	248±6	-0.86	0.89±0.07	-0.037	13.3±0.9	
NCS DC 73321a	Soil	0.69±0.06	5.6±0.4	0.12±0.03	3.5±0.2	2.6±0.2	325±12	1.2±0.2	0.50±0.04	-0.04	6.7±0.8	
NCS DC 73322a	Soil	1.4±0.2	15.9±0.6	0.31±0.04	6.8±0.5	5.6±0.6	58±2	1.4±0.2	0.84±0.07	-0.085	19±2	
NCS DC 73323a	Soil	14.9±1.3	16.9±1.2	0.75±0.12	4.5±0.3	7.2±0.8	39±3	1.6±0.3	0.80±0.07	6.6±1.3	17.2±1.7	
NCS DC 73324a	Soil	14±2	17±2	0.47±0.08	4.7±0.4	439±58	30±4	16±3	0.84±0.09	-0.5	35±6	
NCS DC 73325a	Soil	0.53±0.07	25±2	0.34±0.07	9.3±1.1	5.0±0.4	37±5	5.7±0.9	1.2±0.2	-0.06	10.5±1.4	
NCS DC 73326a	Soil	1.2±0.2	11.5±0.6	0.098±0.022	6.0±0.5	2.9±0.2	197±6	1.1±0.1	0.86±0.10	-0.034	12.2±0.9	

Data with * is in percent.

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		Chemical Composition(μg/g)									
		Ti*	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
NCS DC 73319a	Soil	0.326±0.009	1.2±0.1	0.61±0.06	6.0±0.3	61±4	3.5±0.5	38±3	3.8±0.4	475±30	218±10
NCS DC 73320a	Soil	0.28±0.02	0.63±0.06	0.38±0.03	1.9±0.2	65±5	1.9±0.3	25±2	2.5±0.3	58±3	219±13
NCS DC 73321a	Soil	0.228±0.010	0.51±0.05	0.28±0.03	1.2±0.2	45±3	1.1±0.2	16±2	1.8±0.3	39±3	247±15
NCS DC 73322a	Soil	0.46±0.02	1.0±0.1	0.4±0.1	3.0±0.3	125±6	2.9±0.3	23±2	2.6±0.3	92±3	234±5
NCS DC 73323a	Soil	0.61±0.03	1.1±0.1	0.50±0.05	4.0±0.4	136±7	7.4±0.6	29±2	3.2±0.3	172±7	272±9
NCS DC 73324a	Soil	0.434±0.019	3.6±0.4	0.70±0.09	28±2	108±5	132±13	33±4	5.2±0.6	1529±79	156±5
NCS DC 73325a	Soil	2.06±0.10	0.30±0.04	0.33±0.06	2.6±0.2	240±11	2.3±0.4	25±3	2.0±0.3	187±13	370±20
NCS DC 73326a	Soil	0.37±0.02	0.57±0.05	0.43±0.04	2.3±0.3	80±3	1.8±0.2	26±1	2.8±0.3	66±3	241±6

		Chemical Composition(%)									
		SiO_2	Al_2O_3	TFe_2O_3	FeO	CaO	MgO	Na_2O	K_2O	H_2O+	C org.
NCS DC 73319a	Soil	56.60±0.46	12.92±0.21	4.41±0.20	-2.25	2.78±0.11	1.17±0.04	1.65±0.07	2.85±0.08	-4.3	-6.8
NCS DC 73320a	Soil	65.97±0.55	11.70±0.17	4.22±0.14	-0.78	4.00±0.14	1.40±0.03	2.67±0.06	3.03±0.08	2.85±0.22	0.71±0.05
NCS DC 73321a	Soil	72.97±0.40	12.97±0.14	2.63±0.10	-0.55	0.84±0.03	0.61±0.02	2.54±0.07	2.91±0.06	2.66±0.17	0.65±0.06
NCS DC 73322a	Soil	63.33±0.47	16.93±0.18	6.92±0.15	-0.43	-0.13	1.33±0.04	-0.1	3.00±0.07	6.39±0.36	0.42±0.04
NCS DC 73323a	Soil	61.52±0.39	16.88±0.15	9.8±0.21	-0.19	-0.07	0.70±0.02	-0.1	2.14±0.06	7.02±0.37	-0.2
NCS DC 73324a	Soil	45.35±0.33	26.63±0.14	12.39±0.17	-0.1	0.13±0.02	0.20±0.02	-0.14	0.44±0.02	12.9±0.48	-0.2
NCS DC 73325a	Soil	33.73±0.35	27.39±0.50	18.03±0.15	-1.46	-0.2	0.31±0.02	-0.1	0.35±0.02	13.61±0.63	1.18±0.08
NCS DC 73326a	Soil	60.12±0.30	11.81±0.17	4.37±0.14	1.23±0.09	7.59±0.14	2.00±0.04	1.71±0.06	2.30±0.05	3.47±0.13	0.50±0.05

		Chemical Composition(%)		
		CO_2	TC	L.O.I.
NCS DC 73319a	Soil		7.87±0.26	15.82±0.64
NCS DC 73320a	Soil	2.41±0.20	1.37±0.03	5.87±0.34
NCS DC 73321a	Soil		0.69±0.05	3.72±0.27
NCS DC 73322a	Soil		0.46±0.03	-6.97
NCS DC 73323a	Soil		-0.2	7.22±0.25
NCS DC 73324a	Soil		0.23±0.02	-13.22
NCS DC 73325a	Soil		1.30±0.06	15.36±0.92
NCS DC 73326a	Soil	5.34±0.21	1.91±0.07	8.98±0.32

Data with * is in percent.

Number	Name	Chemical Composition(μg/g)													Unit Size (in g)
		Ag	As	B	Ba	Cu	Li	Pb	Sr	Zn	Cd	Sb	Ce	Zr	
NCS DC 73327	Synthetic Silicate	(0.034)	2.0	2.1	24	2.0	15	2.5	5.0	3.0	0.022	0.28		2.2	70
NCS DC 73328	Synthetic Silicate	0.064	5.0	5.1	54	5.0	18	5.5	8.0	6.0	0.052	0.58	2.0	5.2	70
NCS DC 73329	Synthetic Silicate	0.11	10	10.0	104	10.0	23	10.5	13	11.0	0.10	1.1	5.0	10.2	70
NCS DC 73330	Synthetic Silicate	0.21	20	20	204	20.0	33	20.5	23	21	0.20	2.1	10.0	20	70
NCS DC 73331	Synthetic Silicate	0.51	50	50	504	50	63	50	53	51	0.50	5.1	20	50	70

		La	Yb	Y	Co	Cr	Mo	Nb	Ni	Bi	Sn	V	W	Be
NCS DC 73327	Synthetic Silicate	2.1	0.2	2.0	2.6	2.3	0.21	2.3	2.6	0.31	0.28	2.8	0.20	0.26
NCS DC 73328	Synthetic Silicate	5.1	0.50	5.0	5.6	5.3	0.51	5.3	5.6	0.61	0.58	5.8	0.50	0.56
NCS DC 73329	Synthetic Silicate	10	1.0	10	10.6	10.3	1.0	10.3	10.6	1.1	1.1	10.8	1.0	1.1
NCS DC 73330	Synthetic Silicate	20	2.0	20	20.6	20.3	2.0	20.3	20.6	2.1	2.1	20.8	2.0	2.1
NCS DC 73331	Synthetic Silicate	50	5.0	50	50.6	50	5.0	50	50.6	5.1	5.1	51	5.0	5.1

		Mn	Ti
NCS DC 73327	Synthetic Silicate	27	24
NCS DC 73328	Synthetic Silicate	57	54
NCS DC 73329	Synthetic Silicate	107	104
NCS DC 73330	Synthetic Silicate	207	204
NCS DC 73331	Synthetic Silicate	507	504

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Number	Name	Chemical Composition(μg/g)													Unit Size
		Ag	As	B	Ba	Cu	Li	Pb	Sr	Zn	Cd	Sb	Ce	Zr	(in g)
NCS DC73332	Synthetic Silicate	1.0	100	100	1000	100	113	100	103	101	1.0	10	100	100	70
NCS DC73334	Synthetic Silicate	5.0	500	500	0.500*	500	513	500	500	500	5.0	50	500	500	70
NCS DC73335	Synthetic Silicate	10		1000	1.000*	1000	1010	1000	1000	1000	10	100	1000	1000	70
NCS DC73336	Synthetic Silicate	20				2000		2000	2000	2000	20	200			70
NCS DC73337	Synthetic Silicate	50				0.500*		0.500*	0.500*	0.500*	50	500			70

		La	Yb	Y	Bi	Sn	Be	Mo	W	Nb	Co	Ni	Cr	V
NCS DC73332	Synthetic Silicate	100	10	100	10	10	10	10	10	100	101	101	100	101
NCS DC73334	Synthetic Silicate	500	50	500	50	50	50	50	50	500	500	500	500	500
NCS DC73335	Synthetic Silicate		100		100	100	100	100	100				1000	1000

		Mn	Ti
NCS DC73332	Synthetic Silicate	1000	1000
NCS DC73334	Synthetic Silicate	0.500*	0.500*
NCS DC73335	Synthetic Silicate	1.000*	1.000*
NCS DC73336	Synthetic Silicate		2.000*

* Chemical Composition:Percent

Number	Name	Chemical Composition(μg/g)												Unit Size
		Ag	As	B	Ba	Cu	Ga	Li	Pb	Sr	Zn	Cd	Sb	Ce	(in g)
NCS DC73338	Synthetic Limestone	(0.03)	2.2	2.2	24	2.2	2.8	3.2	2.4	170	3.0	(0.023)	0.21	2.8	70
NCS DC73339	Synthetic Limestone	0.060	5.2	5.2	54	5.2	5.8	6.2	5.4	200	6.0	0.053	0.51	5.8	70
NCS DC73340	Synthetic Limestone	0.11	10.2	10	104	10.2	10.8	11.2	10.4	250	11	0.1	1.0	11	70
NCS DC73341	Synthetic Limestone	0.21	20	20	204	20	20.8	21	20.4	350	21	0.2	2.0	21	70
NCS DC73343	Synthetic Limestone	1.0	100	100	1000	100	101	101	100	1150	101	1	10	101	70
NCS DC73344	Synthetic Limestone	2.0	200	200	0.200*	200	200	200	200	0.215*	200	2	20	200	70
NCS DC73345	Synthetic Limestone	5.0	500	500	0.500*	500		500	500	0.515*	500	5	50	500	70
NCS DC73346	Synthetic Limestone	10				1000			1000		1000	10	100		70

		Zr	Ti	Mn
NCS DC73338	Synthetic Limestone	4.0	31	37
NCS DC73339	Synthetic Limestone	7.0	61	67
NCS DC73340	Synthetic Limestone	12	111	117
NCS DC73341	Synthetic Limestone	22	210	217
NCS DC73343	Synthetic Limestone	102	1010	1020
NCS DC73344	Synthetic Limestone	202	2010	2020
NCS DC73345	Synthetic Limestone	500	0.500*	0.500*
NCS DC73346	Synthetic Limestone			1.000*

* Chemical Composition:Percent

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Number	Name	Chemical Composition										Unit Size (in g)
		$Ag(10^{-9})$	$Al(10^{-2})$	$As(10^{-6})$	$B(10^{-6})$	$Ba(10^{-6})$	$Be(10^{-9})$	$Bi(10^{-9})$	$Br(10^{-6})$	$Ca(10^{-2})$	$Cd(10^{-9})$	
NCS DC 73347a	Human hair	(50)	(2)	(0.28)	2.9	11.4	110	21	(1.1)	0.145	0.07	6
		$Ce(10^{-6})$	$Cl(10^{-2})$	$Co(10^{-6})$	$Cr(10^{-6})$	$Cs(10^{-6})$	$Cu(10^{-6})$	$Dy(10^{-9})$	$Er(10^{-9})$	$Eu(10^{-9})$	$F(10^{-6})$	$Fe(10^{-6})$
NCS DC 73347a	Human hair	(0.35)	(0.018)	0.045	0.41	(0.003)	14.3	20	14	3.7	(11)	36
		$Gd(10^{-9})$	$Ge(10^{-9})$	$Hf(10^{-6})$	$Hg(10^{-9})$	$Ho(10^{-9})$	$I(10^{-6})$	$K(10^{-2})$	$La(10^{-6})$	$Li(10^{-6})$	$Lu(10^{-9})$	$Mg(10^{-2})$
NCS DC 73347a	Human hair	20		(0.6)	670	4.6	0.8	(0.002)	0.16	(1.6)	(2.8)	(0.014)
		$Mn(10^{-6})$	$Mo(10^{-6})$	$N(10^{-2})$	$Na(10^{-2})$	$Nd(10^{-6})$	$Ni(10^{-6})$	$P(10^{-2})$	$Pb(10^{-6})$	$Pr(10^{-9})$	$Rb(10^{-6})$	$S(10^{-2})$
NCS DC 73347a	Human hair	2	0.17	13.9	0.0089	0.093	0.43	0.014	5.7	25	(0.06)	4.19
		$Sb(10^{-6})$	$Sc(10^{-6})$	$Se(10^{-6})$	$Si(10^{-2})$	$Sm(10^{-9})$	$Sn(10^{-6})$	$Sr(10^{-6})$	$Tb(10^{-9})$	$Th(10^{-6})$	$Tl(10^{-6})$	$Ti(10^{-9})$
NCS DC 73347a	Human hair	(0.065)	(0.018)	0.58	(0.06)	19	(0.2)	7.7	3.3	0.064	(3.3)	7.7
		$Tm(10^{-9})$	$U(10^{-9})$	$V(10^{-6})$	$Y(10^{-6})$	$Yb(10^{-9})$	$Zn(10^{-6})$	Ash(%)				
NCS DC 73347a	Human hair	21	99	0.5	11.2	15	137	(5.5)				

Number	Name	Chemical Composition(μg/kg)						Unit Size (in g)
		Pt	Pd	Ir	Os	Au	Rh	
NCS DC 73352	Platinum Group	0.26	0.26	(0.04)	(0.05)	0.90		500
NCS DC 73353	Platinum Group	1.6	2.3	(0.05)	(0.05)	10		500
NCS DC 73354	Platinum Group	6.4	4.6	4.3	9.6	1.1	1.3	500
NCS DC 73355	Platinum Group	58	60	4.7	2.4	4.3	4.3	500
NCS DC 73356	Platinum Group	20	11.3	136	353		10	500
NCS DC 73357	Platinum Group	440	568	28	15.6	(45)	22	500
NCS DC 73358	Platinum Group	14.7	15.2	1.2	0.64	(1.8)	1.1	500

Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		SiO_2	Al_2O_3	TFe_2O_3	FeO	MgO	CaO	Na_2O	K_2O	H_2O^+	CO_2	LOI		
NCS DC 73375	Limestone	6.65	0.68	0.21	(0.06)	0.71	51.1	(0.03)	0.15	(0.4)	39.8	40.2		70
NCS DC 73376	Gramite	66.3	16.3	3.12	1.6	1.63	2.66	5.3	2.60	(1.0)	0.35	1.28		70
NCS DC 73377	Plagioclase Bornblende	49.6	13.8	14.8	10.8	7.2	9.6	2.07	0.48	(1.7)	(0.16)	1.06		70
		Chemical Composition(μg/g)												
		Ag	As	B	Ba	Be	Bi	Cd	Ce	Cl	Co	Cr	Cs	Cu	Dy
NCS DC 73375	Limestone	(0.024)	0.67	(6)	8.6	0.13	0.032	(0.018)	4.6	(30)	(0.7)	(3.3)	(0.12)	(2.2)	0.28
NCS DC 73376	Gramite	0.027	0.25	15	1140	1.7	0.094	(0.06)	48	(127)	7.5	23	2.6	(2.6)	1.5
NCS DC 73377	Plagioclase Bornblende	(0.05)	25	12	62	0.34	(0.06)	0.14	7.8	(120)	52	137	1.9	84	3.5
		Er	Eu	F	Ga	Gd	Ge	Hf	Hg	Hc	In	La	Li	Lu	Mn
NCS DC 73375	Limestone	0.15	0.082	240	(0.8)	0.36	0.13	0.21	0.005	(0.04)	(0.03)	2.3	4.5	0.023	30
NCS DC 73376	Gramite	0.76	0.10	660	18	2.4	0.93	3.3	0.004	0.27		25	24	0.11	430
NCS DC 73377	Plagioclase Bornblende	2.3	0.92	206	17.3	2.7	1.46	1.5	0.0032	0.84		2.9	11	0.38	1600
		Mo	Nb	Nd	Ni	P	Pb	Pr	Rb	S	Sb	Sc	Se	Sm	Sn
NCS DC 73375	Limestone	0.18	(0.8)	1.95	(4)	57	(5)	0.60	4.0	35	0.068	(0.7)	0.021	0.40	(0.5)
NCS DC 73376	Gramite	(0.3)	4	21	12.2	570	7.7	5.7	57	(50)	0.063	5.0	0.019	3.3	0.8
NCS DC 73377	Plagioclase Bornblende	0.16	2.7	6.4	119	375	(9)	1.25	30	(70)	(0.7)	43	0.083	2.1	(0.8)
		Sr	Ta	Tb	Th	Ti	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
NCS DC 73375	Limestone	110	(0.05)	0.054	0.86	233	(0.033)	0.022	0.23	5.2	0.13	(1.8)	0.15	(7)	(11)
NCS DC 73376	Gramite	690	(0.33)	0.29	1.9	1780	(0.20)	0.11	(0.4)	45	0.42	7.4	0.69	46	(90)
NCS DC 73377	Plagioclase Bornblende	142	(0.14)	0.57	(0.34)	5530	(0.11)	0.36	(0.14)	300	0.34	20	2.4	100	57

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Number	Name	Chemical Composition									Unit Size
		Pt(10^{-9})	Pt(10^{-6})	Pd(10^{-9})	Pd(10^{6})	Os(10^{-9})	Ru(10^{-9})	Ir(10^{-9})	Rh(10^{-9})	Au(10^{-9})	(in g)
NCS DC 73397	Platinum group	0.66		0.66		0.25	0.66	0.16	0.066	2.3	1000
NCS DC 73398	Platinum group		1.9		0.57	43	74	28	7.3		1000
NCS DC 73399	Platinum group		5.7		1.67	2	2	2.1	1.5		1000

Number	Name	Chemical Composition(Percent)												Unit Size
		Cu	Pb	Zn	Fe	S	Mn	SiO_2	Al_2O_3	MgO	CaO	Na_2O	K_2O	Ag*	(in g)
NCS DC 73510	Ore	0.096	5.13	13.9	19.6	29.0	0.066	14.1	(2.5)	0.59	6.5	(0.03)	0.78	148	50

		Ca*	Od*
NCS DC 73510	Ore	62	400

*Chemical Composition(10^{-6})

Number	Name	Chemical Composition(mg/g)											Unit Size
		Ni(%)	Co	S(%)	Ag	As	Cd	Cr	Cu	Mn	P	Pb	(in g)
NCS DC 73514	Nickel Ore	0.11	49	0.74	0.56	5.3	0.28	790	330	960	728	21	50
NCS DC 73515	Nickel Ore	0.33	104	1.53	0.75	5.1	0.34	0.13*	681	0.11*	485	25	50
NCS DC 73516	Nickel Ore	1.02	262	3.78	1.1	5.4	0.44	0.12*	0.16*	0.11*	829	25	50
NCS DC 73517	Nickel Ore	5.93	0.13*	18.14	9.3	25	2.5	(720)	1.52*	614	266	77	50
NCS DC 73518	Nickel Ore	9.01	0.20*	27.83	15.2	37	4	(457)	2.47*	295	(130)	116	50

		Sc	Ti	V	Zn	SiO_2(%)	Al_2O_3(%)	Fe_2O_3(%)	Mgo(%)	CaO(%)	Na_2O(%)	K_2O(%)	H_2O(%)
NCS DC 73514	Nickel Ore	15.6	0.42*	102	79	54.89	12.21	8.58	9.67	4.6	2.16	1.51	3.37
NCS DC 73515	Nickel Ore	15.8	0.32*	93	77	52.29	9.09	10.71	14.56	4.02	1.59	1	3.78
NCS DC 73516	Nickel Ore	17.6	0.41*	112	77	46.85	8.65	14.69	14.45	4.7	1.55	0.9	3.21
NCS DC 73517	Nickel Ore	9.1	0.14*	61	102	27.4	4.06	34.71	9.88	2.55	0.69	0.34	2.4
NCS DC 73518	Nickel Ore	2.5	422	(30)	134	14.13	1.04	48.37	6.3	1.16	0.22	0.06	1.65

Note: Date in () is for reference only. value with* means in percent

Number	Name	Chemical Composition											Unit Size
		Mo(%)	S(%)	Ag(μg/g)	As(μg/g)	Bi(μg/g)	Cd(μg/g)	Co(μg/g)	Cr(μg/g)	Cu(μg/g)	Ge(μg/g)	Mn(%)	(in g)
NCS DC 73519	Molybdenum Ore	0.066	0.38	(0.11)	5.2	6.9	0.50	13.3	23	46	6.2	0.92	50
NCS DC 73520	Molybdenum Ore	0.15	0.44	0.10	4.8	7.4	0.52	12.9	23	46	6.0	0.91	50
NCS DC 73521	Molybdenum Ore	0.54	0.68	0.13	4.7	8.2	0.52	13.2	23	48	6.2	0.91	50
NCS DC 73522	Molybdenum Ore	50.08	33.72	(2.1)	(2.2)	86	0.20	10.2	30	266	(0.67)	0.15	50

		Ni(μg/g)	P(μg/g)	Pb(μg/g)	Re(μg/g)	Sb(μg/g)	Sn(μg/g)	W(μg/g)	Zn(μg/g)	SiO_2(%)	Al_2O_3(%)	Fe_2O_3(%)	MgO(%)
NCS DC 73519	Molybdenum Ore	54	1160	9.1	(0.07)	0.58	4.7	489	357	57.23	5.20	10.05	4.29
NCS DC 73520	Molybdenum Ore	52	1231	10.5	0.12	0.60	4.5	518	365	57.47	5.20	9.89	4.37
NCS DC 73521	Molybdenum Ore	52	1210	13.7	0.31	0.73	4.7	557	360	56.87	5.12	9.88	4.35
NCS DC 73522	Molybdenum Ore	(20)	(130)	316	23	13.2	(11.9)	732	68	7.58	(1.16)	1.23	1.96

		CaO(%)	Na_2O(%)	K_2O(%)	Total oil and water(%)
NCS DC 73519	Molybdenum Ore	18.37	0.90	0.66	
NCS DC 73520	Molybdenum Ore	18.13	0.91	0.66	
NCS DC 73521	Molybdenum Ore	18.09	0.90	0.66	
NCS DC 73522	Molybdenum Ore	1.95	(0.21)	(0.06)	0.85

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Number	Name	Composition(ug/g)								Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	
NCS DC73058	Soil	0.088±0.004	12.4±1.0	39±3	639±14	2.7±0.2	0.38±0.04	8.5±0.5	0.098±0.007	70g
NCS DC73059	Soil	0.093±0.003	9.3±0.6	56±3	679±15	2.23±0.07	0.31±0.04	2.4±0.2	0.33±0.02	70g
NCS DC73060	Soil	2.3±0.1	323±14	85±4	255±8	16.3±0.8	301±11	3.3±0.3	2.8±0.2	70g
NCS DC73061	Soil	0.157±0.011	12.9±0.9	131±7	314±11	2.2±0.1	0.63±0.05	7.0±0.5	0.20±0.01	70g
NCS DC73062	Soil	0.086±0.006	13.1±1.0	57±3	502±13	2.06±0.08	0.37±0.04	4.2±0.3	0.31±0.02	70g
NCS DC73063	Soil	0.077±0.005	13.2±0.8	58±3	557±16	2.55±0.10	0.42±0.02	2.3±0.4	0.174±0.008	70g
NCS DC73064	Soil	0.072±0.005	14.2±0.8	61±4	505±13	2.02±0.07	0.36±0.03	4.3±0.3	0.186±0.008	70g
NCS DC73065	Soil	0.060±0.005	11.4±0.7	46±3	564±14	1.68±0.07	0.25±0.03	2.3±0.2	0.121±0.006	70g
NCS DC73066	Soil	0.053±0.004	13.5±1.2	31±2	615±12	1.54±0.06	0.22±0.03	5.2±0.3	0.057±0.006	70g

		Composition(ug/g)							
		Ce	Cl	Co	Cr	Cs	Cu	Dy	Er
NCS DC73058	Soil	82±4	53±2	16.0±0.7	69±3	7.9±0.5	23.0±0.8	5.6±0.3	3.2±0.5
NCS DC73059	Soil	70±4	48±3	15.5±0.9	72±3	6.4±0.4	31±2	5.2±0.3	2.9±0.2
NCS DC73060	Soil	111±5	44±4	9.5±0.6	62±2	26±2	173±5	7.8±0.4	4.6±0.3
NCS DC73061	Soil	82±3	85±3	5.9▲ 5.8～7.5	60±3	7.7±0.4	25.3±1.0	5.2±0.3	2.9±0.3
NCS DC73062	Soil	74±3	75±3	12.6±0.6	69±4	7.6±0.4	28±2	5.2±0.2	2.9±0.2
NCS DC73063	Soil	70±3	209±9	11.0±0.6	48±2	8.6±0.4	24±2	5.1±0.4	2.9±0.2
NCS DC73064	Soil	66±3	113±7	12.6±0.4	67±3	8.1±0.4	25.6±0.9	4.6±0.3	2.6±0.2
NCS DC73065	Soil	51±2	91±4	12.0±0.5	84±5	5.1±0.3	24.1±0.8	3.6±0.2	2.0±0.2
NCS DC73066	Soil	41±2	72±4	7.5±0.7	38±2	4.1±0.2	23.7±0.9	2.9±0.2	1.6±0.2

		Composition(ug/g)							
		Eu	F	Ga	Gd	Ge	Hf	Hg	Ho	I
NCS DC73058	Soil	1.4±0.2	455±14	19.4±0.9	6.2±0.3	1.39±0.06	8.3±0.4	0.034±0.003	1.12±0.14	3.49±0.15
NCS DC73059	Soil	1.4±0.2	603±18	17.4±1.0	5.8±0.3	1.39±0.06	7.3±0.3	0.056±0.005	1.04±0.07	0.97±0.09
NCS DC73060	Soil	1.27±0.06	3069±80	24±3	8.0±0.4	2.3±0.3	7.9±0.4	0.24±0.02	1.55±0.10	3.42±0.17
NCS DC73061	Soil	1.29±0.09	577±20	15.2±0.8	6.0±0.5	1.50±0.06	8.3±0.6	0.075±0.004	1.04±0.12	2.93±0.12
NCS DC73062	Soil	1.27±0.07	690±21	15.4±0.8	5.8±0.3	1.29±0.05	7.4±0.3	0.081±0.007	1.04±0.08	2.30±0.05
NCS DC73063	Soil	1.2±0.2	954±24	17.1±0.9	5.5±0.4	1.15±0.07	5.5±0.4	0.015±0.003	1.03±0.13	1.59±0.08
NCS DC73064	Soil	1.15±0.05	675±24	15.6±0.6	5.2±0.3	1.21±0.06	5.7±0.4	0.035±0.004	0.91±0.05	2.04±0.10
NCS DC73065	Soil	0.98±0.07	530±23	12.8±0.4	3.9±0.2	1.20±0.06	4.0±0.2	0.027±0.003	0.72±0.07	1.33±0.06
NCS DC73066	Soil	0.84±0.04	313±12	11.4±0.5	3.1±0.2	1.19±0.05	5.8±0.4	0.018±0.003	0.58±0.05	2.04±0.09

		Composition(ug/g)							
		In	La	Li	Lu	Mn	Mo	N	Nb
NCS DC73058	Soil	0.066±0.003	41±3	35.1±1.0	0.50±0.04	923±16	0.68±0.03	1799±41	16.3±0.9
NCS DC73059	Soil	0.063±0.002	37±2	34.5±0.8	0.43±0.03	674±11	1.11±0.07	874±21	16.9±0.6
NCS DC73060	Soil	2.3±0.2	55±2	73.6±1.5	0.78±0.04	1675±24	12.2±0.6	1442±27	21.4±1.2
NCS DC73061	Soil	0.080±0.004	42±2	26.1±0.7	0.44±0.04	119±3	3.2±0.2	1708±51	14.9±0.7
NCS DC73062	Soil	0.056±0.003	38±2	35.8±1.0	0.45±0.03	666±12	0.98±0.06	1191▲ 1113～1205	13.7±0.6
NCS DC73063	Soil	0.062±0.003	36±2	42.6±1.1	0.44±0.04	721±12	1.32±0.06	606±9	15.5±0.6
NCS DC73064	Soil	0.055±0.003	34±2	40.2±0.9	0.40±0.04	661±11	0.78±0.04	987±24	12.5±0.6
NCS DC73065	Soil	0.044±0.003	26±3	24.8±0.5	0.32±0.05	590±9	0.72±0.05	840±16	10.0±0.4
NCS DC73066	Soil	0.031±0.002	22±1	18.1±0.5	0.28±0.02	399±7	0.66±0.05	440±12	7.9±0.5

		Composition(ug/g)								
		Nd	Ni	P	Pb	Pr	Rb	S	Sb	Sc
NCS DC73058	Soil	37.0±1.2	31.0±1.3	752±20	26.6±1.2	9.6±0.6	124±5	227±9	0.80±0.08	12.6±0.4
NCS DC73059	Soil	33.2±2.7	33.8±1.1	729±20	22.2±1.6	8.5±0.4	100±3	124±8	0.87±0.05	13.1±0.5
NCS DC73060	Soil	45.9±1.8	22.3±0.9	806±24	727±16	12.5±1.1	206±9	401±36	18.2±1.2	11.4±0.4
NCS DC73061	Soil	36.0±1.5	17.1±0.8	1249±35	27.0±0.8	9.4±0.5	94±3	494±23	1.1±0.1	11.1±0.4
NCS DC73062	Soil	34.3±1.4	31.3±1.1	1278±24	25±1.3	8.7±0.5	101±3	279±8	1.16±0.05	11.8±0.3
NCS DC73063	Soil	31.8±1.4	25.4±1.2	924±20	24.3±1.2	8.2±0.4	129±3	0.27*±0.02*	0.95±0.03	9.9±0.3
NCS DC73064	Soil	30.1±1.2	31.7±0.9	1121±19	23.1±1.3	7.7±0.4	101±3	348±14	1.18±0.06	11.8±0.4
NCS DC73065	Soil	23.1±1.2	38.4±1.1	718±16	19.5±0.9	6.0±0.4	86±3	368±18	1.01±0.07	10.7±0.3
NCS DC73066	Soil	18.8±1.3	16.2±0.9	241±12	18.8±1.0	4.9±0.3	85±3	141±11	0.76±0.04	6.8±0.2

Section 4 Mineral & Geology(Powder)

		Composition(ug/g)								
		Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti*
NCS DC73058	Soil	0.36±0.02	7.1±0.3	3.4±0.2	186±7	1.26±0.10	1.00±0.08	0.049±0.008	13.6±0.7	0.476±0.007
NCS DC73059	Soil	0.23±0.02	6.3±0.3	3.1±0.2	151±4	1.27±0.06	0.94±0.09	(0.05)	11.2±0.5	0.457±0.009
NCS DC73060	Soil	1.3±0.2	9.0±0.4	411±36	26.3±1.3	2.63±0.12	1.34±0.10	(1.6)	23.9±1.2	0.41±0.02
NCS DC73061	Soil	1.2±0.1	6.6±0.4	6.0±0.5	80.1±1.6	1.26±0.08	0.93±0.06	(0.05)	13.9±0.6	0.425±0.010
NCS DC73062	Soil	0.19±0.02	6.5±0.4	3.0±0.2	203±5	1.12±0.07	0.93±0.08	0.039±0.007	13.0±0.6	0.392±0.009
NCS DC73063	Soil	0.21±0.02	6.0±0.3	3.8±0.2	315±9	1.39±0.06	0.90±0.08	0.036±0.006	14.1±0.7	0.313±0.008
NCS DC73064	Soil	0.25±0.02	5.7±0.3	2.7±0.2	297±5	1.02±0.07	0.82±0.04	(0.04)	12.0±0.4	0.348±0.007
NCS DC73065	Soil	0.26±0.02	4.4±0.3	2.1±0.2	221±5	0.85±0.07	0.63±0.05	0.032±0.006	9.8±0.3	0.280±0.006
NCS DC73066	Soil	0.14±0.02	3.5±0.5	1.8±0.2	205±4	0.60±0.04	0.51±0.03	0.041±0.008	7.3±0.3	0.240±0.006

		Composition(ug/g)							
		Tl	Tm	U	V	W	Y	Yb	Zn
NCS DC73058	Soil	0.73±0.03	0.51±0.06	3.1±0.2	95±3	2.1±0.3	29.9±1.1	3.2±0.2	75±3
NCS DC73059	Soil	0.58±0.03	0.46±0.04	2.1±0.2	109±3	1.8±0.2	28.6±0.8	2.9±0.2	85±3
NCS DC73060	Soil	2.13±0.09	0.75±0.04	15.6±0.7	79±3	164±9	43.7±1.3	5.1±0.3	514±16
NCS DC73061	Soil	0.81±0.04	0.45±0.04	4.4±0.2	136±5	3.0±0.2	27.8±0.9	2.9±0.3	70±3
NCS DC73062	Soil	0.59±0.03	0.47±0.03	2.6±0.2	83±3	2.1±0.2	27.7±0.9	3.0±0.1	78±2
NCS DC73063	Soil	0.70±0.03	0.46±0.02	5.7±0.3	68±2	2.2±0.2	27.7±1.0	2.9±0.2	82±2
NCS DC73064	Soil	0.60±0.03	0.40±0.03	2.8±0.2	82▲ 80～86	1.9±0.1	25±0.7	2.6±0.2	72±2
NCS DC73065	Soil	0.50±0.02	0.33±0.03	2.6±0.1	77±2	1.3±0.2	19.6±0.6	2.1±0.2	55±2
NCS DC73066	Soil	0.53±0.03	0.27±0.03	1.4±0.1	54±2	1.4±0.2	15.8±0.6	1.8±0.2	35±2

		Composition(ug/g)
		Zr
NCS DC73058	Soil	306±9
NCS DC73059	Soil	260±7
NCS DC73060	Soil	257±7
NCS DC73061	Soil	280±13
NCS DC73062	Soil	264±7
NCS DC73063	Soil	185±7
NCS DC73064	Soil	201±6
NCS DC73065	Soil	140±3
NCS DC73066	Soil	201±7

		Composition(%)								
		SiO_2	Al_2O_3	TFe_2O_3	FeO	CaO	MgO	Na_2O	K_2O	H_2O+
NCS DC73058	Soil	62.32±0.24	14.84±0.10	5.13±0.10	(1.1)	1.39±0.03	1.24±0.02	1.73±0.05	2.72±0.04	4.90±0.21
NCS DC73059	Soil	66.74±0.25	13.21±0.09	4.98±0.08	1.32±0.05	2.18±0.03	2.07±0.04	1.95±0.03	2.51±0.04	3.13±0.15
NCS DC73060	Soil	65.60±0.19	12.70±0.07	8.29±0.11	1.39±0.09	1.18±0.03	0.92±0.02	0.13±0.01	1.83±0.03	5.03±0.16
NCS DC73061	Soil	73.80±0.28	11.04±0.12	3.84±0.07	(1.1)	0.36±0.01	0.42±0.01	0.26±0.02	1.76±0.03	4.31±0.16
NCS DC73062	Soil	59.83±0.19	12.10±0.10	4.52±0.09	(1.5)	6.42±0.07	2.34±0.03	1.68±0.04	2.46±0.04	3.89±0.12
NCS DC73063	Soil	53.97±0.19	11.92±0.11	4.40±0.07	1.74±0.04	9.33±0.12	3.20±0.04	1.83±0.04	3.11±0.05	3.67±0.13
NCS DC73064	Soil	56.71±0.22	11.90±0.09	4.47±0.10	(1.5)	8.03±0.17	2.70±0.03	1.54±0.03	2.44±0.04	3.86±0.14
NCS DC73065	Soil	65.49±0.20	10.54±0.07	4.00±0.09	1.56±0.05	4.82±0.07	2.79±0.05	1.60±0.04	2.18±0.03	3.31±0.07
NCS DC73066	Soil	74.15±0.32	9.89±0.09	2.63±0.06	0.64±0.05	3.00±0.07	1.04±0.02	1.73±0.05	2.57±0.04	2.25±0.10

		Composition(%)			
		Corg.	CO_2	TC	L.O.I
NCS DC73058	Soil	2.07±0.06		2.29±0.06	(9)
NCS DC73059	Soil	0.76±0.04	(1.1)	1.03±0.03	5.16±0.17
NCS DC73060	Soil	1.51±0.05		1.68±0.05	7.92±0.22
NCS DC73061	Soil	1.63±0.06		1.82±0.05	7.16±0.23
NCS DC73062	Soil	1.06±0.03	4.48±0.15	2.25±0.05	9.42±0.22
NCS DC73063	Soil	0.52±0.03	6.89±0.13	2.35±0.06	(10.9)
NCS DC73064	Soil	0.95±0.03	6.13±0.19	2.59±0.06	(10.9)
NCS DC73065	Soil	0.78±0.03	3.70±0.10	1.73±0.05	7.70±0.20
NCS DC73066	Soil	0.38±0.02	(1.8)	0.81±0.02	4.31±0.13

Section 4 Mineral & Geology(Powder)

Number	Name	Composition(ug /g)								Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	
NCS DC73067	Soil	0.114±0.009	8.3±1.7	20±3	715±20	2.9±0.3	0.37±0.03	5.2±0.3	0.127±0.007	70
NCS DC73068	Soil	0.081±0.003	6.0±0.3	23±2	657±14	2.4±0.1	0.24±0.03	1.9±0.4	0.074±0.005	70
NCS DC73069	Soil	0.068±0.005	7.6±0.3	28±3	761±28	2.2±0.2	0.27±0.03	3.2±0.3	0.078±0.009	70
NCS DC73070	Soil	0.049±0.005	3.9±0.3	13.2±1.0	544±12	1.6±0.1	0.11±0.01	1.5±0.4	0.042±0.005	70
NCS DC73071	Soil	0.084±0.005	19.9±0.5	68±5	614±15	2.22±0.09	0.38±0.02	3.4±0.4	0.18±0.01	70
NCS DC73072	Soil	0.059±0.004	3.6±0.3	47±3	357±8	3.2±0.3	0.46±0.03	11.8±0.5	0.108±0.005	70
NCS DC73073	Soil	0.084±0.005	10.0±0.3	37±3	468±17	2.2±0.1	0.33±0.03	2.4±0.3	0.19±0.01	70
NCS DC73074	Soil	(0.065)	12.1±0.3	60±3	483±11	2.2±0.2	0.43±0.03	2.1±0.3	0.138±0.007	70
		Ce	Cl	Co	Cr	Cs	Cu	Dy	Er	Eu
NCS DC73067	Soil	85±3	53±6	11.3±0.5	48±2	9.6±0.6	12.9±0.8	4.8±0.3	2.6±0.1	1.31±0.05
NCS DC73068	Soil	60±2	56±7	7.4±0.3	38±3	6.0±0.3	12.6±0.6	4.1±0.2	2.4±0.1	1.13±0.07
NCS DC73069	Soil	60±3	45±5	10.9±0.3	50±3	6±0.4	17.2±0.8	4.2±0.3	2.44±0.09	1.08±0.04
NCS DC73070	Soil	26±2	42±5	3.8±0.2	(23)	3.4±0.3	(6.4)	1.94±0.05	1.17±0.05	0.58±0.05
NCS DC73071	Soil	64±3	0.345±0.019	18.6±1.0	113±3	8.4±0.4	40.3±1.2	4.5±0.3	2.6±0.2	1.16±0.05
NCS DC73072	Soil	62±3	574±28	8.9±0.3	47±2	7.6±0.3	16.9±0.6	6.3±0.3	3.6±0.3	1.34±0.05
NCS DC73073	Soil	58±2	871±30	12.9±0.5	55±3	6.1±0.3	28±1	5.3±0.2	3.07±0.09	1.20±0.03
NCS DC73074	Soil	57±3	125±7	10.1±0.3	55±3	12.7±0.5	19.8±0.8	4.2±0.3	2.3±0.1	1.05±0.03
		F	Ga	Gd	Ge	Hf	Hg	Ho	I	In
NCS DC73067	Soil	603±28	21.7±0.7	5.8±0.3	1.26±0.08	7.4±0.3	0.055±0.005	0.94±0.06	1.9±0.3	0.061±0.003
NCS DC73068	Soil	365±22	15.6±0.8	4.5±0.2	1.25±0.05	9.3±0.4	0.019±0.003	0.84±0.03	0.70±0.05	0.044±0.004
NCS DC73069	Soil	357±20	17.5±0.7	4.5±0.3	1.33±0.06	5.6±0.3	0.024±0.003	0.85±0.03	2.33±0.09	0.052±0.003
NCS DC73070	Soil	(164)	10.2±0.3	2.0±0.05	1.06±0.04	5.6±0.5	0.014±0.002	0.40±0.03	0.63±0.05	0.019±0.003
NCS DC73071	Soil	750±46	17.5±0.8	4.9±0.3	1.29±0.06	4.1±0.4	0.031±0.003	0.90±0.04	2.0±0.1	0.063±0.003
NCS DC73072	Soil	511±26	15.5±0.7	6.3±0.3	1.33±0.09	6.3±0.3	0.009±0.004	1.30±0.08	1.9±0.3	0.051±0.003
NCS DC73073	Soil	589±26	17.4±0.6	5.2±0.3	1.28±0.06	4.9±0.6	0.012±0.002	1.09±0.05	1.7±0.1	0.061±0.005
NCS DC73074	Soil	697±30	15.1±0.4	4.6±0.3	1.26±0.06	5.2±0.3	0.020±0.002	0.85±0.03	0.76±0.08	0.059±0.005
		La	Li	Lu	Mn	Mo	N	Nb	Nd	Ni
NCS DC73067	Soil	44.6±1.1	50±3	0.41±0.03	0.107±0.002	2.08±0.09	0.247±0.009	16.7±0.8	38±3	16.8±0.5
NCS DC73068	Soil	31.8±0.9	27±2	0.40±0.02	505±10	0.86±0.13	0.111±0.002	13.4±0.4	28.1±0.9	13.6±0.8
NCS DC73069	Soil	31.5±1.2	25±2	0.40±0.03	700±13	0.50±0.05	692±26	12.9±0.7	27.1±1.1	21.5±0.8
NCS DC73070	Soil	14.4±0.6	13.2±0.5	0.21±0.01	230±6	0.38±0.03	351±26	7.4±0.5	12.1±0.3	10.0±0.5
NCS DC73071	Soil	34.0±1.2	39.3±1.4	0.40±0.02	879±20	1.92±0.09	592±24	12.8±0.6	29.2±0.8	63±2
NCS DC73072	Soil	34±1.3	29±1	0.56±0.04	550±10	0.99±0.05	808±24	11.2±0.6	33.4±1.2	22.2±0.7
NCS DC73073	Soil	30±2	31±1	0.52±0.03	800±10	(1.1)	637±22	12.0±0.6	28.2±0.6	27±1
NCS DC73074	Soil	30±1	50±3	0.35±0.03	564±10	0.68±0.04	605±22	13.5±0.6	26.2±0.6	27.2±1.2
		P	Pb	Pr	Rb	Re	S	Sb	Sc	Se
NCS DC73067	Soil	990±26	26.4±1.3	10.0±0.5	130±4	~0.003	351±17	(0.5)	10.8±0.5	0.137±0.006
NCS DC73068	Soil	411±8	21.4±0.7	7.3±0.3	111±3	~0.002	229±5	(0.47)	8.2±0.5	0.121±0.009
NCS DC73069	Soil	499±10	23.1±1.2	7.0±0.3	122±4	~0.002	104±5	0.58±0.05	9.6±0.5	0.152±0.006
NCS DC73070	Soil	162±8	15.8±0.8	3.2±0.2	106±3	~0.002	107±5	0.37±0.04	3.2±0.2	0.072±0.005
NCS DC73071	Soil	559±9	25.0±1.1	7.5±0.4	110±3	~0.004	0.369±0.001	1.58±0.07	15.6±0.5	0.42±0.03
NCS DC73072	Soil	862±16	20.0±0.8	8.4±0.3	109±5	~0.003	0.213±0.009	0.39±0.04	10.7±0.5	0.21±0.03
NCS DC73073	Soil	885±13	20.2±0.9	7.1±0.3	94±3	~0.002	0.123±0.005	1.00±0.05	14.0±0.3	0.29±0.01
NCS DC73074	Soil	890±12	20.1±1.2	6.9±0.3	128±3	~0.002	(206)	0.73±0.03	10.6±0.3	0.128±0.005

Section 4 Mineral & Geology(Powder)

		Sm	Sn	Sr	Ta	Tb	Te	Th	Ti*	Tl
NCS DC73067	Soil	6.8±0.3	2.9±0.2	252±4	1.3±0.1	0.87±0.04	0.039±0.007	14.5±1.1	0.442±0.007	0.82±0.05
NCS DC73068	Soil	5.2±0.2	2.4±0.3	213±4	1.04±0.05	0.73±0.03	0.034±0.005	10.1±1.0	0.355±0.007	0.68±0.03
NCS DC73069	Soil	5.1±0.3	2.7±0.2	155±3	1.03±0.07	0.72±0.03	0.038±0.005	10.5±0.8	0.336±0.052	0.74±0.06
NCS DC73070	Soil	2.3±0.1	1.4±0.3	138±3	0.60±0.05	0.33±0.02	(0.021)	4.6±0.3	0.189±0.006	0.67±0.03
NCS DC73071	Soil	5.5±0.2	2.7±0.3	308±6	0.99±0.07	0.78±0.04	0.052±0.005	12.5±0.8	0.361±0.008	0.68±0.03
NCS DC73072	Soil	7.0±0.3	2.7±0.2	178±4	1.05±0.09	1.10±0.06	(0.033)	11.9±1.3	0.290±0.008	0.62±0.03
NCS DC73073	Soil	5.6±0.2	2.4±0.3	285±6	0.93±0.09	0.89±0.03	0.049±0.007	9.7±1.0	0.374±0.011	0.56±0.03
NCS DC73074	Soil	5.1±0.2	4.0±0.3	227±5	1.3±0.1	0.75±0.03	0.032±0.006	10.5±0.5	0.311±0.004	0.75±0.03

		Tm	U	V	W	Y	Yb	Zn	Zr	SiO_2*
NCS DC73067	Soil	0.42±0.03	7.9±0.5	72±2	1.92±0.05	25.5±0.6	2.7±0.2	95±3	260±7	60.21±0.20
NCS DC73068	Soil	0.39±0.03	3.0±0.2	51±3	1.7±0.2	22.8±0.7	2.6±0.1	53±3	330±9	70.86±0.19
NCS DC73069	Soil	0.39±0.02	2.2±0.2	67±3	1.7±0.2	22.6±0.6	2.6±0.1	63±3	187±4	68.47±0.24
NCS DC73070	Soil	0.20±0.02	0.97±0.04	28±1	0.64±0.06	12.4±0.3	1.32±0.05	21±3	206±4	81.68±0.24
NCS DC73071	Soil	0.40±0.03	3.4±0.3	107±5	1.71±0.09	23.8±0.5	2.60±0.08	80±2	137±4	53.00±0.20
NCS DC73072	Soil	0.57±0.03	12.5±0.5	59±4	2.7±0.2	34.9±1.1	3.7±0.3	53±3	200±6	68.33±0.26
NCS DC73073	Soil	0.51±0.03	3.2±0.2	90±3	1.4±0.1	28.2±0.7	3.3±0.2	81±2	171±4	58.84±0.24
NCS DC73074	Soil	0.37±0.03	3.3±0.2	66±3	2.5±0.2	23±1	2.3±0.1	65±1	180±4	60.93±0.48

		Al_2O_3*	TFe_2O_3*	FeO*	CaO*	MgO*	Na_2O*	K_2O*	TC*	Corg*
NCS DC73067	Soil	16.12±0.21	4.27±0.10	~1.71	1.23±0.03	1.16±0.02	2.42±0.07	2.87±0.04	2.96±0.07	2.75±0.09
NCS DC73068	Soil	12.73±0.17	2.99±0.05	~0.89	1.19±0.03	0.73±0.03	2.36±0.05	2.99±0.03	1.41±0.05	1.34±0.05
NCS DC73069	Soil	14.23±0.17	3.96±0.14	~0.58	1.06±0.03	0.94±0.03	1.83±0.05	3.27±0.10	0.72±0.17	0.68±0.03
NCS DC73070	Soil	8.65±0.18	1.44±0.03	~0.64	0.73±0.03	0.43±0.02	1.82±0.05	3.02±0.03	0.32±0.03	0.28±0.03
NCS DC73071	Soil	13.47±0.20	5.78±0.07	~1.95	6.69±0.14	4.18±0.12	1.90±0.05	2.70±0.07	2.02±0.05	0.69±0.03
NCS DC73072	Soil	12.54±0.22	3.36±0.03	~1.52	2.59±0.05	1.63±0.03	3.21±0.08	2.57±0.03	0.85±0.04	0.71±0.04
NCS DC73073	Soil	13.70±0.24	4.84±0.07	~1.39	5.47±0.05	2.64±0.07	2.81±0.07	2.69±0.05	1.30±0.05	0.54±0.03
NCS DC73074	Soil	11.69±0.19	3.79±0.05	~1.85	7.28±0.11	2.38±0.05	2.15±0.05	2.59±0.03	1.95±0.05	0.55±0.03

		LOI*
NCS DC73067	Soil	~10.57
NCS DC73068	Soil	~5.15
NCS DC73069	Soil	~5.51
NCS DC73070	Soil	~1.59
NCS DC73071	Soil	~11.45
NCS DC73072	Soil	~4.57
NCS DC73073	Soil	~7.41
NCS DC73074	Soil	~8.31

Value with* is in percent.

Section 4 Mineral & Geology(Powder)

Number	Name	Composition(ug /g)								Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	
NCS DC73075	Soil	0.069±0.005	17.1±0.5	54±5	503±19	2.0±0.10	0.27±0.02	1.8±0.3	0.160±0.005	70
NCS DC73076	Soil	0.067±0.004	21.2±0.7	58±3	457±11	2.7±0.1	0.38±0.02	2.1±0.3	0.130±0.006	70
NCS DC73077	Soil	0.059±0.004	16.8±0.5	74±7	356±33	1.7±0.2	0.25±0.02	4.0±0.3	0.109±0.005	70
NCS DC73078	Soil	0.075±0.004	6.8±0.3	40±3	341±13	2.1±0.1	0.29±0.03	(0.77)	0.066±0.009	70
NCS DC73079	Soil	0.055±0.005	15.2±0.5	68±5	383±11	2.6±0.2	0.29±0.02	(0.7)	(0.08)	70
NCS DC73080	Soil	0.085±0.007	5.7±0.5	27±3	431±11	2.4±0.2	0.31±0.02	1.4±0.3	0.18±0.01	70
NCS DC73081	Soil	(0.07)	12.3±0.2	42±2	572±15	1.57±0.07	0.25±0.02	1.5±0.4	0.146±0.005	70
NCS DC73082	Soil	0.053±0.005	14.3±0.3	51±4	429±13	1.7±0.1	0.27±0.02	1.6±0.3	0.113±0.005	70
		Ce	Cl	Co	Cr	Cs	Cu	Dy	Er	Eu
NCS DC73075	Soil	56±3	156±6	11.0±0.5	57±3	14.8±0.4	22±1	4.2±0.2	2.40±0.09	1.03±0.05
NCS DC73076	Soil	58±2	116±5	13.4±0.6	110±7	16.3±0.6	22±2	3.8±0.2	2.1±0.1	1.02±0.06
NCS DC73077	Soil	48±2	57±6	10.4±0.6	70±5	20.3±0.7	18.6±0.9	3.07±0.09	1.75±0.07	0.86±0.04
NCS DC73078	Soil	69±3	428±17	12.9±0.8	82±6	9.0±0.3	16.2±0.9	4.3±0.2	2.45±0.09	1.23±0.05
NCS DC73079	Soil	75±3	(32)	11.7±0.8	74±5	15.5±0.5	24±1	4.0±0.3	2.0±0.2	1.30±0.06
NCS DC73080	Soil	79±3	71±9	7.6±0.3	34±3	8.8±0.4	16.0±0.5	4.7±0.4	2.6±0.3	1.19±0.05
NCS DC73081	Soil	55±3	480±22	12.6±1.0	80±3	4.8±0.3	27.0±1.0	4.1±0.3	2.3±0.2	1.05±0.05
NCS DC73082	Soil	54±1	633±34	9.6±0.3	48±3	5.9±0.3	21±1	3.9±0.3	2.2±0.1	1.01±0.03
		F	Ga	Gd	Ge	Hf	Hg	Ho	I	In
NCS DC73075	Soil	617±24	14.4±0.8	4.5±0.3	1.15±0.07	4.9±0.2	0.029±0.001	0.85±0.04	1.08±0.08	0.050±0.005
NCS DC73076	Soil	471±17	15.5±0.4	4.1±0.2	1.3±0.1	4.9±0.7	0.025±0.002	0.75±0.01	1.42±0.09	0.046±0.003
NCS DC73077	Soil	613±30	12.1±0.9	3.4±0.2	1.15±0.09	4.0±0.4	0.028±0.003	0.62±0.02	2.6±0.2	0.039±0.004
NCS DC73078	Soil	535±17	16.7±0.6	5.0±0.3	1.37±0.06	5.4±0.5	0.011±0.003	0.86±0.03	0.41±0.05	0.053±0.005
NCS DC73079	Soil	403±15	15±2	5.2±0.3	1.48±0.07	5.2±0.3	0.015±0.003	0.76±0.06	(0.44)	0.048±0.003
NCS DC73080	Soil	422±13	14.6±0.5	5.5±0.3	1.24±0.06	8.4±1.2	0.101±0.009	0.94±0.05	0.65±0.08	0.042±0.005
NCS DC73081	Soil	526±28	13.4±0.5	4.4±0.3	1.20±0.03	5.2±0.5	0.018±0.003	0.82±0.03	0.90±0.05	0.049±0.003
NCS DC73082	Soil	459±24	12.9±0.5	4.2±0.3	1.20±0.04	5.8±0.4	0.019±0.002	0.79±0.03	1.01±0.08	0.044±0.004
		La	Li	Lu	Mn	Mo	N	Nb	Nd	Ni
NCS DC73075	Soil	30±1	38±2	0.36±0.02	592±12	0.86±0.06	552±18	12.1±0.7	25.6±0.9	28.2±1.1
NCS DC73076	Soil	31±1	37±2	0.34±0.02	559±9	0.63±0.06	(540)	11.1±0.4	25±1	83±3
NCS DC73077	Soil	26±2	40±3	0.28±0.03	532±16	0.42±0.03	639±28	10.0±0.7	21.3±0.8	36±2
NCS DC73078	Soil	37.0±0.7	39±2	0.39±0.02	669±14	0.43±0.03	356±22	12.8±0.6	31.1±0.8	32.4±0.6
NCS DC73079	Soil	38±2	46±3	0.29±0.03	496±11	0.53±0.03	366±20	12.0±0.5	33.8±1.2	41±1
NCS DC73080	Soil	41±2	22.0±1.1	0.38±0.03	627±13	0.62±0.03	655±24	12.5±0.6	34.3±1.1	14.1±0.9
NCS DC73081	Soil	28.8±1.3	25.2±1.2	0.38±0.03	626±16	0.85±0.03	276±15	11.1±0.6	25.5±0.8	32.5±0.8
NCS DC73082	Soil	28±1	30±2	0.33±0.03	509±13	0.60±0.03	418±17	10.6±0.7	24.6±0.3	23±2
		P	Pb	Pr	Rb	Re	S	Sb	Sc	Se
NCS DC73075	Soil	671±12	20.3±1.3	6.7±0.3	100±3	~0.002	262±17	1.39±0.05	10.7±0.3	0.16±0.06
NCS DC73076	Soil	556±9	26.3±1.1	6.7±0.3	121±3	~0.002	315±13	1.31±0.06	11.0±0.3	0.19±0.01
NCS DC73077	Soil	432±12	18.0±1.2	5.5±0.3	93±3	~0.002	324±17	0.80±0.03	8.6±0.5	0.11±0.01
NCS DC73078	Soil	372±12	22.8±0.6	8.2±0.3	118±3	~0.001	(87)	0.55±0.03	12.1±0.3	0.074±0.005
NCS DC73079	Soil	491±9	24.9±1.3	8.7±0.3	101±2	~0.002	(73)	2.6±0.3	10.1±0.4	0.118±0.005
NCS DC73080	Soil	0.11±0.003*	25±2	9.2±0.5	110±3	~0.002	132±5	0.33±0.03	8.2±0.4	0.087±0.005
NCS DC73081	Soil	556±10	19.3±0.7	6.5±0.3	79±3	~0.001	0.229±0.003	0.88±0.05	11.7±0.4	0.27±0.01
NCS DC73082	Soil	612±15	18.7±0.6	6.5±0.2	82±2	~0.004	291±12	1.8±0.2	9.2±0.3	0.107±0.005

Section 4 Mineral & Geology(Powder)

		Sm	Sn	Sr	Ta	Tb	Te	Th	Ti*	Tl
NCS DC73075	Soil	5.0±0.3	2.7±0.3	259±6	0.98±0.09	0.75±0.03	0.036±0.004	10.4±0.3	0.316±0.006	0.63±0.03
NCS DC73076	Soil	4.7±0.3	2.6±0.2	219±4	0.96±0.09	0.67±0.03	0.047±0.007	13.8±0.5	0.298±0.005	0.72±0.05
NCS DC73077	Soil	4.0±0.3	1.9±0.2	477±11	0.75±0.09	0.55±0.03	0.040±0.004	9.0±0.3	0.273±0.008	0.52±0.03
NCS DC73078	Soil	5.8±0.3	2.6±0.1	98±2	0.99±0.07	0.78±0.03	0.046±0.005	13.7±0.5	0.394±0.009	0.64±0.03
NCS DC73079	Soil	6.3±0.3	2.6±0.2	141±2	0.89±0.05	0.77±0.04	(0.054)	11.1±0.3	0.351±0.009	0.57±0.04
NCS DC73080	Soil	6.3±0.3	2.8±0.2	214±3	1.08±0.07	0.86±0.04	(0.028)	16.0±0.6	0.282±0.006	0.64±0.03
NCS DC73081	Soil	4.9±0.2	2.1±0.1	189±6	0.85±0.05	(0.71)	0.042±0.005	9.8±0.9	0.334±0.006	0.51±0.03
NCS DC73082	Soil	4.8±0.2	2.3±0.3	233±3	0.81±0.07	0.68±0.04	0.038±0.007	9.0±0.5	0.313±0.008	0.51±0.03

		Tm	U	V	W	Y	Yb	Zn	Zr	SiO_2*
NCS DC73075	Soil	0.37±0.03	2.7±0.3	71±3	1.8±0.2	22.6±0.6	2.37±0.09	65±2	165±4	57.08±0.46
NCS DC73076	Soil	0.34±0.01	2.3±0.9	75±4	2.0±0.2	20.4±0.5	2.18±0.08	64±2	169±7	63.89±0.46
NCS DC73077	Soil	0.28±0.02	2.2±0.2	67±3	1.3±0.1	16.5±0.5	1.81±0.09	52±2	133±5	49.83±0.44
NCS DC73078	Soil	0.39±0.02	1.94±0.08	99±3	1.5±0.1	22.6±0.6	2.52±0.07	76±3	184±6	64.37±0.26
NCS DC73079	Soil	0.32±0.03	1.3±0.2	79±3	1.6±0.2	20.7±1.0	1.9±0.2	66±3	179±6	68.11±0.26
NCS DC73080	Soil	0.40±0.03	2.6±0.3	57±3	1.99±0.08	25.7±1.1	2.6±0.3	67±2	264±5	73.16±0.22
NCS DC73081	Soil	0.37±0.03	2.6±0.1	79±4	1.42±0.07	21.9±0.8	2.4±0.2	62±3	176±4	61.47±0.44
NCS DC73082	Soil	0.34±0.02	2.1±0.1	60±2	1.8±0.2	21.5±0.5	2.19±0.06	57±2	201±4	65.18±0.26

		Al_2O_3*	TFe_2O_3*	FeO*	CaO*	MgO*	Na_2O*	K_2O*	TC*	Corg*
NCS DC73075	Soil	11.20±0.20	3.96±0.09	~1.71	9.44±0.16	2.61±0.05	1.88±0.03	2.42±0.03	2.44±0.07	0.48±0.04
NCS DC73076	Soil	13.03±0.08	4.08±0.05	~0.79	4.42±0.08	2.37±0.05	2.07±0.06	2.70±0.02	0.99±0.04	0.34±0.04
NCS DC73077	Soil	9.54±0.13	3.46±0.09	~0.86	15.26±0.32	1.98±0.05	1.01±0.03	2.09±0.05	3.81±0.10	0.44±0.03
NCS DC73078	Soil	13.50±0.20	5.70±0.09	~0.69	3.46±0.08	1.82±0.03	0.54±0.03	2.24±0.03	0.80±0.03	(0.12)
NCS DC73079	Soil	11.48±0.15	4.46±0.11	~1.35	4.22±0.10	1.50±0.03	1.44±0.03	2.16±0.03	0.91±0.03	0.17±0.02
NCS DC73080	Soil	12.15±0.22	3.15±0.05	~1.10	1.95±0.05	0.97±0.03	2.29±0.03	2.50±0.03	0.69±0.04	0.66±0.03
NCS DC73081	Soil	10.74±0.16	4.31±0.05	~1.83	6.62±0.12	3.09±0.05	1.72±0.05	2.12±0.09	1.70±0.09	0.30±0.03
NCS DC73082	Soil	10.58±0.15	3.70±0.07	~1.69	6.28±0.10	1.77±0.05	2.10±0.04	2.03±0.03	1.69±0.03	0.36±0.03

		LOI*
NCS DC73075	Soil	~10.46
NCS DC73076	Soil	~6.37
NCS DC73077	Soil	~16.17
NCS DC73078	Soil	~7.18
NCS DC73079	Soil	~5.69
NCS DC73080	Soil	~2.72
NCS DC73081	Soil	~8.85
NCS DC73082	Soil	~7.49

Value with* is in percent.

Section 4 Mineral & Geology(Powder)

Number	Name	Composition(ug /g)								Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	
NCS DC73083	Soil	0.080±0.003	9.1±0.3	60±5	492±15	1.94±0.09	0.34±0.03	4.6±0.5	0.18±0.02	70
NCS DC73084	Soil	0.071±0.017	12.8±0.3	49±3	513±16	2.07±0.07	0.33±0.02	3.8±0.3	0.156±0.007	70
NCS DC73085	Soil	0.098±0.004	13.0±0.5	56±3	600±13	2.5±0.2	0.45±0.03	1.8±0.3	0.29±0.03	70
NCS DC73086	Soil	0.074±0.005	11.0±0.5	62±5	509±10	2.0±0.2	0.36±0.03	3.6±0.4	0.104±0.005	70
NCS DC73087	Soil	0.131±0.007	6.6±0.3	70±3	435±10	1.88±0.10	0.38±0.03	3.0±0.4	0.171±0.011	70
NCS DC73088	Soil	0.122±0.005	5.0±0.4	65±5	570±15	2.38±0.08	0.45±0.03	1.8±0.3	0.28±0.03	70
NCS DC73089	Soil	0.115±0.007	8.9±0.3	53±3	605±17	2.2±0.2	0.31±0.03	2.6±0.3	0.166±0.007	70
NCS DC73090	Soil	0.077±0.003	3.9±0.3	41±3	585±15	2.1±0.2	0.29±0.03	(1)	0.131±0.005	70
		Ce	Cl	Co	Cr	Cs	Cu	Dy	Er	Eu
NCS DC73083	Soil	69±3	141±8	11.6±1.1	64±3	5.6±0.3	57±2	4.8±0.2	2.8±0.2	1.22±0.05
NCS DC73084	Soil	68±3	66±3	13.5±0.5	70±3	8.0±0.3	25±1	4.7±0.3	2.7±0.2	1.20±0.03
NCS DC73085	Soil	80±3	58±6	16.1±0.6	85±3	8.7±0.5	32.5±1.2	5.6±0.3	3.2±0.2	1.42±0.05
NCS DC73086	Soil	76±3	41±4	15.0±0.8	90±3	6.9±0.5	25.4±1.0	5.4±0.3	3.1±0.3	1.28±0.05
NCS DC73087	Soil	88±8	73±4	10.9±0.5	59±3	5.3±0.3	62±3	5.5±0.3	3.1±0.3	1.36±0.05
NCS DC73088	Soil	81±3	65±4	15.1±0.7	(448)	9.6±0.7	31±2	5.5±0.3	3.1±0.2	1.41±0.05
NCS DC73089	Soil	69±3	58±7	12.4±0.5	66±3	9.6±0.3	27.1±0.6	4.6±0.3	2.5±0.2	1.24±0.05
NCS DC73090	Soil	75±3	55±5	14.4±1.0	63±3	6.2±0.3	26.2±0.9	4.3±0.2	2.46±0.07	1.19±0.05
		F	Ga	Gd	Ge	Hf	Hg	Ho	I	In
NCS DC73083	Soil	537±20	14.8±0.7	5.3±0.3	1.32±0.06	8.4±0.7	0.069±0.005	0.97±0.03	1.9±0.2	0.051±0.003
NCS DC73084	Soil	653±26	16.0±0.8	5.2±0.3	1.29±0.03	5.7±0.3	0.025±0.003	0.95±0.03	2.0±0.3	0.055±0.003
NCS DC73085	Soil	622±24	18.3±0.6	6.2±0.2	1.47±0.06	7.0±0.5	0.161±0.009	1.12±0.03	0.95±0.08	0.065±0.006
NCS DC73086	Soil	431±24	15.1±0.7	5.7±0.3	1.42±0.07	9.8±0.7	0.049±0.005	1.08±0.05	1.5±0.2	0.051±0.003
NCS DC73087	Soil	402±17	13.3±0.4	6.1±0.3	1.37±0.09	9.5±1.0	0.134±0.007	1.10±0.06	1.05±0.08	(0.057)
NCS DC73088	Soil	649±22	20.5±0.7	5.8±0.2	1.50±0.07	7.0±0.5	0.19±0.01	1.11±0.03	0.56±0.07	0.077±0.003
NCS DC73089	Soil	588±17	16.6±0.9	5.2±0.3	1.3±0.1	5.8±0.3	0.21±0.01	0.90±0.05	1.51±0.08	0.052±0.005
NCS DC73090	Soil	531±26	18.0±0.6	4.9±0.3	1.39±0.05	7.0±0.5	0.044±0.004	0.87±0.03	(0.61)	0.054±0.003
		La	Li	Lu	Mn	Mo	N	Nb	Nd	Ni
NCS DC73083	Soil	36±2	33.8±0.9	0.44±0.03	572±10	0.79±0.04	0.146±0.006*	14.3±0.7	32±3	27.7±0.6
NCS DC73084	Soil	36±1	38±2	0.42±0.02	659±11	(0.74)	665±24	13.7±0.6	30.5±0.8	34±1
NCS DC73085	Soil	42±2	43±2	0.48±0.02	701±12	0.79±0.07	0.149*±0.004	15.9±0.7	36.6±1.1	38±1
NCS DC73086	Soil	39±2	31.8±1.1	0.48±0.03	878±16	0.50±0.03	666±30	15.7±0.6	33.6±1.1	34.8±0.8
NCS DC73087	Soil	44±2	29.0±1.1	0.47±0.03	479±13	0.58±0.03	0.124±0.005*	17.7±0.6	38±2	23.0±0.7
NCS DC73088	Soil	41±1	57±3	0.49±0.02	519±13	0.66±0.05	0.239±0.009*	16.4±0.6	36±2	38±1
NCS DC73089	Soil	38±2	43±2	0.40±0.03	632±12	0.64±0.03	682±28	13.1±0.6	32±1	36±4
NCS DC73090	Soil	40.0±1.3	35.6±1.0	0.39±0.03	749±11	0.32±0.03	591±22	15.1±0.5	31.8±1.0	26.3±0.5
		P	Pb	Pr	Rb	Re	S	Sb	Sc	Se
NCS DC73083	Soil	(0.158) *	25±2	8.3±0.3	86±3	~0.002	322±15	0.90±0.05	10.8±0.3	0.38±0.03
NCS DC73084	Soil	750±9	22±2	8.0±0.3	101±3	~0.002	173±9	1.07±0.06	12.6±0.4	0.168±0.009
NCS DC73085	Soil	876±16	33±2	9.5±0.3	115±3	~0.003	286±7	1.19±0.09	13.9±0.5	0.25±0.02
NCS DC73086	Soil	421±10	24.8±1.2	8.7±0.4	96±3	~0.003	119±5	1.02±0.05	13.0±0.5	0.157±0.006
NCS DC73087	Soil	584±11	71±2	9.8±0.4	78±3	~0.002	216±9	4.3±0.3	9.6±0.5	0.30±0.03
NCS DC73088	Soil	413±9	41±2	9.2±0.3	117±3	~0.004	459±19	0.72±0.05	15.9±0.8	0.28±0.03
NCS DC73089	Soil	693±20	24.4±1.0	8.3±0.3	102±3	~0.003	170±8	0.70±0.04	10.6±0.3	0.099±0.005
NCS DC73090	Soil	362±7	25.4±1.1	8.4±0.3	106±3	~0.002	119±5	0.49±0.03	10.5±0.5	0.10±0.01

Section 4 Mineral & Geology(Powder)

		Sm	Sn	Sr	Ta	Tb	Te	Th	Ti*	Tl
NCS DC73083	Soil	6.0±0.3	4.6±0.3	174±3	1.08±0.07	0.85±0.05	(0.038)	11.4±0.7	0.407±0.008	0.53±0.03
NCS DC73084	Soil	5.8±0.3	3.0±0.3	211±3	1.05±0.05	0.84±0.03	0.044±0.007	11.5±0.6	0.385±0.006	0.63±0.04
NCS DC73085	Soil	7.0±0.3	4.0±0.3	162±2	1.20±0.09	1±0.03	(0.049)	13.8±0.9	0.461±0.009	0.70±0.03
NCS DC73086	Soil	6.3±0.3	3.4±0.3	105±3	1.19±0.07	0.93±0.05	(0.04)	12.7±1.2	0.470±0.011	0.56±0.04
NCS DC73087	Soil	6.9±0.3	12.1±0.7	111±3	1.31±0.09	0.96±0.07	0.040±0.005	13.0±0.7	0.500±0.014	0.50±0.03
NCS DC73088	Soil	6.6±0.3	4.2±0.5	111±3	1.19±0.01	0.95±0.03	0.040±0.005	13.7±0.9	0.537±0.010	0.75±0.03
NCS DC73089	Soil	5.9±0.3	2.5±0.2	130±3	1.00±0.09	0.81±0.05	(0.042)	12.3±0.5	0.344±0.011	0.63±0.03
NCS DC73090	Soil	5.6±0.3	2.6±0.3	134±3	1.11±0.05	0.77±0.03	(0.042)	11.9±1.0	0.434±0.008	0.64±0.03

		Tm	U	V	W	Y	Yb	Zn	Zr	SiO_2*
NCS DC73083	Soil	0.44±0.03	2.4±0.2	76±3	1.9±0.2	26.2±1.0	2.8±0.2	120±3	294±6	65.27±0.20
NCS DC73084	Soil	0.42±0.03	2.5±0.2	84±2	1.84±0.07	25±1	2.7±0.2	71±2	191±4	58.76±0.46
NCS DC73085	Soil	0.50±0.03	2.6±0.2	102±3	2.2±0.2	29.8±0.6	3.2±0.2	101±2	253±6	65.32±0.32
NCS DC73086	Soil	0.49±0.03	2.5±0.3	92±4	2.1±0.2	29.3±0.7	3.1±0.3	56±2	348±8	71.11±0.22
NCS DC73087	Soil	0.49±0.03	2.7±0.2	70±4	2.2±0.2	30.4±0.9	3.1±0.3	180±5	318±6	74.76±0.20
NCS DC73088	Soil	0.50±0.03	3.5±0.3	118±3	1.9±0.2	30.1±0.9	3.2±0.2	111±3	250±8	62.03±0.28
NCS DC73089	Soil	0.41±0.03	2.4±0.2	77±3	1.5±0.1	24±1	2.5±0.2	70±2	202±6	62.62±0.14
NCS DC73090	Soil	0.38±0.03	2.1±0.1	81±3	1.6±0.2	23.6±0.9	2.5±0.2	75±3	249±5	68.21±0.17

		Al_2O_3*	TFe_2O_3*	FeO*	CaO*	MgO*	Na_2O*	K_2O*	TC*	Corg*
NCS DC73083	Soil	11.91±0.19	4.22±0.09	~1.23	3.88±0.07	1.78±0.03	1.75±0.03	2.26±0.02	2.12±0.05	1.45±0.05
NCS DC73084	Soil	12.47±0.19	4.67±0.07	~1.26	7.12±0.09	2.35±0.05	1.61±0.03	2.40±0.03	1.91±0.05	0.52±0.03
NCS DC73085	Soil	14.10±0.22	5.45±0.07	~1.53	1.43±0.03	1.70±0.05	1.62±0.03	2.41±0.02	1.60±0.05	1.50±0.05
NCS DC73086	Soil	12.23±0.16	4.78±0.11	~0.74	1.23±0.03	1.15±0.03	1.32±0.04	2.12±0.05	0.60±0.05	0.59±0.03
NCS DC73087	Soil	10.57±0.17	3.62±0.12	~1.09	0.81±0.03	0.69±0.03	1.51±0.03	1.60±0.05	1.27±0.03	1.23±0.03
NCS DC73088	Soil	16.06±0.28	4.14±0.07	~1.90	1.22±0.03	2.09±0.11	0.99±0.03	2.59±0.04	2.33±0.05	2.23±0.09
NCS DC73089	Soil	12.80±0.20	4.21±0.05	~0.62	5.66±0.07	1.43±0.03	1.44±0.03	2.31±0.05	1.41±0.05	0.42±0.03
NCS DC73090	Soil	13.71±0.18	4.85±0.07	~0.74	0.95±0.03	1.66±0.03	1.41±0.03	2.48±0.03	0.46±0.03	0.45±0.03

		LOI*
NCS DC73083	Soil	~7.71
NCS DC73084	Soil	~9.55
NCS DC73085	Soil	~6.77
NCS DC73086	Soil	~4.62
NCS DC73087	Soil	~5.09
NCS DC73088	Soil	~9.35
NCS DC73089	Soil	~8.58
NCS DC73090	Soil	~5.84

Value with* is in percent.

Section 4 Mineral & Geology(Powder)

Number	Name	Composition(ug /g)								Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	
NCS DC73091	Soil	0.060±0.005	11.7±0.5	80±5	517±17	2.5±0.2	0.35±0.03	1.5±0.3	0.131±0.005	70
NCS DC73092	Soil	-0.028	5.4±0.3	14.8±1.0	652±24	2.6±0.2	0.28±0.02	2.8±0.3	(0.03)	70
NCS DC73093	Soil	0.071±0.005	37±3	52±3	297±14	2.5±0.2	0.91±0.04	(1.9)	0.104±0.011	70
NCS DC73094	Soil	0.087±0.005	7.5±1.9	88±7	285±8	4.7±0.3	0.62±0.03	(0.8)	0.36±0.03	70
NCS DC73095	Soil	0.088±0.012	33±2	125±10	259±10	2.6±0.2	1.00±0.05	10.4±0.5	0.69±0.05	70
NCS DC73096	Soil	0.041±0.004	3.8±0.3	13.4±1.0	(74)	1.89±0.08	2.1±0.2	2.9±0.3	(0.035)	70
NCS DC73097	Soil	(0.049)	18.1±0.5	74±5	171±11	1.40±0.07	1.22±0.06	(1.4)	0.114±0.003	70
NCS DC73098	Soil	0.128±0.009	35.6±1.4	144±11	615±17	3.0±0.3	0.86±0.03	2.7±0.4	0.30±0.03	70
		Ce	Cl	Co	Cr	Cs	Cu	Dy	Er	Eu
NCS DC73091	Soil	95±3	(39)	16.7±0.6	83±5	7.7±0.5	29.4±1.0	6.2±0.3	3.4±0.3	1.57±0.05
NCS DC73092	Soil	121±6	(33)	5.4±0.3	31±3	11.6±0.3	-5	3.0±0.2	1.57±0.07	1.16±0.03
NCS DC73093	Soil	81±3	(50)	16.8±0.8	121±5	18.3±0.7	59±2	5.4±0.3	3.3±0.2	1.25±0.06
NCS DC73094	Soil	95±3	(30)	21.9±0.8	95±3	10.3±0.5	37.2±1.1	7.9±0.3	4.6±0.3	1.87±0.05
NCS DC73095	Soil	176±6	(34)	30.3±1.3	166±4	17.3±1.0	76±2	6.3±0.5	3.8±0.3	1.27±0.05
NCS DC73096	Soil	90±5	49±5	8.8±0.3	37±2	4.0±0.3	16.0±1.1	1.7±0.1	0.94±0.07	0.49±0.03
NCS DC73097	Soil	92±5	42±4	6±0.3	67±3	3.8±0.3	25.8±0.9	2.77±0.09	1.71±0.08	0.69±0.03
NCS DC73098	Soil	94±5	64±3	17.6±0.7	118±3	12.4±0.5	41±2	6.0±0.2	3.2±0.2	1.55±0.03
		F	Ga	Gd	Ge	Hf	Hg	Ho	I	In
NCS DC73091	Soil	532±32	18.2±0.7	7.0±0.3	1.55±0.06	9.4±0.6	0.056±0.003	1.22±0.07	2.3±0.2	0.063±0.005
NCS DC73092	Soil	540±38	30.9±1.2	5.0±0.3	1.01±0.05	9.3±0.7	0.062±0.003	0.56±0.03	4.6±0.3	0.062±0.005
NCS DC73093	Soil	909±52	32.3±1.0	5.8±0.3	2.1±0.2	5.7±0.7	0.33±0.03	1.12±0.06	2.2±0.1	0.122±0.007
NCS DC73094	Soil	0.125±0.006*	29.1±0.8	8.4±0.5	2.22±0.12	5.1±0.5	0.069±0.005	1.6±0.1	0.7±0.1	0.106±0.005
NCS DC73095	Soil	0.162±0.013*	30.0±0.8	6.6±0.4	1.78±0.11	12.6±1.2	0.25±0.03	1.30±0.07	8.0±0.9	0.120±0.008
NCS DC73096	Soil	212±10	21.7±1.0	2.4±0.3	1.6±0.1	8.6±1.0	0.053±0.003	0.35±0.02	5.3±0.7	0.069±0.006
NCS DC73097	Soil	250±12	19.5±1.0	3.3±0.3	2.3±0.2	(8.9)	0.047±0.003	0.58±0.03	3.4±0.2	0.101±0.009
NCS DC73098	Soil	635±24	21.9±0.7	6.9±0.3	1.47±0.09	7.8±0.5	0.060±0.004	1.16±0.06	1.25±0.09	0.089±0.005
		La	Li	Lu	Mn	Mo	N	Nb	Nd	Ni
NCS DC73091	Soil	49±3	42.7±1.1	0.51±0.03	816±17	0.67±0.04	492±22	18.7±0.6	42±3	37.1±1.3
NCS DC73092	Soil	60±3	24.8±0.8	0.23±0.02	123±5	0.67±0.04	-261	19.9±0.8	41.8±0.9	10.6±0.8
NCS DC73093	Soil	49±2	96±3	0.54±0.03	318±8	3.2±0.2	762±34	19.3±0.7	38±2	80±3
NCS DC73094	Soil	57±3	106±3	0.68±0.03	919±22	0.43±0.03	696±30	21.4±1.1	45±3	39.3±1.0
NCS DC73095	Soil	57±2	76±4	0.62±0.05	0.398±0.008*	2.7±0.3	867±30	35±2	39±2	60±2
NCS DC73096	Soil	21.3±0.7	23.8±1.3	0.17±0.03	189±7	7.3±0.3	309±20	23.2±0.9	16.2±0.6	16.9±0.8
NCS DC73097	Soil	30.6±1.1	13.0±0.3	0.32±0.03	247±8	1.35±0.08	218±18	17.6±0.7	22.0±1.0	15.5±0.6
NCS DC73098	Soil	47±2	33±3	0.44±0.03	648±11	1.01±0.05	0.146±0.007*	20.6±0.7	40±2	60±2
		P	Pb	Pr	Rb	Re	S	Sb	Sc	Se
NCS DC73091	Soil	542±7	24.4±1.0	11.0±0.5	109±3	~0.003	(102)	1.06±0.05	13.6±0.5	0.165±0.006
NCS DC73092	Soil	(127)	29.8±1.2	11.7±0.3	180±3	~0.002	(94)	0.28±0.02	8.3±0.3	0.269±0.005
NCS DC73093	Soil	578±10	42.6±1.3	10.0±0.4	134±4	~0.001	184±11	2.3±0.1	21.7±1.0	0.34±0.03
NCS DC73094	Soil	720±30	34±1.1	11.8±0.4	141±3	~0.001	(107)	0.64±0.05	19.2±1.0	0.18±0.03
NCS DC73095	Soil	720±12	71±3	10.7±0.5	128±3	~0.001	(176)	1.86±0.11	21.9±0.7	0.28±0.03
NCS DC73096	Soil	176±9	42±3	4.4±0.3	43±2	~0.001	271±13	0.33±0.03	11.7±0.5	0.36±0.03
NCS DC73097	Soil	(319)	56±3	5.9±0.3	43.1±1.2	~0.003	247±12	1.20±0.07	13.9±0.7	0.53±0.03
NCS DC73098	Soil	938±13	36.7±1.0	10.5±0.3	131±5	~0.004	284±11	2.16±0.09	16.1±0.9	0.37±0.03

Section 4 Mineral & Geology(Powder)

		Sm	Sn	Sr	Ta	Tb	Te	Th	Ti*	Tl
NCS DC73091	Soil	7.8±0.3	3.5±0.3	94±2	1.4±0.1	1.09±0.05	-0.046	15.7±0.9	0.539±0.010	0.64±0.04
NCS DC73092	Soil	6.2±0.3	2.9±0.3	(16)	1.5±0.3	0.62±0.03	0.032±0.007	27.6±1.6	0.445±0.013	1.12±0.05
NCS DC73093	Soil	6.5±0.3	5.1±0.5	37±2	1.6±0.3	0.93±0.04	0.11±0.03	22.8±1.2	0.556±0.010	1.09±0.05
NCS DC73094	Soil	8.9±0.3	4.8±0.3	196±4	1.6±0.1	1.38±0.06	(0.18)	17.6±1.0	0.505±0.011	0.81±0.03
NCS DC73095	Soil	6.9±0.3	6.2±0.5	58±4	2.6±0.3	1.06±0.07	0.10±0.03	26±2	1.05±0.17	1.18±0.05
NCS DC73096	Soil	2.8±0.1	5.6±0.3	(11.5)	2.7±0.3	0.33±0.03	0.045±0.007	16.7±0.9	0.424±0.020	0.47±0.03
NCS DC73097	Soil	3.8±0.2	4.1±0.3	(17)	1.4±0.1	0.49±0.03	(0.07)	(20)	0.465±0.080	0.44±0.03
NCS DC73098	Soil	7.6±0.3	7.1±0.3	51±3	1.66±0.09	1.08±0.05	0.048±0.007	17.7±1.3	0.655±0.012	0.83±0.05

		Tm	U	V	W	Y	Yb	Zn	Zr	SiO_2*
NCS DC73091	Soil	0.54±0.03	3.3±0.3	106±4	2.5±0.3	33.1±0.8	3.4±0.3	79±3	322±7	67.62±0.22
NCS DC73092	Soil	0.24±0.02	2.9±0.2	76±3	3.3±0.3	16.2±0.9	1.50±0.06	78±3	302±8	58.51±0.18
NCS DC73093	Soil	0.52±0.03	6.0±0.3	204±7	3.4±0.2	29.1±0.8	3.5±0.3	180±3	193±5	48.80±0.24
NCS DC73094	Soil	0.71±0.05	3.3±0.2	131±5	(2.7)	46±2	4.5±0.3	137±6	171±4	56.28±0.26
NCS DC73095	Soil	0.62±0.05	9.0±0.5	358±13	4.3±0.3	35.3±1.1	4.1±0.3	181±3	459±10	49.13±0.52
NCS DC73096	Soil	0.16±0.03	5.1±0.3	72±4	5.7±0.3	(9.8)	1.06±0.08	39±3	253±12	67.23±0.46
NCS DC73097	Soil	0.29±0.03	4.0±0.2	107±4	15.7±0.6	15±0.6	2.0±0.2	46±2	317±11	71.18±0.24
NCS DC73098	Soil	0.48±0.03	4.0±0.3	132±4	3.3±0.3	31.5±0.8	3.0±0.2	102±2	265±7	62.60±0.20

		Al_2O_3*	TFe_2O_3*	FeO*	CaO*	MgO*	Na_2O*	K_2O*	TC*	Corg*
NCS DC73091	Soil	13.84±0.24	5.67±0.11	~0.65	1.37±0.03	1.21±0.05	0.85±0.03	2.19±0.03	0.48±0.03	0.34±0.03
NCS DC73092	Soil	22.66±0.17	5.46±0.09	~0.62	(0.06)	0.57±0.02	(0.09)	3.19±0.03	(0.25)	(0.23)
NCS DC73093	Soil	24.45±0.32	10.94±0.22	~0.46	(0.18)	1.19±0.03	(0.13)	1.65±0.03	(0.28)	(0.23)
NCS DC73094	Soil	22.48±0.26	6.75±0.09	~1.31	0.59±0.03	2.02±0.05	0.62±0.02	1.98±0.05	(0.2)	(0.15)
NCS DC73095	Soil	21.67±0.32	11.5±0.10	~0.91	0.46±0.03	1.55±0.03	(0.13)	1.49±0.03	0.78±0.05	(0.63)
NCS DC73096	Soil	18.03±0.26	4.67±0.16	~0.48	(0.1)	0.21±0.02	(0.06)	0.46±0.03	0.41±0.03	0.40±0.03
NCS DC73097	Soil	13.87±0.19	6.64±0.13	~0.54	(0.13)	0.29±0.02	(0.06)	0.82±0.03	(0.2)	(0.19)
NCS DC73098	Soil	15.79±0.24	6.44±0.09	~1.90	0.69±0.03	1.75±0.05	0.46±0.01	2.48±0.03	1.71±0.05	1.63±0.07

		LOI*
NCS DC73091	Soil	~5.69
NCS DC73092	Soil	~8.09
NCS DC73093	Soil	~11.36
NCS DC73094	Soil	~7.57
NCS DC73095	Soil	~11.49
NCS DC73096	Soil	~8.15
NCS DC73097	Soil	~6.29
NCS DC73098	Soil	~8.40

Value with* is in percent.

Section 4 Mineral & Geology(Powder)

Number	Name	Composition(ug /g)								Unit Size (in g)
		Ag	As	B	Ba	Be	Bi	Br	Cd	
NCS DC73099	Soil	0.105±0.007	8.1±0.3	43±3	383±10	2.5±0.2	0.69±0.03	2.9±0.4	0.098±0.005	70
NCS DC73100	Soil	0.076±0.007	5.4±0.3	74±5	457±11	1.66±0.07	0.35±0.03	1.4±0.3	0.17±0.01	70
NCS DC73101	Soil	0.085±0.005	13.0±0.5	60±5	382±24	2.13±0.08	0.30±0.03	-0.75	0.21±0.01	70
NCS DC73102	Soil	-0.042	7.7±0.3	12.8±1.0	376±12	1.80±0.07	0.18±0.01	-1	0.042±0.005	70
NCS DC73103	Soil	0.098±0.007	13.9±0.5	59±3	184±10	3.0±0.2	1.5±0.2	2.4±0.4	0.055±0.009	70
NCS DC73104	Soil	-0.028	3.5±0.4	37±3	-47	-0.4	0.35±0.03	4.4±0.4	(-0.027)	70
		Ce	Cl	Co	Cr	Cs	Cu	Dy	Er	Eu
NCS DC73099	Soil	91±3	46±3	7±0.2	34±3	7.8±0.3	15.1±0.5	5.1±0.3	3.1±0.3	0.90±0.04
NCS DC73100	Soil	73±2	62±5	5.0±0.3	27±3	6.2±0.5	18.3±0.9	6.2±0.3	3.6±0.3	1.08±0.05
NCS DC73101	Soil	75±3	39±4	23.4±0.7	-75	7.3±0.4	40±2	5.8±0.3	3.3±0.2	1.50±0.03
NCS DC73102	Soil	74±3	46±4	13.4±0.5	-20	7.2±0.3	-8.9	8.0±0.3	4.6±0.3	1.60±0.05
NCS DC73103	Soil	79±4	-53	5.0±0.5	42±3	13.2±0.3	-8	5.1±0.5	-3.2	0.67±0.03
NCS DC73104	Soil	17.6±1.3	34±4	1.79±0.09	31±3	2.7±0.2	9.5±0.8	1.39±0.08	0.9±0.1	0.19±0.03
		F	Ga	Gd	Ge	Hf	Hg	Ho	I	In
NCS DC73099	Soil	362±20	16.0±0.8	5.2±0.3	1.39±0.07	15.5±1.4	0.099±0.005	1.03±0.05	4.1±0.3	0.069±0.005
NCS DC73100	Soil	254±9	11.2±0.7	5.8±0.3	1.59±0.09	14.7±1.0	0.038±0.003	1.26±0.06	0.56±0.05	0.048±0.003
NCS DC73101	Soil	466±24	18.4±0.7	6.1±0.3	1.6±0.3	7.8±0.5	0.055±0.006	1.17±0.07	1.75±0.09	0.069±0.003
NCS DC73102	Soil	218±14	21.0±0.6	7.7±0.3	1.52±0.04	-5.6	0.032±0.003	1.62±0.07	3.1±0.3	0.052±0.003
NCS DC73103	Soil	485±22	25.2±1.0	5.0±0.3	1.83±0.08	10.8±1.0	0.100±0.004	1.1±0.1	2.9±0.2	0.093±0.009
NCS DC73104	Soil	134±11	10.7±0.8	1.09±0.06	1.28±0.09	8.2±0.7	0.031±0.003	0.31±0.03	5.7±0.5	0.038±0.003
		La	Li	Lu	Mn	Mo	N	Nb	Nd	Ni
NCS DC73099	Soil	42±2	27.7±0.9	0.53±0.03	387±8	0.92±0.05	506±20	21.8±0.9	32.5±1.2	10.7±0.6
NCS DC73100	Soil	38±3	14±0.5	0.59±0.03	311±10	0.38±0.03	960±34	17.2±1.0	31.6±0.9	7.9±0.5
NCS DC73101	Soil	38±3	37±3	0.52±0.03	0.123±0.002*	0.44±0.03	555±22	17.7±0.8	34.3±1.2	37.5±0.9
NCS DC73102	Soil	52±2	15.0±0.5	0.73±0.05	435±12	1.23±0.05	-114	11.7±0.7	40.9±1.4	12.5±0.6
NCS DC73103	Soil	46±3	45±3	-0.55	116±6	1.84±0.09	267±10	35±2	31±2	13.6±0.9
NCS DC73104	Soil	10.3±0.5	13.2±0.6	0.17±0.03	-62	1.17±0.08	198±17	13.2±0.7	6.6±0.5	14.9±0.9
		P	Pb	Pr	Rb	Re	S	Sb	Sc	Se
NCS DC73099	Soil	440±13	39.5±1.2	8.8±0.3	149±3	~0.002	120±7	0.42±0.03	7.9±0.3	0.19±0.01
NCS DC73100	Soil	375±10	22.9±1.1	8.5±0.3	94±3	~0.0002	158±5	0.70±0.08	5.6±0.3	0.10±0.01
NCS DC73101	Soil	-180	21.0±1.1	8.7±0.3	94±4	~0.003	174±7	1.3±0.1	15.6±0.7	0.21±0.02
NCS DC73102	Soil	-164	49±2	11.0±0.4	123±3	~0.003	119±5	0.25±0.03	12.2±0.4	0.221±0.005
NCS DC73103	Soil	177±10	46±3	8.7±0.7	135±4	~0.003	222±9	(0.87)	(9.1)	0.57±0.03
NCS DC73104	Soil	160±7	11.3±0.7	1.9±0.2	17.8±0.8	~0.001	107±7	(0.38)	(4.2)	(0.36)
		Sm	Sn	Sr	Ta	Tb	Te	Th	Ti*	Tl
NCS DC73099	Soil	6.0±0.3	9.3±0.7	49±2	2.2±0.1	0.87±0.05	0.032±0.005	21.7±1.2	0.372±0.007	0.94±0.03
NCS DC73100	Soil	6.0±0.2	3.2±0.3	30±2	1.21±0.09	1.03±0.05	(0.029)	13.3±0.8	0.413±0.012	0.57±0.03
NCS DC73101	Soil	6.6±0.3	3.0±0.2	60±2	1.28±0.07	0.99±0.06	0.052±0.005	12.1±1.1	0.662±0.028	0.56±0.03
NCS DC73102	Soil	8.1±0.3	3.6±0.3	(10)	1.3±0.3	1.33±0.05	0.024±0.004	21.0±1.3	0.229±0.006	0.97±0.05
NCS DC73103	Soil	5.6±0.3	11.0±0.8	28.5±1.3	3.9±0.3	0.85±0.05	0.047±0.005	37±3	0.397±0.011	1.11±0.07
NCS DC73104	Soil	1.19±0.08	2.7±0.2	(18.7)	1.04±0.07	0.20±0.03	0.034±0.005	8.6±0.4	0.343±0.011	(0.13)
		Tm	U	V	W	Y	Yb	Zn	Zr	SiO_2*
NCS DC73099	Soil	0.51±0.03	5.3±0.3	47±3	4.0±0.3	29±2	3.4±0.3	65±3	477±12	75.50±0.24
NCS DC73100	Soil	0.58±0.03	3.2±0.2	37±3	2.2±0.3	35±2	3.8±0.3	59±2	505±10	81.70±0.22
NCS DC73101	Soil	0.53±0.03	2.8±0.1	(127)	1.9±0.3	31.7±0.7	3.4±0.3	91±2	261±6	68.94±0.26
NCS DC73102	Soil	0.73±0.05	8.4±0.5	60±3	(0.84)	44.0±1.1	4.8±0.3	51±3	154±7	66.91±0.32
NCS DC73103	Soil	0.53±0.05	9.5±0.5	61±3	7.5±0.4	32±3	3.4±0.3	72±3	332±12	67.75±0.44
NCS DC73104	Soil	0.16±0.02	1.45±0.08	39±3	1.64±0.09	(9.9)	1.09±0.08	919.4)	278±9	88.45±0.26

Section 4 Mineral & Geology(Powder)

		Al_2O_3*	TFe_2O_3*	FeO*	CaO*	MgO*	Na_2O*	K_2O*	TC*	Corg*
NCS DC73099	Soil	11.86±0.20	2.99±0.07	~0.73	0.34±0.01	0.31±0.01	0.26±0.02	2.61±0.04	0.57±0.03	0.53±0.03
NCS DC73100	Soil	7.77±0.14	2.54±0.03	~0.66	0.26±0.02	0.35±0.02	0.57±0.03	2.03±0.04	1.02±0.03	0.96±0.03
NCS DC73101	Soil	14.25±0.22	6.46±0.09	~0.65	0.30±0.02	0.68±0.03	0.42±0.02	1.69±0.05	0.28±0.03	0.26±0.03
NCS DC73102	Soil	18.65±0.28	4.37±0.09	~0.30	(0.04)	0.44±0.02	(0.08)	2.03±0.05	(0.11)	(0.11)
NCS DC73103	Soil	17.99±0.24	3.82±0.09	~0.91	0.38±0.02	0.33±0.03	0.14±0.01	1.48±0.03	(0.24)	(0.23)
NCS DC73104	Soil	6.16±0.14	1.58±0.05	~0.37	(0.15)	0.18±0.01	(0.08)	0.21±0.01	(0.17)	(0.15)

		LOI*
NCS DC73099	Soil	~4.92
NCS DC73100	Soil	~3.72
NCS DC73101	Soil	~5.90
NCS DC73102	Soil	~7.09
NCS DC73103	Soil	~7.19
NCS DC73104	Soil	~3.06

Value with* is in percent.

Number	Name	Composition(ug/g) TiO_2 (%)	SiO_2 (%)	Al_2O_3 (%)	TFe_2O_3 (%)	FeO (%)	MgO (%)	CaO (%)	Na_2O (%)	Unit Size (in g)
NCS DC73523	Titanium ore	3.1±0.2	51.9±1.6	14.8±0.4	12.6±0.5	0.62±0.07	4.6±0.3	3.3±0.2	1.4±0.1	35
NCS DC73524	Titanium ore	6.3±0.3	51.0±1.6	15.3±0.5	10.9±0.5	0.52±0.08	3.6±0.2	3.2±0.2	2.4±0.1	35
NCS DC73525	Titanium ore	16.7±0.4	29.3±1.0	9.2±0.4	29.8±0.5	15.0±0.4	5.4±0.3	6.5±0.3	1.5±0.1	35
NCS DC73526	Titanium concentrate	48.1±0.9	2.1±0.3	0.94±0.09	48.1±1.1	22.5±0.9	0.57±0.03	0.32±0.03	0.08±0.01	35

		K_2O (%)	H_2O+ (%)	L.O.I (%)	As	Cd	Ce	Co	Cr	Cu
NCS DC73523	Titanium ore	3.4±0.2	(3.1)	-3.8	1.8±0.2	0.06±0.01	103±7	37±3	474±35	46±5
NCS DC73524	Titanium ore	2.9±0.2	(3)	-3.4	2.0±0.2	0.07±0.01	107±7	26±2	286±40	31±2
NCS DC73525	Titanium ore	0.46±0.04	(1.8)	2.1±0.3	(2)	0.09±0.02	59±5	70±4	202±31	35±3
NCS DC73526	Titanium concentrate	0.030±0.006	0.8±0.2	(0.7)		-0.05	143±12	50±5	397±60	18±3

		Dy	Er	Eu	Ga	Gd	Ho	La	Lu	Mn
NCS DC73523	Titanium ore	6.5±0.6	3.1±0.4	3.0±0.3	22±1	8.9±0.7	1.2±0.2	53±5	0.30±0.04	700±61
NCS DC73524	Titanium ore	6.7±0.6	3.3±0.4	3.0±0.3	21±1	9.1±0.8	1.3±0.2	54±6	0.35±0.06	759±40
NCS DC73525	Titanium ore	3.8±0.3	2.1±0.3	1.1±0.2	17±1	4.9±0.5	0.74±0.06	29±4	0.31±0.05	0.44±0.03*
NCS DC73526	Titanium concentrate	7.0±0.8	4.1±0.8	0.6±0.1	11±2	10±2	1.3±0.3	68±8	0.60±0.13	1.1±0.1*

		Nb	Nd	Ni	P	Pb	Pr	Rb	S	Sc
NCS DC73523	Titanium ore		55±6	182±10	0.25±0.02*	5.9±0.6	13±1	57±3	62±8	28±2
NCS DC73524	Titanium ore		55±7	104±6	0.26±0.02*	6.7±0.9	14±2	48±3	55±9	24±2
NCS DC73525	Titanium ore	195±29	28±3	51±3	0.10±0.02*	32±3	7.0±0.7	18±2	0.28±0.03*	36±5
NCS DC73526	Titanium concentrate	-707	62±7	15±2	225±42	104±7	16±2	1.5±0.3	185±27	50±7

		Sm	Sr	Ta	Tb	Th	Tm	U	V	W
NCS DC73523	Titanium ore	10.0±1.5	237±11	(3.4)	1.3±0.2	6.0±0.9	0.45±0.05	0.7±0.1	202±21	(0.6)
NCS DC73524	Titanium ore	10±2	298±13	8.7±1.5	1.3±0.2	7.6±1.1	0.50±0.06	(2.2)	264±48	
NCS DC73525	Titanium ore	5.3±0.4	412±14	(14)	0.7±0.1	30±4	0.35±0.06	1.8±0.3	690±51	(2.5)
NCS DC73526	Titanium concentrate	11±1	21±2	(40)	1.3±0.2	99±14	0.6±0.1	4.7±0.7	723±79	(8)

		Y	Yb	Zn	Zr
NCS DC73523	Titanium ore	31±2	2.4±0.4	111±13	340±38
NCS DC73524	Titanium ore	32±3	2.7±0.4	92±5	701±60
NCS DC73525	Titanium ore	20±2	2.1±0.2	193±16	158±25
NCS DC73526	Titanium concentrate	37±5	4.0±0.4	294±19	414±57

Section 4 Mineral & Geology(Powder)

Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		Al	Ca	Fe	K	Mg	N	Na	P	Si	Ti			
NCS DC 78302	Tibet Soil	7.11	2.59	3.34	2.12	1.53	0.128	1.52	0.86	30.57	0.40			15
Number	Name	Chemical Composition(μg/g)												
		As	Be	Cd	Co	Ce	Cr	Cu	Eu	La	Mn	Pb	Rb	
NCS DC 78302	Tibet Soil	3.8	2.96	0.081	13.1	83.6	60.8	24.6	1.4	41.9	677	14.2	135	
		Sc	Se	Sm	Sr	Th	U	V	Zn	Yb	Hf	Hg	Lu	
NCS DC 78302	Tibet Soil	10.8	0.16	7.1	163	17.5	3.84	77.5	58.0	3.1	(7.3)	(0.018)	(0.48)	
		Sb	Ta	Tb	Ba	Nd	Ni	Br	Cs	Dy				
NCS DC 78302	Tibet Soil	(0.4)	(1.1)	(0.9)	(509)	42.3	31.1	(1.3)	(7.3)	(5)				
Number	Name	Chemical Composition(Percent)												Unit Size (in g)
		P_2O_5	SiO_2	CaO*	MgO	TFe_2O_3	Al_2O_3	MnO	TiO_2	F	CO_2	K_2O	Na_2O	
NCS DC 79003	Phosphat Rock	6.06	38.80	19.42	7.12	3.08	4.06	0.026	0.48	0.51	16.41	2.63	0.14	100
* Including Sro														
		SrO												
NCS DC 79003	Phosphat Rock	0.055												
Number	Name	Chemical Composition(%)												Unit Size (in g)
		Cu	Pb	Zn	SiO_2	Al_2O_3	Tfe	MgO	CaO	Na_2O	K_2O	Mn	S	
NCS DC73507a	Ore	0.72	0.72	0.94	23.79	3.38	27.85	4.7	13.37	0.8	0.34	0.12	7.07	50
NCS DC73508a	Ore	1.94	5.97	3.3	57.8	7.03	6.18	0.23	1.27	0.63	2.83	0.42	5.67	50
NCS DC73509a	Ore	2.81	0.34	0.36	68.4	8.1	5.75	0.09	0.77	0.73	3.32	0.46	3.32	50
NCS DC73510a	Ore	0.081	4.85	13.73	9.61	2.09	20.71	0.71	7.91	0.033	0.64	0.056	30.8	50
NCS DC73511a	Ore	21.67	0.64	1.35	3.91	0.52	28.14	0.74	2.03	(0.06)	0.1	0.019	30.7	50
NCS DC73512a	Ore	0.62	52.25	7.45	3.98	0.86	8.19	0.22	0.93	(0.02)	0.23	0.009	20.3	50
NCS DC73513a	Ore	1.79	0.8	50.59	2.8	0.45	7.33	0.15	0.89	(0.02)	0.13	0.022	31.6	50
		TC	Ag	As	Bi	Cd	Ce	Ga	Ge	Hg	In	Mo	Sb	
NCS DC73507a	Ore	1.54	14.7	243	0.89	24.6	112	24.7	4.3	9.6	0.47	2.1	18.4	
NCS DC73508a	Ore	(0.1)	392	0.228*	0.164*	317	25.2	11.9	2.8	1.3	13.1	189	787	
NCS DC73509a	Ore	(0.06)	150	136	570	59.1	24.4	13.6	3.3	0.95	14.3	138	63.3	
NCS DC73510a	Ore	1.9	104	1244	9.4	357	12.7	69.2	31.5	120	0.8	3.3	111	
NCS DC73511a	Ore	(0.3)	45.5	253	8	39.4	19.5	8.8	2.8	11.1	5.8	18.3	32.8	
NCS DC73512a	Ore	2.23	467	793	25.2	175	(8.4)	17	7.5	69.1	0.24	4.2	728	
NCS DC73513a	Ore	0.33	126	363	1.1	1207	5	103	65.5	472	1.5	2.7	93.5	
		Se	Sn	Te	Tl	W	Re#							
NCS DC73507a	Ore	(1.8)	2	(0.2)	0.11	5	(1.6)							
NCS DC73508a	Ore	(17)	944	(5)	6.5	0.398*	(15)							
NCS DC73509a	Ore	(7)	991	(0.5)	4.4	1288	(68)							
NCS DC73510a	Ore	(0.7)	(10)	(0.2)	0.34	38.1	(7)							
NCS DC73511a	Ore	(15.5)	2.8	(2)	0.32	5.2	(4)							
NCS DC73512a	Ore	(4.6)	(3.6)	(2)	0.5	16.9	(16)							
NCS DC73513a	Ore	(1.4)	(4)	(0.3)	(0.2)	6.8	(7)							

Section 4 Mineral & Geology(Powder)

Number	Name	Chemical Composition(Percent) pH	Organic Matter (g/kg)	Total Nitrogen (g/kg)	Nitrogen as ammonium (mg/kg)	Hydrolyzable Nitrogen (mg/kg)	Available Phosphorus (mg/kg) $NaHCO_3$ Extraction	Unit Size (in g)
NCS DC85101b	Available Nutrients in Soil	5.88	46.8	2.5	(183)	414		500
NCS DC85102b	Available Nutrients in Soil	8.01	19.8	1.26	(34)	138	148	500
NCS DC85103b	Available Nutrients in Soil	8.15	8.7	0.77	(19.7)	79	23	500
NCS DC85104b	Available Nutrients in Soil	7.43	5.8	0.50	(11.2)	41	22	500
NCS DC85105b	Available Nutrients in Soil	5.09	5.3	0.46	(19.0)	48		500
NCS DC85106b	Available Nutrients in Soil	6.53	3.7	0.26	(3)	21	(4)	500

Number	Name	Effective Potassium (g/kg)	Slowly available Potassium (Inexchangeable) (g/kg)	Available sulfur (mg/kg) Phosphate Extraction	Available sulfur (mg/kg) $NaHCO_3$ Extraction	Available Silicon (g/kg)	Cation Exchange Capacity(B) cmol(+)/kg
NCS DC85101b	Available Nutrients in Soil	0.32	0.79	86		0.66	17.8
NCS DC85102b	Available Nutrients in Soil	0.48	1.13		68	0.57	14
NCS DC85103b	Available Nutrients in Soil	0.64	1.12		34	0.63	20.3
NCS DC85104b	Available Nutrients in Soil	0.35	0.88	25		1.21	13.8
NCS DC85105b	Available Nutrients in Soil	0.22	0.3	62		0.72	10.5
NCS DC85106b	Available Nutrients in Soil	0.11	0.18	35		1.25	9

Number	Name	Cation Exchange Capacity(E) cmol(+)/kg	Exchangeable Calcium(B) cmol(1/2Ca+)/kg	Exchangeable Calcium(E) cmol(1/2Ca+)/kg	Exchangeable Magnesium(B) cmol(1/2Mg+)/kg	Exchangeable Magnesium(E) cmol(1/2Mg+)/kg
NCS DC85101b	Available Nutrients in Soil	17.9	10	10.3	1.7	1.6
NCS DC85102b	Available Nutrients in Soil	13.5	6.9		3.2	
NCS DC85103b	Available Nutrients in Soil	19.8	14		1.3	
NCS DC85104b	Available Nutrients in Soil	14.1	22.9	21.5#	2.2	2.1
NCS DC85105b	Available Nutrients in Soil	11.8	1.7	1.5	0.54	0.5
NCS DC85106b	Available Nutrients in Soil	9.6	6.1	6.1	(0.26)	(0.23)

Number	Name	Exchangeable Sodium(B) cmol(Na+)/kg	Exchangeable Sodium(E) cmol(Na+)/kg	Exchangeable Potassium(B) cmol(K+)/kg	Exchangeable Potassium(E) cmol(K+)/kg	Exchangeable Manganese (mg/kg)
NCS DC85101b	Available Nutrients in Soil	0.87	0.76	0.88	0.85	56
NCS DC85102b	Available Nutrients in Soil		1.1		60	
NCS DC85103b	Available Nutrients in Soil		(1.1)		42	
NCS DC85104b	Available Nutrients in Soil	(0.4)	0.35	0.95	0.89	26
NCS DC85105b	Available Nutrients in Soil	0.47	0.42	0.59	0.58	8.4
NCS DC85106b	Available Nutrients in Soil	0.5	0.43	0.29	0.28	(1.3)

Number	Name	Easy reduced Manganese (mg/kg)	Available Molybdenum (mg/kg)	Available Boron (mg/kg)	Available Selenium (mg/kg)	Soluble Fluorine (mg/kg)
NCS DC85101b	Available Nutrients in Soil		0.46	0.46	(0.051)	3.4
NCS DC85102b	Available Nutrients in Soil		0.21	1.13	(0.085)	7.4
NCS DC85103b	Available Nutrients in Soil	(100)	0.1	0.74	(0.03)	8.7
NCS DC85104b	Available Nutrients in Soil	(132)	0.14	0.18	(0.035)	7.1
NCS DC85105b	Available Nutrients in Soil		0.21	0.26	(0.063)	
NCS DC85106b	Available Nutrients in Soil	(1.6)	0.16	0.13	(0.083)	(2)

Section 4 Mineral & Geology(Powder)

		Soluble salt								
		Total (g/kg)	Conductivity (mS/cm)	Cl^- (g/kg)	SO_4^{2-} (g/kg)	HCO_3^- (g/kg)	Ca^{2+} (g/kg)	Mg^{2+} (mg/kg)	K^+ (mg/kg)	Na^+ (mg/kg)
NCS DC85101b	Available Nutrients in Soil	1.2	(0.41)	(0.07)	0.25	(0.29)	0.14	25	55	126
NCS DC85102b	Available Nutrients in Soil	1.3	(0.36)	0.075	0.16	(0.54)	0.18	52	(75)	73
NCS DC85103b	Available Nutrients in Soil	0.96	(0.26)	(0.03)	0.091	(0.5)	0.17	10.2	(52)	70
NCS DC85104b	Available Nutrients in Soil	0.83	(0.28)		0.085	(0.54)	0.18	20	22	44
NCS DC85105b	Available Nutrients in Soil	0.33	(0.1)	(0.04)	0.067	(0.07)	0.014	2.7	16	61
NCS DC85106b	Available Nutrients in Soil	0.37	(0.12)	0.05	0.107	(0.072)	0.031	(1.1)	7.9	63

		DTPA extraction								
		Available Copper (mg/kg)	Available Zinc (mg/kg)	Available Iron (mg/kg)	Available Manganese (mg/kg)	Available Cadmium (mg/kg)	Available Lead (mg/kg)	Available Nickel (mg/kg)	Available Cobalt (mg/kg)	
NCS DC85101b	Available Nutrients in Soil	10.3	5.7	480		0.33		0.78	(0.64)	
NCS DC85102b	Available Nutrients in Soil	21.3	18.9	203	109	0.073	4.9	0.66	(0.5)	
NCS DC85103b	Available Nutrients in Soil	4.4	2.1	(127)	70	0.06	3.5	0.66	(0.3)	
NCS DC85104b	Available Nutrients in Soil	1.5	(1.4)	(158)	56	0.026	2.3	(0.45)	(0.6)	
NCS DC85105b	Available Nutrients in Soil	(0.5)	1.6	(60)	8.4	(0.008)	1.5	0.25	0.16	
NCS DC85106b	Available Nutrients in Soil		0.53	16.9	1.3	(0.004)	4.2	(0.06)		

		Hydrochloric acid extraction								
		Available Copper (mg/kg)	Available Zinc (mg/kg)	Available Iron (mg/kg)	Available Manganese (mg/kg)	Available Cadmium (mg/kg)	Available Lead (mg/kg)	Available Nickel (mg/kg)	Available Chromium (mg/kg)	Available Arsenic (mg/kg)
NCS DC85101b	Available Nutrients in Soil	19.3	21.2	1.19*	118	0.58	11.9	2	1.5	(0.12)
NCS DC85102b	Available Nutrients in Soil									
NCS DC85103b	Available Nutrients in Soil									
NCS DC85104b	Available Nutrients in Soil	0.95	2.9		157	0.053	(0.23)	1.2	0.47	
NCS DC85105b	Available Nutrients in Soil	2.1	4.5	(220)	17	0.022	4.5	0.7	0.62	
NCS DC85106b	Available Nutrients in Soil	0.54#	2.2	125	6.6	0.014	10.1	0.28	0.65	

		Sodium nitrate extraction								
		Available Copper (mg/kg)	Available Zinc (mg/kg)	Available Cadmium (mg/kg)	Available Nickel (mg/kg)	Available Chromium (mg/kg)	Exchangeable acidity (cmol/kg)	Hydrolyzable total acidity (cmol/kg)	Calcium carbonate (g/kg)	Free iron (g/kg)
NCS DC85101b	Available Nutrients in Soil	(0.23)	0.17	6.4	(0.06)	(0.04)	(0.9)	(7.8)		(24.6)
NCS DC85102b	Available Nutrients in Soil	(0.53)		0.28	(0.04)	(0.008)			(45.7)	(13.6)
NCS DC85103b	Available Nutrients in Soil	(0.08)		0.15					(72.2)	(14.2)
NCS DC85104b	Available Nutrients in Soil	(0.02)								(30.9)
NCS DC85105b	Available Nutrients in Soil	(0.02)	0.39	7.1	(0.15)	(0.007)	(4.12)	(8.8)		(48.2)
NCS DC85106b	Available Nutrients in Soil			(0.2)		(0.005)		(3.2)		(26.5)

Section 4 Mineral & Geology(Powder)

Number	Name	Chemical Composition(Percent) pH	Organic Matter (g/kg)	Total Nitrogen (g/kg)	Nitrogen as ammonium (mg/kg)	Hydrolyzable Nitrogen (mg/kg)	Available Phosphorus (mg/kg) $NaHCO_3$ Extraction	Unit Size (in g)
NCS DC85113a	Available Nutrients in Soil	7.1	45.2	2.08	(127)	297	152	500
NCS DC85114a	Available Nutrients in Soil	8.37	17.9	1.12	(36)	103	34	500
NCS DC85115a	Available Nutrients in Soil	8.35	7.8	0.53	(6.8)	40	(12)	500
NCS DC85116a	Available Nutrients in Soil	8.8	3.7	0.29	(4.7)	22	9.8	500

		Effective Potassium (g/kg)	Slowly available Potassium (Inexchangeable) (g/kg)	Available sulfur (mg/kg) Phosphate Extraction	Available sulfur (mg/kg) $NaHCO_3$ Extraction	Available Silicon (g/kg)	Cation Exchange Capacity(B) cmol(+)/kg
NCS DC85113a	Available Nutrients in Soil	0.57	0.96	64		0.86	29.6
NCS DC85114a	Available Nutrients in Soil	1.05	1.27		2.4*	0.49	17.7
NCS DC85115a	Available Nutrients in Soil	0.41	1.16		24	0.55	13.7
NCS DC85116a	Available Nutrients in Soil	0.3	0.92		25	0.42	8.9

		Cation Exchange Capacity(E) cmol(+)/kg	Exchangeable Calcium(B) cmol(1/2Ca^{+}) /kg	Exchangeable Calcium(E) cmol(1/2Ca^{+}) /kg	Exchangeable Magnesium(B) cmol(1/2Mg^{+}) /kg	Exchangeable Magnesium(E) cmol(1/2Mg^{+})/ kg
NCS DC85113a	Available Nutrients in Soil	30.8	24.5	25.7	4.9	4.7
NCS DC85114a	Available Nutrients in Soil	17	(3)		(6)	
NCS DC85115a	Available Nutrients in Soil	13.5	9.4		1.09	
NCS DC85116a	Available Nutrients in Soil	8.4	6.8		1.21	

		Exchangeable Sodium(B) cmol(Na^{+})/kg	Exchangeable Sodium(E) cmol(Na^{+})/kg	Exchangeable Potassium(B) cmol(K^{+})/kg	Exchangeable Potassium(E) cmol(K^{+})/kg	Exchangeable Manganese (mg/kg)
NCS DC85113a	Available Nutrients in Soil	0.81	0.73	1.52	1.5	165
NCS DC85114a	Available Nutrients in Soil	(7.9)		2		33
NCS DC85115a	Available Nutrients in Soil			0.59		11
NCS DC85116a	Available Nutrients in Soil			0.66		5.9

		Easy reduced Manganese (mg/kg)	Available Molybdenum (mg/kg)	Available Boron (mg/kg)	Available Selenium (mg/kg)	Soluble Fluorine (mg/kg)
NCS DC85113a	Available Nutrients in Soil		0.22	0.68	(0.063)	7.3
NCS DC85114a	Available Nutrients in Soil		0.47	9.7	(0.128)	12.6
NCS DC85115a	Available Nutrients in Soil	(90)	0.08	0.43		6.6
NCS DC85116a	Available Nutrients in Soil	(60)	0.1	0.47	(0.014)	8.5

Section 4 Mineral & Geology(Powder)

		Soluble salt								
		Total (g/kg)	Conductivity (mS/cm)	Cl^- (g/kg)	SO_4^{2-} (g/kg)	HCO_3^- (g/kg)	Ca^{2+} (g/kg)	Mg^{2+} (mg/kg)	K^+ (mg/kg)	Na^+ (mg/kg)
NCS DC85113a	Available Nutrients in Soil	1.2	(0.4)	(0.09)	0.183	(0.45)	0.2	40	65	111
NCS DC85114a	Available Nutrients in Soil	11.4	(3.2)	1	7.2	(0.45)	0.89	302	262	2.39*
NCS DC85115a	Available Nutrients in Soil	0.85	(0.2)	(0.02)	0.065	(0.5)	0.16	10		44
NCS DC85116a	Available Nutrients in Soil	0.75	(0.18)		0.09	(0.37)	(0.1)	(11)	31	62

		DTPA extraction								
		Available Copper (mg/kg)	Available Zinc (mg/kg)	Available Iron (mg/kg)	Available Manganese (mg/kg)	Available Cadmium (mg/kg)	Available Lead (mg/kg)	Available Nickel (mg/kg)	Available Cobalt (mg/kg)	
NCS DC85113a	Available Nutrients in Soil	5	4.2	232	234	0.075		1.4	(1.2)	
NCS DC85114a	Available Nutrients in Soil	6.5	2.9	(170)	85	0.029	4.7	0.8	(0.5)	
NCS DC85115a	Available Nutrients in Soil	2.1	0.88	(116)	31	0.02	1.2	0.5	(0.3)	
NCS DC85116a	Available Nutrients in Soil	1.2	(0.7)	(90)	11.2	0.009	1.4	0.24	(0.15)	

		Hydrochloric acid extraction								
		Available Copper (mg/kg)	Available Zinc (mg/kg)	Available Iron (mg/kg)	Available Manganese (mg/kg)	Available Cadmium (mg/kg)	Available Lead (mg/kg)	Available Nickel (mg/kg)	Available Chromium (mg/kg)	Available Arsenic (mg/kg)
NCS DC85113a	Available Nutrients in Soil	(1.8)	8	339	377	0.093	1.2	3.2	0.63	
NCS DC85114a	Available Nutrients in Soil									
NCS DC85115a	Available Nutrients in Soil									
NCS DC85116a	Available Nutrients in Soil									

		Sodium nitrate extraction								
		Available Copper (mg/kg)	Available Zinc (mg/kg)	Available Cadmium (mg/kg)	Available Nickel (mg/kg)	Available Chromium (mg/kg)	Exchangeable acidity (cmol/kg)	Hydrolyzable total acidity (cmol/kg)	Calcium carbonate (g/kg)	Free iron (g/kg)
NCS DC85113a	Available Nutrients in Soil	0.079		0.22	(0.04)	(0.006)		(2.8)		(15.5)
NCS DC85114a	Available Nutrients in Soil	(0.17)							(123)	(10.3)
NCS DC85115a	Available Nutrients in Soil	(0.037)							(56.2)	(16.7)
NCS DC85116a	Available Nutrients in Soil	0.027							(95.1)	(11.7)

Section 4 Mineral & Geology(Powder)

Number	Name	Chemical Composition(Percent)													Unit Size
		SiO_2	AL_2O_3	TFe_2O_3	MgO	CaO	Na_2O	K_2O	TIO_2	MNO	P_2O_5	S	L.O.L	Cu*	(in g)
NCS DC 85107	Agriculture soil	65.37	15.06	4.98	1.62	1.68	2.48	2.72	0.74	0.094	0.120	(0.013)	4.83	24	70
NCS DC 85108	Agriculture soil	63.06	12.76	4.49	2.01	4.57	1.69	2.43	0.68	0.077	0.162	(0.017)	7.71	25	70
NCS DC 85109	Agriculture soil	53.72	14.74	5.72	2.09	7.93	0.99	2.72	0.65	0.106	0.197	(0.019)	11.17	29	70
NCS DC 85110	Agriculture soil	61.03	16.21	6.20	1.90	0.84	0.99	2.45	0.92	0.050	0.098	(0.033)	9.01	42	70
NCS DC 85111	Agriculture soil	69.68	14.58	5.21	0.54	(0.22)	(0.090)	1.08	0.96	0.029	0.122	(0.014)	7.52	32	70
NCS DC 85112	Agriculture soil	83.34	8.89	1.35	(0.20)	(0.16)	(0.038)	0.65	0.22	0.015	0.124	(0.014)	4.86	2.8	70

		Zn*	B*	Mo*
NCS DC 85107	Agriculture soil	67	34	0.80
NCS DC 85108	Agriculture soil	68	54	(0.82)
NCS DC 85109	Agriculture soil	96	75	1.53
NCS DC 85110	Agriculture soil	93	65	0.73
NCS DC 85111	Agriculture soil	81	71	1.47
NCS DC 85112	Agriculture soil	22	(20)	1.15

Number	Name	Chemical Composition(Percent)												Unit Size
		BeO	LI_2O	Rb_2O	Cs_2O	TA_2O_5	Nb_2O_5	ZrO_2	HfO_2	SIO_2	Al_2O_3	$TFeO_3$	FeO	CaO	(in g)
NCS DC 86301	Beryllium Ore	0.060								73.80	14.85	0.515	(0.17)	0.577	50
NCS DC 86302	Beryllium Ore	0.359								73.77	14.83	0.591	(0.18)	0.578	50
NCS DC 86303	Lithium Ore	0.017	0.459	0.145	0.036	48.4*	26.5*			74.21	14.79	0.391	(0.06)	0.335	50
NCS DC 86304	Lithium Ore	0.026	2.28	0.734	0.178	0.011	60.7*			64.70	19.23	0.299	(0.02)	0.076	50
NCS DC 86305	Tantalium Ore	0.033	0.791	0.245	0.064	87.3*	42.1			75.03	14.32	0.322	(0.02)	0.107	50
NCS DC 86307	Zirconium Ore							0.187	42.9*	65.36	14.75	4.78	1.83	2.69	50
NCS DC 86308	Zirconium Ore							1.27	0.026	65.56	14.76	4.67	1.83	2.64	50
NCS DC 86310	Rare-Earth Ore		0.015	0.069	17.9*					74.61	14.72	1.16	0.053	0.03	50

		RE_2O_3	La_2O_3	MgO	MnO	TiO_2	K_2O	Na_2O	P_2O_5	F	H_2O*	L.O.I
NCS DC 86301	Beryllium Ore	75.8*	6.97*	0.070	0.029	0.015	4.08	4.79	(0.01)	0.019	0.607	0.687
NCS DC 86302	Beryllium Ore		7.74	0.069	0.035	0.015	3.87	4.66	0.013	0.040	0.596	0.732
NCS DC 86303	Lithium Ore	47.1*	5.03*	0.054	0.069	0.018	3.16	4.19	0.169	0.676	1.06	1.49
NCS DC 86304	Lithium Ore	15.2*	(2.1)*	0.036	0.252	0.028	4.79	2.34	0.236	3.16	2.34	4.11
NCS DC 86305	Tantalium Ore	18.3*	3.09*	0.050	0.113	0.028	2.05	3.62	0.350	1.34	1.50	2.20
NCS DC 86307	Zirconium Ore	0.018	36.3*	2.08	0.082	0.420	3.35	3.80	0.166	0.081	1.34	1.57
NCS DC 86308	Zirconium Ore	0.022	38.0*	2.01	0.083	0.411	3.33	3.72	0.169	0.083	1.3	1.51
NCS DC 86310	Rare-Earth Ore	0.086	19.9*	0.080	0.016	0.022	4.94	0.157	(0.003)	0.034	3.61	3.70

*Cherical Composition(10^{-6})

		Chemical Composition(μg/g)											
		CeO_2	Pr_6O_{11}	Nd_2O_3	Sm_2O_3	Eu_2O_3	Gd_2O_3	Tb_4O_7	Dy_2O_3	HO_2O_3	Er_2O_3	Tm_2O_3	Yb_2O_3	La_2O_3
NCS DC 86301	Beryllium Ore	14.7	1.70	6.68	2.53	0.14	3.64	0.75	4.53	0.85	2.16	0.33	2.27	0.32
NCS DC 86302	Beryllium Ore	15.2	1.91	7.52	2. 73	0.14	3.84	0.80	4.63	0.91	2.20	0.36	2.37	0.38
NCS DC 86303	Lithium Ore	8. 98	1.30	4. 96	1.60	(0.14)	2.09	0.42	2.47	0.43	1.16	0.18	1.28	0.18
NCS DC 86304	Lithium Ore	2.56	0.61	2.56	0.63	0.13	0.72	0.13	0.63	(0.12)	0.27	0.039	0.23	0.030
NCS DC 86305	Tantalium Ore	3.63	0.82	3.27	0.75	0.16	0. 83	0.14	0.65	0.12	0.28	0.041	0.23	0.031
NCS DC 86307	Zirconium Ore	71.9	7.87	27.2	4.70	1.22	3.40	0.53	2.89	0.58	1.78	0.30	2.16	0.37
NCS DC 86308	Zirconium Ore	75.9	7.91	27.0	4. 93	1.22	(4.1)	0.76	4.71	1.36	4.82	0.94	7.74	1.54
NCS DC 86310	Rare-Earth Ore	21.9	6.32	27.9	15.3	0.37	32.9	8.03	56.9	12.1	36.6	5.60	36.0	5.67

		Y_2O_3	Sc_2O_3	W	Mo	Sn	Th
NCS DC 86301	Beryllium Ore	29.2	1.66	1.30	0.41		
NCS DC 86302	Beryllium Ore	28.5	3.4	5.46	1.25		
NCS DC 86303	Lithium Ore	17.0	0.98	8.87		(32)	
NCS DC 86304	Lithium Ore	3.51	0.44	43.7		95.4	
NCS DC 86305	Tantalium Ore	3.76	0.63	16.4		(52)	
NCS DC 86307	Zirconium Ore	19.5	14.1				7.95
NCS DC 86308	Zirconium Ore	42.7	14.5				15.0
NCS DC 86310	Rare-Earth Ore	0.057*	9.26				40.0

*Chemical Composition Percent

Section 4 Mineral & Geology(Powder)

Number	Name	Chemical Composition(Percent)													Unit Size
		SiO_2	Al_2O_3	$Fe_2O_3(T)$	FeO	CaO	MgO	MnO	TiO_2	K_2O	Na_2O	P_2O_5	F	H_2O^+	(in g)
NCS DC 86313	Beryllium Ore	71.97	15.55	0.47	0.15	0.52	0.083	0.020	0.010	3.28	3.63	(0.018)	0.0088	(0.63)	70
NCS DC 86315	Tantalum Ore	72.34	14.58	0.68	0.26	0.71	0.093	0.45	0.039	4.11	4.40	(0.040)	0.019	0.56	70
NCS DC 86316	Zirconium Ore	70.73	(14.57)	0.38	0.10	0.63	0.079	0.021	0.64	3.90	4.20	0.040	0.027	0.49	70
		L.O.I													
NCS DC 86313	Beryllium Ore	0.86													
NCS DC 86315	Tantalum Ore	0.61													
NCS DC 86316	Zirconium Ore	0.56													
		Chemical Composition(μg/g)													
		Σ RE_xO_y	La_2O_3	CeO_2	Pr_6O_{11}	Nd_2O_3	Sm_2O_3	Eu_2O_3	Gd_2O_3	Tb_4O_7	Dy_2O_3	Ho_2O_3	Er_2O_3	Tm_2O_3	
NCS DC 86313	Beryllium Ore	63.6	6.08	13.1	1.58	5.96	1.99	0.11	2.83	0.57	3.62	0.67	1.95	0.29	
NCS DC 86315	Tantalum Ore	81.0	7.65	16.5	1.91	7.84	2.48	0.13	3.47	0.72	4.72	0.88	2.65	0.38	
NCS DC 86316	Zirconium Ore	515	69.2	146	15.7	53.4	10.1	0.55	9.92	2.02	14.9	3.66	16.4	2.84	
		Yb_2O_3	Lu_2O_3	Y_2O_3	Sc_2O_3	Mo	BeO	Lu_2O_3	Y_2O_3	Sc_2O_3	W	Rb_2O	BeO	Li_2O	
NCS DC 86313	Beryllium Ore	1.88	0.25	23.0	1.91	3.37	3.02*								
NCS DC 86315	Tantalum Ore	2.37						0.37	29.9	21.4	2.14	244	12.5	106	
NCS DC 86316	Zirconium Ore	25.9													
		Cs_2O	Nb_2O_5	Ta_2O_5	Sn	Lu_2O_3	Y_2O_3	Sc_2O_3	W	ZrO_2	Th	HfO_2			
NCS DC 86355	Tantalum Ore	8.14	0.52*	1.02*	(2.65)										
NCS DC 86316	Zirconium Ore					6.11	142	10.7	5.01	4.68*	202	0.084*			

Section 4 Mineral & Geology(Powder)

Number	Name	Chemical Composition(%)												Unit Size (in g)
		SiO_2	Al_2O_3	Fe_2O_3(T)	FeO	CaO	MgO	MnO	TiO_2	K_2O	Na_2O	P_2O_5	F^-	H_2O^+	
NCS DC 86318	Rare Earth Ore	66.9	(14.26)	2.24	0.20	0.29	(0.11)	0.052	0.17	5.52	0.66	(0.020)	0.017	3.60	70

		L.O.I	Σ RE_xO_y	La_2O_3	CeO_2	Pr_6O_{11}	Nd_2O_3	Sm_2O_3	Eu_2O_3	Gd_2O_3	Tb_4O_7	Dy_2O_3	Ho_2O_3	Er_2O_3
NCS DC 86318	Rare Earth Ore	5.43	4.30	0.23	0.053	0.089	0.40	0.20	21.9*	0.25	0.055	0.37	(0.064)	0.20

		Tm_2O_3	Yb_2O_3	Lu_2O_3	Y_2O_3	Sc_2O_3	Cs_2O	Rb_2O	Th	Li_2O
NCS DC 86318	Rare Earth Ore	0.031	0.21	0.030	2.16	7.2*	12.6*	404*	67.0*	121*

*Chemical Composition μg/g

Number	Name	Chemical Composition(%)													Unit Size (in g)
		Al_2O_3	CaO	CO_2	K_2O	LOI	MgO	MnO	Na_2O	P_2O_5	S	SiO_2	TF_2O_3	TiO_2	Cr_2O_3	
NCS DC87111	Magnesite	0.073	0.76	45.84	0.0052	51.04	47.16	0.013	0.011	0.013	0.0024	0.35	0.19	0.0024		80
NCS DC87112	Magnesite	0.83	0.44	42.4	0.0048	47.15	45.61	0.015	0.025	0.019	0.0023	5.15	0.65	0.021		80
NCS DC87113	Magnesite	1.71	2.51	39.96	0.0098	45.76	43.64	0.016	0.02	0.023	0.0034	5.45	0.71	0.053		80
NCS DC87114	Magnesite	0.35	1.99	44.97	0.012	49.81	44.24	0.05	0.013	0.025	0.0031	1.71	1.79	0.01		80
NCS DC87116	Serpentine	0.13	0.62	7.29	0.015	19.07	43.09	0.012	0.0067	0.013	0.015	36.45	0.44	0.005	0.001	80
NCS DC87117	Serpentine	0.49	0.35	1.34	0.0052	14.04	40.17	0.09	0.0039	0.0054	0.042	37.49	7.16	0.013	0.35	80
NCS DC87118	Serpentine	0.46	19.46	15.15	0.009	24.05	23.73	0.075	0.0061	0.0095	0.006	25.38	5.83	0.018	0.27	80
NCS DC87119	Serpentine	0.91	0.49	0.75	0.13	12.67	39.87	0.098	0.03	0.006	0.043	38.4	7.09	0.019	0.34	80
NCS DC87120	Serpentine	13.84	6.41	0.81	0.34	10.98	27.38	0.23	0.0081	0.0055	0.024	35.4	4.72	0.032	0.33	80

		(μg/g)													
		As	Ba	Ce	Co	Cr	Cu	La	Li	Ni	Pb	Sc	Sr	Th	U
NCS DC87111	Magnesite	0.41	1.4	1.6	0.53	2.12	0.81	0.66	2.21	2.14	0.79	0.99	3.49	0.047	2
NCS DC87112	Magnesite	0.4	2.99	7.77	0.69	10.2	0.77	3.23	2.16	8.31	1.14	3.23	5.06	0.85	0.029
NCS DC87113	Magnesite	0.25	5.68	8.54	1.7	13.4	0.99	3.33	11.2	9.23	1.35	3.09	30.1	1.95	7.72
NCS DC87114	Magnesite	0.68	9.99	1.67	3.14	4.16	16.4	0.57	12.8	12.1	1.05	1.58	10.6	0.2	0.28
NCS DC87116	Serpentine	56.8	5.25	1.73	0.5		1.74	0.88	7.9	1.98	1.28	1.22	8.16	0.1	2
NCS DC87117	Serpentine	1.4	2.54	0.98	102		2.23	0.51	5.04	2276	4.94	6.45	11	0.067	0.029
NCS DC87118	Serpentine	9.04	17.7	1.23	81.3		3.6	1.38	4.53	1937	206	4.98	40.2	0.051	7.72
NCS DC87119	Serpentine	0.64	88.2	2.08	101		3.66	1.31	3.82	2174	3.76	7.85	14.9	0.75	0.28
NCS DC87120	Serpentine	7.07	177	0.55	57.5		35.7	0.24	163	1057	1.79	5.14	62.8	0.042	0.038

		(μg/g)			
		U	V	Y	Zn
NCS DC87111	Magnesite	0.41	0.96	1.25	1.94
NCS DC87112	Magnesite	0.33	4.09	6.68	2.41
NCS DC87113	Magnesite	0.25	7.26	3.32	2.64
NCS DC87114	Magnesite	0.96	1.63	3.25	2.55
NCS DC87116	Serpentine		3.92	0.7	4.03
NCS DC87117	Serpentine		32.2	0.26	58.2
NCS DC87118	Serpentine		32.9	2.51	57.6
NCS DC87119	Serpentine		40.9	0.68	44.5
NCS DC87120	Serpentine		32.9	0.87	33.4

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Number	Name	Chemical Composition(μg/g) Certified value	Unit Size (in g)
NCS DC 90001	Ag in Silver ore	46.9	50
NCS DC 90002	Ag in Silver ore	112	50
NCS DC 90003	Ag in Silver ore	298	50
NCS DC 90004	Ag in Silver ore	446	50
NCS DC 90005	Ag in Silver ore	559	50
NCS DC 90006	Ag in Silver ore	732	50

Number	Name	Chemical Composition(Percent) F	Al	Na	SiO_2	Fe_2O_3	SO_4^{2-}	P_2O_5	CaO	L.O.I	Unit Size (in g)
NCS DC 91001	Cryolite	55.45	17.34	21.75	0.087	0.053	0.233	0.0034	(0.606)	4.53	100
NCS DC 91002	Cryolite	54.66	15.18	26.32	0.211	0.032	0.199	0.025	(0.597)	2.97	100
NCS DC 91003	Cryolite	53.89	13.65	29.29	0.363	0.036	0.205	0.013	(0.719)	2.25	100
NCS DC 91004	Cryolite	53.2	13.16	30.26	0.389	0.033	0.293	0.037	(0.508)	2.12	100
NCS DC 91005	Cryolite	52.14	12.69	32.01	0.485	0.0098	0.45	0.065	(0.0062)	1.4	100
NCS DC 91006	Cryolite	51.21	11.75	33.24	0.238	0.04	0.683	0.051	0.112	1.6	100

Number	Name	Chemical Composition(Percent) F	Al	Na	SiO_2	FeO	SO	PO	L.O.I	Unit Size (in g)
NCS DC 91007	Alaminum fluoride	60.76	30.27	0.104	0.146	0.156	0.654	0.0295	6.00	100
NCS DC 91008	Alaminum fluoride	61.79	30.7	0.097	0.104	0.132	0.585	0.0253	4.61	100
NCS DC 91009	Alaminum fluoride	57.79	34.68	0.113	0.015	0.028	0.093	0.0008	0.662	100
NCS DC 91010	Alaminum fluoride	60.96	30.52	0.125	0.251	0.126	0.748	0.0265	5.48	100
NCS DC 91011	Alaminum fluoride	61.51	32.28	0.121	0.429	0.021	0.627	0.1317	0.754	100
NCS DC 91012	Alaminum fluoride	59.74	33.93	0.126	0.016	0.037	0.136	0.0027	0.547	100
NCS DC 91013	Alaminum fluoride	60.88	33.12	0.315	0.017	0.02	0.098	0.0013	0.467	100
NCS DC 91014	Alaminum fluoride	57.72	34.76	0.113	0.014	0.015	0.104	0.0007	0.64	100
NCS DC 91015	Alaminum fluoride	59.99	30.7	0.111	0.301	0.107	0.702	0.0247	5.61	100
NCS DC 91016	Alaminum fluoride	64.97	31.92	0.028	0.196	0.025	0.076	0.0275	1.25	100

Number	Name	Chemical Composition Au(ng/g)	Unit Size (in g)
NCS DC 93003	Gold Ore	3.4	500
NCS DC 93004	Gold Ore	52	500

Number	Name	Chemical Composition(Percent) TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	Mn	TiO_2	P	S	Na_2O	K_2O	Unit Size (in g)
NCS DC 93023	Magnetite	61.34	29.68	12.36	0.45	0.64	(0.6)	0.056	0.064	0.036	0.494	0.012	0.018	100
NCS DC 93024	Magnetite	68.02	30.50	4.58	0.34	0.35	0.19	0.017	0.056	0.017	0.301	0.012	0.018	100
NCS DC 93025	Magnetite	64.17	31.34	9.43	0.29	0.56	0.49	0.032	0.049	0.033	0.624	0.011	0.012	100

Number	Name	Chemical Composition(Percent) SiC	Fe_2O_3	F.C.	F.Si	SiO_2	Al_2O_3	CaO	MgO	Unit Size (in g)
NCS DC 93026	Silicon Carbide	84.09	0.86	1.71	1.45	6.15	1.41	0.17	0.082	50
NCS DC 93027	Silicon Carbide	90.86	1.12	3.48	0.24	2	0.77	0.47	0.039	50
NCS DC 93028	Silicon Carbide	97.87	0.39	0.48	0.18	0.55	0.1	0.055	0.008	50

Number	Name	Chemical Composition(Percent) Ni	Fe	SiO_2	Al_2O_3	CaO	MgO	Mn	Cr	S	P	Unit Size (in g)
NCS DC 93030	Nickel iron ore	1.71	15.04	36.98	1.57	0.15	23.80	0.27	0.78	0.018	0.003	50

Number	Name	Chemical Composition(Percent) Si	Fe	Si_F	Al	Ca	N	Si_3N_4	Unit Size (in g)
NCS DC93031	Silicon Nitride	59.16	0.48	1.04	0.23	0.098	36	90.14	50

Number	Name	Chemical Composition(Percent) TFe	FeO	SiO_2	Al_2O_3	CaO	MgO	MnO	TiO_2	S	P	V_2O_5	Unit Size (in g)
NCS DC93032	Titanium concentrate	34.26	37.08	2.08	0.64	0.64	3.04	0.766	47.79	0.185	0.0074	0.088	100
NCS DC93033	Titanium concentrate	31.11	35.76	4.03	1.08	1.17	5.36	0.698	45.96	0.201	0.0032	0.075	100
NCS DC93034	Iron Ore	52.84	33.14	4	4.29	1.04	3.17	0.356	12.78	0.786	0.002	0.561	100

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Number	Name	Chemical Composition(μg/g)										Unit Size (in g)
		SiO_2	Fe_2O_3	Al_2O_3	TiO_2	CaO	MgO	TS	Na_2O	K_2O	MnO	
NCS DC 91017	Bauxite	3.16	2.01	71.14	3.04	0.75	0.090	0.031	0.022	0.477	0.0036	50
NCS DC 91018	Bauxite	8.02	6.06	64.53	2.59	0.26	0.246	0.040	0.030	0.22	0.012	50
NCS DC 91019	Bauxite	6.31	16.11	57.15	2.65	0.089	0.235	0.033	0.031	1.00	0.021	50

		P_2O_5	Ga_2O_3	ZnO
NCS DC 91017	Bauxite	0.221	0.0114	0.0018
NCS DC 91018	Bauxite	0.185	0.0106	0.0040
NCS DC 91019	Bauxite	0.077	0.0088	0.0036

Number	Name	Chemical Composition(μg/g)									Unit Size (in g)
		SiO_2	Fe_2O_3	Na_2O	K_2O	TiO_2	V_2O_5	P_2O_5	ZnO	Li_2O	CaO	
NCS DC 91020	Aluminium Hydroxide	0.0089	0.0047	0.19	0.0004	0.0013	0.00013	0.00009	0.00044	0.0002	0.0069	50
NCS DC 91021	Aluminium Hydroxide	0.02	0.0035	0.34	0.017	(0.00008)	0.00013	0.00015	0.00042	0.011	0.015	50
NCS DC 91022	Aluminium Hydroxide	0.112	0.0062	1.4	0.1	0.00054	0.00027	0.00029	0.00026	0.0027	0.017	50
NCS DC 91023	Aluminium Hydroxide	0.037	0.0037	0.55	0.03	0.0011	0.00017	0.0002	0.00041	0.0012	0.009	50
NCS DC 91024	Aluminium Hydroxide	0.083	0.0033	0.68	0.038	0.00014	0.00021	0.00028	0.00031	0.0079	0.017	50

		MgO	Cr_2O_3	L.O.I	CuO
NCS DC 91020	Aluminium Hydroxide	0.0014	(0.0001)	34.26	(<0.0001)
NCS DC 91021	Aluminium Hydroxide	0.0012	(0.0001)	34.26	
NCS DC 91022	Aluminium Hydroxide	0.0048	(0.0001)	33.7	
NCS DC 91023	Aluminium Hydroxide	0.0019	(0.0001)	34.23	
NCS DC 91024	Aluminium Hydroxide	0.0023	(0.0001)	34.14	

Number	Name	Chemical Composition(μg/g)									Unit Size (in g)
		SiO_2	Fe_2O_3	Na_2O	K_2O	TiO_2	CaO	ZnO	Li_2O	MgO	V_2O_5	
NCS DC 91025	Alumina	0.044	0.022	0.27	0.014	0.0027	0.022	0.0049	0.048	0.009	0.00034	50
NCS DC 91026	Alumina	0.025	0.0044	0.43	0.019	0.00019	0.016	0.0005	0.016	0.0024	0.00097	50
NCS DC 91027	Alumina	0.034	0.0087	0.18	0.0026	0.0035	0.02	0.00027	0.0089	0.0018	0.0019	50
NCS DC 91028	Alumina	0.047	0.0094	0.31	0.0056	0.0042	0.021	-0.00013	0.01	0.0012	0.0034	50
NCS DC 91029	Alumina	0.041	0.014	0.22	0.0077	0.0033	0.023	0.0026	0.027	0.006	0.00095	50

		P_2O_5	Cr_2O_3	L.O.I	CuO
NCS DC 91025	Alumina	0.00052	(0.0002)	0.49	(0.0002)
NCS DC 91026	Alumina	0.00022	(0.0003)	1	(<0.0001)
NCS DC 91027	Alumina	0.00095	(0.0002)	0.042	
NCS DC 91028	Alumina	0.00098	(0.0002)	0.16	
NCS DC 91029	Alumina	0.00076	(0.0002)	0.29	

Number	Name	Chemical Composition(μg/g)										Unit Size (in g)
		Mo	SiO_2	CaO	Cu	Fe_2O_3	MgO	Mn	Pb	W	Zn	
NCS DC93010a	Molybdenum Concentrate	55.54	2.56	0.95	0.06	1.44	0.47	0.033	0.044	0.12	0.014	50

		Al_2O_3	C	Bi	P	Re	Total oil and water
NCS DC93010a	Molybdenum Concentrate	0.23	0.34	0.0052	0.0055	0.0026	(0.34)