Table 1. Analytical data for altered and mineralized rock samples from the northern Talkeetna Mountains, Alaska

Map No.	Field No.	Latitude (Deg. N)	Longitude (Deg. W)	Element / Sample description / Analytical method[1] / Units	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cu	Eu	Fe
					1	2	1	3	2	2	1	2	1	2	2	2	1	2	2	2
					ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
1	02RR001B	63.197	-149.149	Red-brown weathering, rhyolite porphyry dike	2.2	6.084	3	<0.005	315	5	2	0.062	1.09	95	<2	4	8.6	11	<2	0.84
2	01ANS005B	63.176	-149.080	Dark-gray to rusty weathering, medium grained pyroxene basalt	<0.08	7.27	<1	<0.005	134	<1	<1	9.265	0.06	24	39	14	243	267	<2	7.25
3	02SC003A	63.116	-149.301	Cherty siliceous siltstone	0.2	5.56	8	<0.005	673	<1	<1	0.922	0.15	20	11	5	52.8	49	<2	2.13
4	02SC003B	63.116	-149.301	Mildly altered pyritic felsic dike	0.2	6.793	8	<0.005	1960	3	<1	0.651	0.13	79	<2	3	58.7	60	<2	1.8
5	02SC003F	63.116	-149.301	Rusty-weathering pyritic felsic dike	<0.08	6.757	377	<0.005	1730	3	<1	0.898	0.37	86	<2	3	22.8	24	2	2.41
6	02SC005D	63.116	-148.940	Float of orange-weathering, altered felsic volcanic rock at contact with granite	0.3	6.98	19	<0.005	274	4	<1	0.045	0.23	128	<2	3	6.95	8	3	2.54
7	02SC035A	63.114	-149.421	Quartz vein cutting sheared graywacke at Antimony Creek prospect	0.2	5.925	69	<0.005	727	2	<1	0.234	0.62	27	15	46	51.8	50	<2	3.98
8	02SC035B	63.114	-149.421	Quartz vein cutting sheared graywacke at Antimony Creek prospect	0.3	4.055	53	0.03	794	1	<1	0.028	0.13	29	3	11	7.18	6	<2	0.7
9	02SC035C	63.114	-149.421	Quartz vein cutting sheared graywacke at Antimony Creek prospect	0.2	6.389	26	<0.005	641	1	1	0.171	2.09	26	23	68	51.3	47	2	4.74
10	02SC035D	63.114	-149.421	Quartz vein cutting sheared graywacke at Antimony Creek prospect	0.2	4.369	39	<0.005	348	<1	<1	0.161	0.88	20	15	72	20.9	20	<2	3.06
11	02SC035E	63.114	-149.421	Sheared graywacke at Antimony Creek prospect	0.1	6.666	12	<0.005	654	1	<1	0.138	0.55	33	11	66	37.3	37	<2	3.7
12	02JS025A	63.113	-148.828	Bright orange-red weathering quartz-eye porphyritic granite, with pyrite after biotite(?)	0.2	6.273	<1	<0.005	55	3	<1	0.13	<0.05	10	<2	23	9.01	9	<2	0.59
13	02SC009A	63.113	-148.828	Very fine grained pyrite in quartz vein /breccia cutting kaolinite- altered quartz-eye rhyodacite	1.3	3.512	15	<0.005	153	4	<1	0.053	<0.05	<5	<2	5	7.52	9	<2	1.64
14	02SC009B	63.113	-148.828	Kaolinite-altered quartz-eye rhyodacite	0.5	6.113	<1	<0.005	109	4	<1	0.079	<0.05	6	<2	3	3.53	5	<2	0.33
15	01ANS004B	63.111	-149.232	Rubble of fine grained felsite with <5% pyrite cross-cutting Kahiltna Fm. Siltstone	<0.08	7.27	<1	<0.005	1520	2	<1	1.38	0.4	77	5	3	6.72	11	2	3.88
16	02SC004B	63.105	-149.348	White-weathering, pyritic feldspar-phyric felsic dike	0.1	6.497	18	<0.005	2120	3	<1	0.512	<0.05	77	<2	3	16.2	17	<2	1.23
17	02SC004C	63.105	-149.348	Fine-grained, equigranular non-magnetic pyroxene(?)-plagioclase diorite(?)	<0.08	6.802	<1	<0.005	414	<1	<1	5.056	0.18	9	46	52	196	193	3	8.31
18	01SC028B	63.102	-147.735	Quartz vein from altered, pyritic argillite; trench at Gold Hill	<0.08	0.155	210	0.007	31	<1	2	0.065	<0.05	<5	<2	<2	2.37	24	<2	0.15
19	02JS008B	63.098	-149.299	Tertiary rhyolite dike with white quartz veins and rare iron staining	0.2	4.811	6	<0.005	437	3	<1	0.068	<0.05	35	<2	2	16.8	17	<2	0.26
20	02SC032	63.091	-149.022	Pyrite-pyrrhotite-bornite(?) in feldspar-bearing mafic intrusion cutting coarse grained granite	0.1	7.952	<1	<0.005	696	2	<1	5.232	0.22	50	29	50	20.8	20	4	6.1
21	02SC031B	63.089	-149.021	Altered felsic sill parallel to basalt/shale layers	0.1	7.132	4	<0.005	2770	2	<1	0.081	<0.05	54	<2	4	7.52	10	<2	1.48
22	02JS009C	63.062	-149.272	Red-orange stained black argillite of lower Kahiltna Fm.	0.8	7.8	44	<0.005	562	2	<1	0.661	0.82	40	25	107	132	123	2	5.97
23	01MN040-2	63.050	-149.208	Argillite(?) with pyrite and Fe-stain	0.4	8.683	9	<0.005	256	3	<1	1.552	0.29	102	26	21	80.3	77	5	6.19
24	00JS043B	63.042	-148.608	Fe-oxide stained, siliceous siltstone layer in limestone	0.1	8.25	5	<0.005	1590	<1	1	3.39	0.19	33	12	163	35.2	36	<2	3.2
25	01JS006A	63.035	-148.130	Dark red weathering, biotite-bearing metasiltstone / argillite	0.5	8.675	4	0.009	1910	<1	<1	0.55	0.2	60	<2	42	47.3	49	<2	1.39
26	01JS006B	63.035	-148.130	1% pyrite in quartz-biotite-feldspar porphyritic granite(?) dike cross-cutting Kahiltna Fm. slate	<0.08	8.01	51	0.137	986	3	<1	0.705	0.15	71	<2	3	11.2	16	<2	1.59
27	02JS050A	63.035	-148.940	Locally red-orange weathering, very fine-grained quartz-biotite hornfels	<0.08	5.982	<1	<0.005	1770	1	<1	0.309	0.4	44	16	74	54.6	52	<2	2.65
28	02SC026	63.023	-149.178	Felsic stock and dikes	0.3	7.26	<1	<0.005	205	6	<1	0.582	0.65	7	<2	<2	2.73	4	<2	0.43
29	02SC012A	63.022	-148.707	Mafic dike	0.1	9.043	<1	<0.005	629	2	<1	5.437	0.2	26	20	27	5.92	7	3	6.8
30	02SC012B	63.022	-148.707	Felsic dike	0.9	7.168	4	<0.005	1720	3	<1	0.222	0.82	66	<2	2	8.17	7	2	1.72
31	02SC012C	63.022	-148.707	Felsic dike	7.4	5.978	63	<0.005	415	2	<1	0.032	0.2	11	<2	3	6.24	6	<2	0.73
32	02SC012D	63.022	-148.707	Leucocratic granite host rock to mafic and felsic dikes	0.3	7.397	2	<0.005	2070	3	<1	1.153	0.47	70	<2	2	4.37	5	2	2.19
33	02SC013	63.022	-148.715	Medium-grained biotite granite pluton	0.3	8.257	10	<0.005	1220	2	<1	3.292	0.62	55	20	19	12.2	13	3	5.48
34	02SC013M	63.022	-148.715	Medium-grained biotite granite pluton	0.5	8.037	23	<0.005	1070	3	<1	3.084	1.02	61	31	28	18.7	21	3	6.51
35	00JS077F	63.021	-148.617	Float of rare orange-brown weathering biotite gneiss	0.6	6.875	8	<0.005	1750	1	<1	7.17	0.32	25	12	109	180	168	2	5.77
36	02JS038A	63.018	-148.746	Bright orange weathering, aphanitic, siliceous subvolcanic intrusion or dome	0.3	6.047	2	<0.005	622	3	<1	0.092	0.13	54	<2	4	8.04	9	<2	0.76
37	00JS077H	63.018	-148.607	Rusty, dark- orange weathering, pyritic biotite gneiss	0.4	5.825	5	0.006	938	<1	<1	4.055	0.09	31	6	95	53.6	54	2	4.17
38	02SC022C	63.016	-149.216	Dacite(?)plug with minor pyrite	0.2	0.934	<1	<0.005	98	<1	<1	0.016	0.08	<5	<2	4	35	38	<2	0.44
39	02SC017A	63.011	-149.246	Initial red precipitate from bubbling cold spring in argillite	<0.08	3.858	<1	<0.005	1420	5	6	0.153	12.4	1010	17	33	24.3	24	141	18.76
40	02SC017B	63.011	-149.246	White precipitate 3 m downstream of bubbling cold spring	<0.08	6.468	3	<0.005	581	10	13	0.353	41.1	2710	42	5	24.6	28	281	31.55
41	02SC017C	63.011	-149.246	Orange precipitate 3 m downstream of bubbling cold spring	0.1	5.569	4	<0.005	3490	5	4	0.138	13.8	759	17	25	30.5	31	89	12.41
42	02SC017D	63.011	-149.246	Black precipitate 8 m downstream of bubbling cold spring	<0.08	0.393	<1	<0.005	405	<1	18	0.041	1.04	<5	19	8	16.4	16	11	50.01
43	02SC018A	63.007	-149.228	Kalhitna Fm. black argillite above bubbling cold spring	0.2	2.604	8	<0.005	3550	1	<1	4.39	0.37	152	<2	25	9.19	10	9	1.59
44	02SC018B	63.007	-149.228	Float of vuggy quartz veins cutting Kahiltna argillite above bubbling cold spring	<0.08	0.185	<1	<0.005	214	<1	<1	0.021	0.25	<5	<2	3	4.04	4	<2	0.13

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Map No.	Field No.	Ga	Hg	Ho	K	La	Li	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pb	Sb	Sc	Sn	Sr	Ta	Th	Ti	U	V	W	Y	Yb	Zn	Zn
		2	4	2	2	2	2	2	2	1	2	2	2	2	2	1	2	1	2	2	2	2	2	2	2	2	5	2	2	1	2
		ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
1	02RR001B	26	<0.02	<4	2.11	36	13	0.029	149	1.6	3.336	27	34	5	<0.005	82	87	1	3	<50	29	<40	17	0.059	<100	4	1.9	30	5	98.3	92
2	01ANS005B	35	0.05	<4	0.07	17	12	1.165	690	0.3	0.035	9	27	20	0.1	1	<4	<1	22	<50	104	<40	<6	0.946	<100	212	<0.5	23	2	64.9	74
3	02SC003A	12	<0.02	<4	1.44	8	17	0.671	691	0.3	2.044	<4	10	14	0.044	5	<4	<1	12	<50	264	<40	<6	0.216	<100	83	0.9	14	2	54	59
4	02SC003B	23	<0.02	<4	3.11	37	22	0.064	216	1.8	2.701	17	36	<3	0.018	12	10	<1	20	<50	206	<40	8	0.148	<100	9	1.4	29	2	22.2	23
5	02SC003F	24	<0.02	<4	3.8	41	15	0.069	306	1.3	2.387	16	41	3	0.017	13	17	4	21	<50	229	<40	9	0.151	<100	9	1.5	37	3	34.2	34
6	02SC005D	29	<0.02	<4	3.18	97	58	0.159	144	1.4	0.081	22	92	5	0.048	13	10	<1	41	<50	25	<40	8	0.296	<100	34	2.7	47	4	92.6	98
7	02SC035A	15	0.08	<4	1.51	13	42	0.651	313	2.2	1.388	<4	14	56	0.078	9	6	24	13	<50	99	<40	<6	0.158	<100	119	8.4	11	2	108	107
8	02SC035B	12	0.12	<4	1.48	15	12	0.158	35	1.7	0.446	<4	14	12	0.007	8	5	24	11	<50	42	<40	<6	0.148	<100	134	8.1	5	1	69.5	66
9	02SC035C	17	0.06	<4	1.27	13	80	1.466	1150	2.4	1.234	6	14	70	0.072	12	9	10	15	<50	99	<40	<6	0.293	<100	136	1.3	9	2	158	149
10	02SC035D	11	0.03	<4	0.65	9	50	0.656	717	1.7	1.391	<4	11	50	0.077	4	<4	11	10	<50	95	<40	<6	0.135	<100	103	4.7	6	1	96	96
11	02SC035E	17	0.08	<4	1.36	16	84	1.038	248	1.8	1.789	<4	16	69	0.058	2	<4	17	13	<50	94	<40	<6	0.147	<100	118	2.6	9	2	132	132
12	02JS025A	26	<0.02	<4	3.35	3	13	0.015	20	1.1	2.681	17	<9	9	<0.005	11	14	<1	2	<50	6	<40	15	0.023	<100	<2	0.8	16	2	11.1	15
13	02SC009A	20	0.02	<4	1.22	<2	111	0.088	47	0.9	1.207	8	<9	9	<0.005	20	18	11	3	<50	26	<40	<6	0.015	<100	<2	1.3	10	2	11.6	11
14	02SC009B	27	<0.02	<4	2.86	<2	22	0.029	18	0.4	2.65	19	<9	8	<0.005	11	12	<1	3	<50	14	<40	9	0.021	<100	<2	1.4	14	2	12.4	11
15	01ANS004B	23	<0.02	<4	2.74	38	46	0.405	669	0.7	2.05	9	42	<3	0.09	12	12	<1	19	<50	182	<40	<6	0.108	<100	29	3	27	2	114	129
16	02SC004B	24	<0.02	<4	3.95	35	18	0.017	316	1.6	2.382	20	33	4	<0.005	7	5	3	8	<50	133	<40	11	0.078	<100	2	0.8	36	4	28.8	29
17	02SC004C	16	<0.02	<4	0.46	4	32	4.444	1310	0.3	2.639	<4	13	63	0.037	2	<4	<1	51	<50	555	<40	<6	0.457	<100	182	<0.5	23	4	73.9	82
18	01SC028B	<4	<0.02	<4	0.04	<2	<2	0.045	38	0.2	0.015	<4	<9	<3	<0.005	<1	<4	<1	<2	<50	4	<40	<6	0.006	<100	5	0.6	<2	<1	0.98	4
19	02JS008B	18	0.07	<4	3.72	10	7	0.036	25	1.5	1.262	14	14	<3	<0.005	11	9	<1	2	<50	28	<40	13	0.014	<100	<2	1.7	28	3	7.8	10
20	02SC032	20	<0.02	<4	0.88	21	48	3.009	1010	1.1	1.633	19	33	24	0.185	3	<4	<1	25	<50	626	<40	<6	0.848	<100	176	<0.5	24	3	92.4	93
21	02SC031B	29	<0.02	<4	4.32	20	13	0.095	174	1.1	2.246	30	21	<3	<0.005	14	15	<1	6	<50	117	<40	11	0.085	<100	<2	2.1	23	3	80.7	91
22	02JS009C	23	<0.02	<4	1.57	19	119	2.43	482	23.6	2.398	10	18	107	0.078	54	53	<1	25	<50	233	<40	7	0.419	<100	272	1.2	10	3	94.5	95
23	01MN040-2	33	<0.02	<4	2.58	44	91	3.746	558	4.3	2.063	27	56	26	0.254	3	<4	<1	21	<50	219	<40	<6	0.671	<100	199	0.7	19	2	161	168
24	00JS043B	31	<0.02	<4	5.38	20	71	2.21	25	0.5	1.23	19	26	30	0.07	<1	<4	<1	24	<50	538	<40	<6	0.605	<100	258	1.2	15	3	56.4	60
25	01JS006A	19	<0.02	<4	3.2	32	27	0.54	204	11.4	0.96	<4	25	5	0.085	3	11	<1	10	<50	248	<40	9	0.154	<100	205	3.8	10	2	32	32
26	01JS006B	22	<0.02	<4	1.96	34	23	0.255	219	0.8	3.31	19	29	4	0.055	6	6	<1	<2	<50	367	<40	7	0.187	<100	14	2.5	4	<1	36.2	38
27	02JS050A	17	<0.02	<4	2.33	23	29	0.671	499	2.7	1.081	<4	21	29	0.024	2	<4	<1	19	<50	93	<40	<6	0.133	<100	199	2.5	5	1	95.7	105
28	02SC026	28	<0.02	<4	3	3	9	0.02	143	0.2	3.18	32	<9	<3	0.01	13	11	<1	<2	<50	84	<40	<6	<0.005	<100	<2	1.2	<2	<1	96	108
29	02SC012A	23	<0.02	<4	1.14	12	25	2.153	1310	0.9	2.621	17	21	13	0.186	4	<4	<1	26	<50	685	<40	<6	0.82	<100	251	1.2	13	3	105	111
30	02SC012B	26	<0.02	<4	3.2	39	24	0.082	847	1.7	2.677	9	39	<3	0.015	28	28	<1	10	<50	151	<40	9	0.098	<100	6	1.3	23	3	113	110
31	02SC012C	23	<0.02	<4	3.5	11	23	0.012	69	3.3	1.578	18	10	<3	<0.005	32	34	3	<2	<50	32	<40	10	0.033	<100	<2	0.6	22	3	38.1	36
32	02SC012D	25	<0.02	<4	2.97	36	10	0.089	524	1.6	3.039	11	35	<3	0.018	19	15	<1	11	<50	283	<40	9	0.12	<100	6	1	32	3	121	131
33	02SC013	24	<0.02	<4	1.62	28	37	1.36	1320	1.5	2.206	19	28	28	0.142	17	14	<1	16	<50	527	<40	6	0.65	<100	114	0.8	15	3	188	181
34	02SC013M	25	<0.02	<4	1.36	31	66	1.738	1700	1.4	2.015	16	32	56	0.176	18	18	<1	21	<50	462	<40	7	0.592	<100	173	<0.5	20	3	233	221
35	00JS077F	31	<0.02	<4	2.63	19	22	2.315	395	1	1.555	35	30	28	0.035	5	8	<1	27	<50	1550	<40	<6	1.095	<100	259	2	16	1	45	151
36	02JS038A	22	<0.02	<4	3.53	14	15	0.016	80	1.4	2.297	11	9	<3	<0.005	12	14	<1	2	<50	45	<40	12	0.054	<100	2	0.6	20	2	48.5	50
37	00JS077H	15	<0.02	<4	1.39	14	27	1.24	421	1.2	1.425	19	20	15	0.065	2	5	<1	20	<50	483	<40	<6	0.53	<100	203	2.1	24	3	39.3	99
38	02SC022C	<4	<0.02	<4	0.22	<2	59	0.043	109	0.2	0.082	<4	<9	5	<0.005	6	6	<1	<2	<50	5	<40	<6	0.012	<100	16	<0.5	<2	<1	29.1	32
39	02SC017A	12	<0.02	48	0.52	304	16	0.383	505	3.6	0.6	<4	1150	32	0.039	5	5	<1	9	<50	62	<40	<6	0.157	<100	144	0.9	1040	117	>500	803
40	02SC017B	10	<0.02	163	0.23	1210	11	0.27	1370	2.4	0.445	<4	2230	85	<0.005	<1	<4	<1	3	<50	68	<40	<6	0.096	<100	42	1	4170	334	>500	3190
41	02SC017C	16	0.02	47	0.71	282	28	0.804	485	3.3	1.175	9	713	43	0.032	3	<4	<1	10	<50	88	<40	<6	0.24	<100	164	<0.5	1410	108	>500	1290
42	02SC017D	7	<0.02	<4	0.07	6	3	0.06	695	3.8	0.091	<4	16	40	0.011	<1	<4	3	<2	<50	30	<40	<6	0.023	<100	36	<0.5	16	6	>500	940
43	02SC018A	10	<0.02	6	0.65	93	11	0.238	69	11.6	0.332	<4	124	10	2.783	12	9	2	49	<50	552	<40	8	0.109	<100	240	<0.5	218	16	68.2	64
44	02SC018B	<4	0.03	<4	0.04	<2	<2	0.026	51	0.4	0.01	<4	<9	4	0.014	<1	<4	<1	<2	<50	6	<40	<6	<0.005	<100	7	<0.5	<2	<1	16.3	18

Table 1. Analytical data for altered and mineralized rock samples from the northern Talkeetna Mountains, Alaska

Map No.	Field No.	Latitude (Deg. N)	Longitude (Deg. W)	Element - - - - - - - - - - -	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cu	Eu	Fe
				Sample description Analytical method[1] - -	1	2	1	3	2	2	1	2	1	2	2	2	1	2	2	2
				Units - - - - - - - - - - - -	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
45	00SC036A	63.004	-148.887	Pyritic fine-grained hornfels	0.3	8.63	4	<0.005	1160	<1	<1	0.45	0.14	62	22	71	54.8	51	2	5.49
46	02SC001	63.004	-149.216	Limonite-stained portion of 2m wide quartz ± calcite vein	0.1	0.166	21	<0.005	20	<1	<1	<0.005	0.12	<5	2	4	4.41	5	<2	0.31
47	02SC002	63.000	-149.217	Fe-oxide stained portion of vuggy 2m wide quartz ±calcite vein	0.2	0.702	4	<0.005	94	<1	<1	0.018	0.09	<5	3	8	11.5	12	<2	0.69
48	02JS041C	63.000	-148.716	Disseminated Fe-oxide in orange- weathering siliceous tuff or fine-grained, altered flow	3.7	7.994	5	<0.005	3080	4	<1	0.152	1.47	160	<2	6	6.16	5	<2	3.41
49	00SC053	62.999	-148.817	Intrusive / volcanic breccia	0.4	7.935	4	<0.005	255	<1	<1	5.27	0.12	31	47	61	210	215	2	9.8
50	02JS043D	62.995	-149.264	Fe-oxide stained bull quartz vein, with small inclusions of mafic rock	<0.08	0.308	<1	<0.005	32	<1	<1	0.018	0.12	<5	5	2	32.2	31	<2	1.07
51	02JS043E	62.995	-149.264	Band of 5-15% pyrite layers and disseminations in dark gray siliceous siltstone; possibly hornfelsed.	0.3	3.471	12	<0.005	1890	<1	<1	0.069	0.71	24	3	17	103	100	<2	3.07
52	00ARj048	62.994	-148.941	Disseminated sulfide in Kahiltna Fm. metasediment or mafic intrusion	<0.08	9.565	<1	0.011	1420	8	<1	0.74	0.1	50	22	160	55	58	<2	6.65
53	02SC014	62.994	-148.768	Crystal tuff interbedded w/ volcanic breccias	0.1	7.474	<1	<0.005	1450	2	<1	2.037	0.22	64	6	7	9.37	9	3	3.66
54	00JS076G	62.991	-148.610	Fe-oxide stained, pyritic gray siliceous argillite	0.2	6.78	3	<0.005	1100	2	3	0.21	0.73	82	<2	<2	18.8	20	<2	1.23
55	00SC030	62.990	-148.806	Pyrite in lithic-rich, gray biotite-quartz tuff	0.1	7.92	11	<0.005	1490	2	<1	1.86	0.37	63	9	21	25.4	26	3	4.36
56	00JS076Q	62.990	-148.618	Yellow-green oxide coatings on altered volcanic(?) rock	<0.08	7.18	3	<0.005	1550	2	1	0.645	0.14	56	<2	6	3.74	5	<2	2.06
57	00JS076M	62.990	-148.615	Orange-brown weathering, feldspar-porphyrytic andesite	0.1	7.185	6	<0.005	1390	2	<1	0.54	0.13	43	<2	<2	6.24	5	<2	2.6
58	00JS076P	62.990	-148.615	Orange-brown bands in chalky, altered volcanic(?) rock	<0.08	7.29	2	<0.005	1520	2	<1	0.74	0.17	63	<2	<2	3.86	5	<2	2.5
59	00ARj087	62.989	-148.864	Disseminated pyrite in black siltstone	0.4	6.615	20	<0.005	2900	<1	<1	0.84	2.34	73	11	69	86.2	90	3	3.25
60	00SC052	62.989	-148.798	Sulfide-bearing lithic tuff	<0.08	5.925	5	<0.005	1120	2	<1	1.615	0.19	60	4	4	5.76	5	<2	2.88
61	00JS076R	62.989	-148.622	Pink-purple mineral in altered feldspar porphyry dike	<0.08	7.395	3	<0.005	1570	2	<1	0.955	<0.05	65	<2	3	2.64	2	<2	2.54
62	00SC062	62.988	-148.851	IPyritic, quartz-veined intermediate flow or sill	<0.08	6.635	10	<0.005	246	<1	<1	1.65	<0.05	33	27	66	142	153	3	11.1
63	00SC032	62.988	-148.849	Locally pyritic dark, aphanitic volcanic rock , cut by quartz veinlets	0.4	8.095	31	<0.005	244	<1	<1	8.18	0.08	39	43	68	240	260	2	8.37
64	00SC061	62.986	-148.847	Sulfide-bearing, K-feldspar and quartz-phenocrystic felsic dike cutting intermediate(?) intrusion within argillite	0.1	7.615	8	<0.005	1790	2	<1	0.855	<0.05	50	<2	<2	2.49	3	<2	1.34
65	00SC060	62.986	-148.837	Rusty weathering black Kahiltna Fm. argillite	1	2.63	32	<0.005	2700	<1	<1	0.365	1.22	19	<2	48	26.7	28	<2	0.75
66	02SC015A	62.971	-149.266	Mineralized and gossanous float in argillite	0.7	5.577	7	<0.005	381	2	<1	9.39	1.13	29	29	26	163	168	5	10.96
67	02SC015B	62.971	-149.266	Mineralized and gossanous float in argillite	0.4	7.088	119	<0.005	817	2	<1	11.93	2.5	37	29	55	105	104	4	6.37
68	02SC015C	62.971	-149.266	Mineralized and gossanous float in argillite	0.3	8.877	1	<0.005	568	4	<1	1.187	0.22	144	15	20	49	52	5	5.72
69	02SC015D	62.971	-149.266	Mineralized and gossanous float in argillite	0.6	3.161	3	<0.005	1010	<1	<1	11.64	6.75	18	11	49	74	73	2	3.28
70	00JS040E	62.971	-148.891	Orange-brown weathering, fine grained, intermediate(?) compostion porphyry	<0.08	7.11	4	<0.005	1820	2	<1	0.3	0.49	85	<2	<2	5.83	5	<2	1.68
71	00JS035A	62.970	-148.879	Fe-oxide coated, welded, banded (.5mm thick) pale green and white felsic tuff	0.1	7.115	4	<0.005	2140	2	<1	0.16	0.15	71	<2	<2	4.21	3	<2	1.72
72	00JS035D	62.970	-148.879	Brick red-brown to black, most-altered felsic tuff	<0.08	7.51	5	<0.005	2120	2	<1	0.175	<0.05	40	<2	<2	5.02	4	<2	1.09
73	00JS035F	62.970	-148.879	Dark red to brown Fe oxides filling miarolitic cavities (?) in welded (?) green-gray rhyolite	0.1	7.225	3	<0.005	2230	2	<1	0.355	0.62	108	<2	<2	5.32	5	<2	1.79
74	00JS035G	62.970	-148.879	Bright orange-red weathering, siliceous aphanite	0.1	7.12	7	<0.005	2190	2	<1	0.175	<0.05	29	<2	<2	3.97	3	<2	1.55
75	00JS044B	62.963	-148.829	Wavy Fe-oxide enriched bands in chalky altered felsic volcanic rock	<0.08	7.83	4	<0.005	1760	2	<1	0.455	0.08	71	3	<2	5.72	5	<2	2.11
76	00JS044C	62.963	-148.829	Fe-oxide and Mn-oxide layer in altered volcanic feldspar porphyry	0.6	6.115	10	<0.005	1400	3	<1	0.07	1.09	72	3	3	6.33	6	<2	15
77	00ARj054	62.963	-148.791	Orange-weathering, crystal-rich tuff with slabby parting	0.1	7.145	<1	0.005	1930	2	3	0.855	0.33	81	2	2	5.53	8	2	2.09
78	01ANS026B	62.962	-148.947	Pyrite- and sulfide (?) -bearing veins in Fe-stained slate at contact with quartz diorite	0.2	7.43	57	0.015	754	<1	<1	5.465	0.1	34	48	18	203	244	3	8.53
79	00JS049M	62.961	-148.887	Rare orange- and red-brown stained Kahiltna Fm. argillite	0.2	6.635	13	<0.005	776	1	<1	0.235	0.17	48	12	50	47.8	44	2	4.5
80	00JS049N	62.961	-148.887	Orange-weathering felsic tuff or flow-banded subvolcanic dome	0.5	7.5	8	<0.005	2690	2	<1	0.175	0.24	78	<2	<2	77.6	74	<2	2.6
81	00SC046	62.961	-148.835	Clay-rich gossan zone in tuff	<0.08	7.495	3	<0.005	1760	2	<1	0.47	0.32	72	3	4	7.11	6	<2	4.05
82	00ARj056C	62.961	-148.809	Rusty weathering, biotite-quartz gneiss (xenolith?)	<0.08	9.61	<1	<0.005	734	4	<1	2.86	0.1	86	7	4	21.7	28	2	4.1
83	02JS045D	62.961	-149.212	Red-orange weathering layer in gray argillite / siltsone	0.1	8.174	8	<0.005	2930	3	1	0.213	<0.05	88	2	20	9.01	9	4	4.81
84	02SC016A	62.958	-149.269	Float sample of multicolored bornite(?) or skarn(?)	<0.08	6.7	2	<0.005	685	2	<1	4.433	1.07	52	39	66	232	242	8	14.72
85	02SC016B	62.958	-149.269	Float sample of multicolored bornite(?) or skarn(?)	0.2	2.004	<1	<0.005	827	<1	<1	0.103	0.12	8	3	9	49.7	46	<2	1.47
86	00JS082B	62.958	-148.974	Red weathering dark gray to black argillite / siltstone	0.8	3.315	23	0.005	5100	<1	<1	0.755	0.07	43	<2	21	10.4	10	<2	1.19
87	00JS082C	62.958	-148.974	Pyritic, fine grained quartz sandstone	0.4	7.875	8	<0.005	3920	2	<1	0.62	0.36	100	10	6	33.6	28	2	2.31

Table 1. Analytical data for altered and mineralized rock samples from the northern Talkeetna Mountains, Alaska

Map No.	Field No.	Ga	Hg	Ho	K	La	Li	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pb	Sb	Sc	Sn	Sr	Ta	Th	Ti	U	V	W	Y	Yb	Zn	Zn
		2	4	2	2	2	2	2	2	1	2	2	2	2	2	1	2	1	2	2	2	2	2	2	2	2	5	2	2	1	2
		ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
45	00SC036A	31	<0.02	<4	2.31	24	81	1.49	515	0.9	1.12	21	25	85	0.045	<1	<4	<1	25	<50	295	<40	9	0.59	<100	244	0.7	6	<1	107	122
46	02SC001	<4	<0.02	<4	0.01	<2	16	0.007	130	0.2	0.025	<4	<9	10	0.018	29	25	<1	<2	<50	6	<40	<6	<0.005	<100	<2	<0.5	<2	<1	8.79	9
47	02SC002	<4	<0.02	<4	0.18	2	7	0.107	873	0.8	0.061	<4	<9	12	0.008	3	<4	3	<2	<50	10	<40	<6	0.054	<100	16	0.5	<2	<1	22	21
48	02JS041C	31	<0.02	<4	6.76	22	98	0.111	94	0.7	0.304	22	29	<3	0.019	35	41	3	12	<50	59	<40	13	0.208	<100	13	1.3	15	2	251	262
49	00SC053	55	<0.02	6	0.22	10	27	3.53	1480	<0.1	2.155	21	24	56	0.09	<1	<4	1	48	<50	280	<40	<6	0.945	<100	242	1.2	39	4	99.3	106
50	02JS043D	<4	<0.02	<4	0.03	<2	3	0.07	77	0.7	0.035	<4	<9	14	0.007	<1	<4	<1	<2	<50	4	<40	<6	0.042	<100	15	<0.5	3	<1	68.4	71
51	02JS043E	8	0.04	<4	1.38	12	3	0.124	178	10.2	1.432	24	10	16	0.043	6	<4	3	9	<50	117	<40	<6	0.21	<100	128	<0.5	16	3	108	112
52	00ARj048	27	<0.02	<4	2.81	29	92	2.12	781	0.5	1.175	17	32	75	0.155	3	9	<1	36	<50	263	<40	<6	0.787	<100	290	1.2	11	<1	122	125
53	02SC014	23	<0.02	<4	2.06	30	29	0.561	695	1.1	2.76	16	31	5	0.071	4	<4	<1	15	<50	430	<40	7	0.37	<100	55	1.3	22	2	80.7	84
54	00JS076G	22	<0.02	<4	2.95	26	57	0.095	67	0.3	2.285	10	33	<3	0.01	14	14	<1	5	<50	65	<40	13	0.04	<100	10	0.5	22	3	78.9	77
55	00SC030	28	0.03	8	2.3	26	40	0.935	762	1.4	2.65	24	28	19	0.085	7	8	<1	20	<50	329	<40	10	0.43	<100	116	1.4	24	2	127	114
56	00JS076Q	25	<0.02	<4	2.78	25	20	0.05	589	0.3	2.73	16	29	<3	0.015	1	5	<1	13	<50	224	<40	10	0.145	<100	2	1.1	20	2	82.4	87
57	00JS076M	24	0.05	<4	2.54	23	32	0.03	66	5.3	2.52	15	23	<3	0.015	5	9	1	13	<50	206	<40	10	0.135	<100	<2	0.7	19	2	101	98
58	00JS076P	25	<0.02	<4	2.81	30	21	0.045	235	1.5	2.965	16	32	<3	0.015	2	5	<1	13	<50	243	<40	8	0.145	<100	2	0.5	24	3	118	139
59	00ARj087	21	<0.02	<4	2.97	29	50	1.585	254	18.9	0.55	10	33	38	0.07	8	14	<1	21	<50	71	<40	<6	0.275	<100	373	1.9	16	3	204	204
60	00SC052	20	<0.02	<4	1.92	24	15	0.46	488	0.8	1.89	15	32	<3	0.05	2	5	<1	12	<50	308	<40	7	0.27	<100	39	1.7	19	2	68.3	74
61	00JS076R	27	<0.02	<4	2.67	31	37	0.13	181	0.4	2.73	16	37	<3	0.03	3	7	<1	14	<50	246	<40	9	0.175	<100	12	1	25	3	126	112
62	00SC062	48	<0.02	<4	0.05	15	93	6.245	700	0.5	0.27	24	28	42	0.045	<1	<4	1	37	<50	42	<40	<6	0.9	<100	326	1.5	44	5	17.9	114
63	00SC032	41	0.27	<4	0.63	10	48	3.38	1790	1.4	2.04	27	25	66	0.09	<1	<4	<1	46	<50	247	<40	<6	1.08	<100	365	4.6	39	4	37.6	86
64	00SC061	25	<0.02	<4	3.22	24	14	0.025	184	1.8	3.29	18	22	<3	0.015	5	8	<1	7	<50	203	<40	13	0.12	<100	5	2.6	14	2	5.82	14
65	00SC060	11	<0.02	<4	0.63	5	17	0.335	80	8.2	0.585	13	12	10	0.03	<1	<4	3	10	<50	73	<40	<6	0.23	<100	410	<0.5	14	2	71.4	72
66	02SC015A	21	<0.02	<4	0.15	12	17	3.074	996	1.9	1.008	40	31	20	0.111	21	22	<1	33	<50	273	<40	<6	1.746	<100	434	<0.5	32	5	125	114
67	02SC015B	24	<0.02	<4	0.32	16	16	3.299	2320	0.8	0.806	45	35	32	0.124	4	<4	<1	38	<50	405	<40	<6	1.614	<100	352	<0.5	38	5	202	190
68	02SC015C	36	<0.02	<4	2.73	67	88	2.365	314	2.5	2.243	57	70	21	0.172	8	4	<1	11	<50	191	<40	10	0.606	<100	94	1	40	4	87.5	91
69	02SC015D	10	<0.02	<4	0.71	14	9	1.386	752	9.6	0.976	5	27	50	0.063	18	20	2	14	<50	396	<40	<6	0.236	<100	403	0.7	32	4	273	301
70	00JS040E	24	<0.02	<4	3.51	36	8	0.06	57	<0.1	2.755	18	43	<3	0.01	5	7	1	6	<50	126	<40	12	0.095	<100	3	1.4	34	3	95.9	94
71	00JS035A	24	<0.02	<4	3.97	19	32	0.05	168	0.3	1.85	16	22	<3	0.01	13	12	<1	9	<50	108	<40	12	0.1	<100	3	1.1	24	3	91.6	90
72	00JS035D	22	<0.02	<4	3.83	11	21	0.02	75	1.9	2.48	19	18	<3	0.01	19	22	<1	10	<50	136	<40	13	0.1	<100	4	0.9	21	3	29.2	32
73	00JS035F	26	<0.02	<4	3.7	59	20	0.025	337	1.1	2.67	17	55	<3	0.01	13	17	1	11	<50	144	<40	13	0.1	<100	3	1.2	43	4	114	111
74	00JS035G	25	<0.02	<4	3.62	5	29	0.03	51	1.7	2.39	13	<9	<3	0.01	14	13	<1	11	<50	132	<40	12	0.09	<100	4	3	15	3	64.1	59
75	00JS044B	25	0.11	4	3.26	30	18	0.085	33	<0.1	1.52	15	39	<3	0.05	13	13	2	11	<50	246	<40	10	0.21	<100	16	1.2	25	3	108	105
76	00JS044C	40	0.28	5	2.59	30	38	0.025	260	2.4	0.145	9	34	<3	0.04	12	10	1	9	<50	110	<40	10	0.165	<100	17	0.7	32	3	226	213
77	00ARj054	22	<0.02	<4	3	40	21	0.125	399	0.3	2.565	14	38	<3	0.015	11	14	<1	10	<50	212	<40	7	0.094	<100	11	2	30	3	110	103
78	01ANS026B	23	<0.02	<4	0.19	27	14	3.05	1220	0.5	2.59	30	43	22	0.22	3	<4	1	37	<50	224	<40	<6	2.261	<100	393	0.6	48	4	43.4	88
79	00JS049M	22	<0.02	<4	1.79	18	61	1.255	314	1	1.285	12	18	69	0.08	10	12	1	13	<50	111	<40	<6	0.305	<100	150	<0.5	9	1	126	117
80	00JS049N	20	<0.02	<4	3.58	34	55	0.155	211	0.9	2.075	14	38	17	0.025	15	14	<1	13	<50	219	<40	9	0.115	<100	10	2.8	29	3	111	100
81	00SC046	26	0.14	6	3.18	26	30	0.07	423	1	1.755	15	31	<3	0.045	13	15	1	12	<50	239	<40	10	0.19	<100	19	0.8	25	2	130	123
82	00ARj056C	29	<0.02	<4	1.84	46	66	0.96	652	0.7	3.34	21	43	<3	0.16	2	6	<1	6	<50	518	<40	12	0.66	<100	26	0.9	16	<1	123	124
83	02JS045D	30	0.03	<4	1.39	37	64	2.711	294	5.1	3.167	42	48	9	0.157	7	<4	<1	17	<50	236	<40	<6	0.896	<100	176	1.3	21	3	64.8	70
84	02SC016A	28	0.02	<4	0.57	27	12	1.879	869	1.8	1.439	5	45	62	0.109	4	<4	<1	41	<50	347	<40	<6	0.729	<100	173	<0.5	48	5	206	199
85	02SC016B	7	0.02	<4	0.67	5	7	0.747	95	0.5	0.323	<4	<9	8	0.006	4	<4	<1	8	<50	20	<40	<6	0.136	<100	47	<0.5	5	1	26.6	25
86	00JS082B	13	<0.02	<4	0.79	17	9	0.42	104	13.4	0.955	18	20	4	0.035	4	<4	2	11	<50	161	<40	6	0.355	<100	259	0.6	19	2	29	30
87	00JS082C	29	<0.02	5	1.42	43	23	1.24	214	3.9	3.255	18	45	15	0.08	3	<4	1	12	<50	197	<40	10	0.24	<100	94	1.9	23	3	34.8	39

Table 1. Analytical data for altered and mineralized rock samples from the northern Talkeetna Mountains, Alaska

Map No.	Field No.	Latitude (Deg. N)	Longitude (Deg. W)	Element / Sample description / Analytical method[1] / Units	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cu	Eu	Fe
					1	2	1	3	2	2	1	2	1	2	2	2	1	2	2	2
					ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
88	00JS050L	62.957	-148.657	Dark brown to black, Fe-oxide stained aplite float	26.6	7.955	11	<0.005	2220	2	15	0.125	126	108	<2	<2	>500	1480	<2	8.61
89	00JS050H	62.957	-148.655	Pyritic fractures In aplite dike	4.9	7.755	4	<0.005	1180	2	2	0.085	3.03	74	<2	4	35.6	36	<2	2.17
90	00JS050K	62.957	-148.655	Pyrite-quartz veinlet in aplite dike	25.1	3.375	47	<0.005	396	3	6	0.045	8.85	42	<2	2	91.5	87	<2	3.67
91	00JS007B	62.956	-148.981	Pyritic fine grained gabbro (?)	0.7	8.99	3	<0.005	462	2	<1	1.28	0.07	122	23	18	54	51	5	5.61
92	00ARj039B	62.956	-148.825	Gray feldspar-quartz rhyolite(?) autobreccia	<0.08	8.66	2	<0.005	1550	<1	<1	2.425	0.18	65	13	10	12.9	19	2	4.08
93	00ARj039C	62.956	-148.825	Altered, flow-banded rhyolite tuff	0.1	6.46	3	<0.005	1570	2	<1	0.33	0.05	87	<2	<2	14.3	42	<2	1.02
94	00ARj039D	62.956	-148.825	Sulfides along wavy fractures in porphyritic lava	<0.08	7.075	<1	<0.005	1630	2	<1	0.31	0.05	52	<2	3	12.1	29	<2	3.24
95	00ARj039E	62.956	-148.825	Fe-oxide on fractures in olive-green feldspar porphyry	<0.08	7.81	1	0.006	1280	1	<1	1.245	<0.05	39	5	3	17.3	32	2	5.78
96	00JS050A	62.956	-148.643	Chalky, altered leucogranodiorite	0.3	6.455	18	<0.005	1120	2	2	0.03	<0.05	45	<2	<2	1.01	<2	<2	0.25
97	00JS050B	62.956	-148.643	Fracture-controlled Fe-oxide in biotite granodiorite	<0.08	7.04	21	<0.005	1600	3	<1	0.435	0.39	132	<2	<2	4.59	4	3	1.21
98	00JS050C	62.956	-148.643	Orange soil developed over biotite granodiorite	<0.08	7.365	19	<0.005	1440	2	1	0.2	0.33	75	<2	<2	3.2	2	<2	1.8
99	00JS050F	62.956	-148.643	Minor silicified aplite	<0.08	3.62	7	<0.005	853	2	<1	0.08	<0.05	23	<2	<2	1.27	<2	<2	0.3
100	99JS020A	62.955	-148.645	Quartz-pyrite cobble in orange-stained granodiorite	0.2	6.221	2	0.02	1430	3	<1	0.303	0.35	43	<2	<2	3.15	4	<2	1.06
101	00JS027A	62.952	-147.814	Small gossan zone in float at contact of limestone and basalt	1	1.775	42	0.024	17	<1	1	0.09	0.26	22	18	78	293	285	<2	28.4
102	02JS046D	62.951	-149.213	Black argillite with orange weathering siderite veinlets	<0.08	1.486	<1	<0.005	105	<1	6	17.16	0.28	9	8	11	20.5	20	4	8.11
103	00JS032C	62.949	-148.636	Chalky to orange-brown altered quartz aplite	<0.08	7.035	3	<0.005	1270	2	<1	<0.005	0.11	69	2	<2	5.24	6	<2	1.61
104	00ARj082B	62.946	-148.775	Minor pyrite(?) in gray-green aphanitic volcanic rock	<0.08	8.08	<1	0.008	1280	2	<1	2.025	0.23	59	4	4	10.5	13	2	3.65
105	01JS035D	62.941	-149.017	Rare quartz veins cross-cutting greenstone / diabase	<0.08	0.335	4	0.011	46	<1	<1	5.935	<0.05	<5	<2	<2	16.5	9	<2	0.37
106	00ARj046A	62.928	-148.727	Silicified, bleached aphanite (lava?) with <20% disseminated Fe-oxide to 3 mm	<0.08	6.795	2	<0.005	1720	2	<1	0.155	<0.05	23	<2	<2	5.99	6	<2	0.71
107	00ARj046B	62.928	-148.727	Light gray dacite(?) with heavy Fe-oxide coating	<0.08	7.115	1	<0.005	1880	2	<1	0.15	<0.05	83	<2	<2	10.6	13	<2	1.49
108	01JS039A	62.926	-149.061	Yellow-orange weathering oxide with quartz in quartz- biotite(?) knotty schist	0.1	7.63	9	0.009	2470	<1	<1	1.02	<0.05	47	16	134	46.2	48	<2	4.24
109	01ANS024D	62.922	-148.808	Pyrite-hematite in 2 m-thick quartz vein cutting biotite grandiorite	0.4	7.215	<1	<0.005	384	<1	<1	1.055	<0.05	8	<2	<2	51.2	63	<2	0.42
110	00ARj091	62.922	-148.737	Fine- to medium-grained biotite granodiorite	<0.08	8.255	<1	<0.005	1710	2	<1	2.385	<0.05	42	2	2	1.27	2	<2	1.63
111	00JS026B	62.915	-147.782	Closely spaced parallel and anastomosing quartz veinlets in chert	<0.08	1.195	6	<0.005	490	<1	<1	0.445	<0.05	29	5	2	7.3	8	<2	1.1
112	00JS026C	62.915	-147.782	Red-brown to orange-weathering layer within chert	0.5	2.71	14	<0.005	2220	<1	<1	0.025	<0.05	38	2	10	44.1	42	<2	3.64
113	00JS026G	62.915	-147.782	Dark red-brown quartz-goethite boxworks in basalt / gabbro (?)	0.3	1.13	31	<0.005	84	<1	<1	13.8	0.79	16	13	13	17.1	19	2	3.95
114	00JS026H	62.915	-147.782	5-10 cm thick red-brown weathering, pyritic gray-green chert layer within limestone	0.6	7.08	126	<0.005	125	<1	1	5.42	0.13	33	28	37	50.8	49	3	5.82
115	02SC025C	62.870	-149.356	Quartz-kaolinite vein cross-cutting argillite and andesite dikes at Mint mine	8.9	4.052	3960	0.143	214	1	1	0.095	0.11	15	9	74	11	11	2	6.17
116	02SC025D	62.870	-149.356	Quartz-kaolinite vein cross-cutting argillite and andesite dikes at Mint mine	5.3	4.522	729	0.114	156	1	3	0.042	<0.05	13	17	64	15.9	17	2	8.03
117	02SC025E	62.870	-149.356	Quartz-kaolinite vein cross-cutting argillite and andesite dikes at Mint mine	116	2.84	>6000	7.64	119	<1	2	0.025	0.1	<5	9	129	7.81	6	<2	5.08
118	02SC025F	62.870	-149.356	Vein quartz from Mint mine dump	2.1	4.864	66	0.012	427	1	<1	0.691	0.33	31	9	31	34.6	32	<2	2.12
119	02SC025G	62.870	-149.356	Vein quartz from Mint mine dump	0.3	0.639	10	<0.005	146	<1	<1	0.057	0.11	10	2	6	16.6	17	<2	0.49
120	02SC025H	62.870	-149.356	Vein quartz from Mint mine dump	0.3	1.139	6	<0.005	181	<1	<1	0.053	0.15	12	3	8	16.9	18	<2	1.02
121	02SC025J	62.870	-149.356	Vein quartz from Mint mine dump	0.3	2.084	7	<0.005	412	<1	<1	0.077	0.16	11	6	19	19	18	<2	1.45
122	00JS025E	62.849	-147.902	Orange-stained gabbr or diorite near chert	<0.08	3.025	16	<0.005	136	<1	<1	0.32	<0.05	26	6	5	61	60	<2	1.29
123	02JS033A	62.845	-148.560	Pale gay to white weathering altered fine-grained granite	0.2	7.224	1	<0.005	1340	<1	<1	0.031	<0.05	<5	<2	8	2.45	2	<2	0.23
124	02JS033C	62.845	-148.560	Orange weathering equigranular medium-grained granite	0.1	7.208	21	<0.005	1350	1	<1	0.075	<0.05	17	<2	5	2.96	4	<2	1.57
125	02JS033F	62.845	-148.560	Orange-weathering granite grus	<0.08	7.43	22	<0.005	858	1	1	0.29	0.14	16	<2	5	6.7	8	<2	3.99
126	00JS017A	62.830	-148.252	Orange-red to orange-brown fracture coating in altered amygdaloidal Nikolai basalt	0.1	7.75	9	<0.005	51	<1	<1	5.17	<0.05	22	34	68	21.7	20	<2	8.61
127	00JS017B	62.830	-148.252	Yellow-green bloom on fractures in altered amygdaloidal Nikolai basalt	0.1	8.155	10	<0.005	72	<1	2	6.045	<0.05	25	67	64	27.5	26	<2	8.22
128	00JS017C	62.830	-148.252	Yellow-green bloom on fractures in altered amygdaloidal Nikolai basalt	0.6	7.43	13	<0.005	162	<1	2	3.58	<0.05	25	120	67	261	248	<2	10.1
129	00JS017E	62.830	-148.252	White + yellow effluorescent fracture coating in altered amygdaloidal Nikolai basalt	0.8	3.495	102	ins	90	<1	1	0.64	1.12	14	226	13	>500	2120	<2	6.6
130	01JS069B	62.814	-148.804	Slightly pyritic, biotite-rich Fe-stained zone in metasediments	0.2	7.91	<1	0.005	1800	<1	<1	1.34	<0.05	23	5	14	29.4	32	<2	3.19
131	01ANS027L	62.787	-148.195	5% disseminated pyrite in orange-weathering mafic sill	<0.08	6.315	2	<0.005	26	<1	<1	9.86	<0.05	<5	35	14	123	115	2	5.92
132	01ANS018A	62.763	-148.614	Orange-stained, pyritic (<10%) dark gray slaty metasediment	<0.08	8.655	<1	0.009	110	<1	<1	5.895	<0.05	<5	36	44	70.9	69	<2	8.22

Table 1. Analytical data for altered and mineralized rock samples from the northern Talkeetna Mountains, Alaska

Map No.	Field No.	Ga	Hg	Ho	K	La	Li	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pb	Sb	Sc	Sn	Sr	Ta	Th	Ti	U	V	W	Y	Yb	Zn	Zn
		2	4	2	2	2	2	2	2	1	2	2	2	2	2	1	2	1	2	2	2	2	2	2	2	2	5	2	2	1	2
		ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
88	00JS050L	38	0.02	<4	6.73	58	23	0.06	4150	16.4	1.915	14	56	<3	0.015	1660	1550	<1	7	81	72	<40	16	0.105	<100	<2	0.7	24	2	>500	18900
89	00JS050H	32	<0.02	<4	1.48	41	186	0.035	4380	1.4	4.355	7	43	<3	0.01	367	400	<1	7	<50	73	<40	13	0.04	<100	3	1.3	26	2	>500	597
90	00JS050K	19	0.18	<4	0.54	27	180	0.03	385	8.8	0.37	<4	26	<3	0.005	1120	1050	10	4	76	41	<40	<6	0.02	<100	<2	1.5	25	2	>500	2130
91	00JS007B	41	<0.02	<4	1.66	61	51	3.005	523	3.3	3.6	16	73	21	0.18	<1	<4	1	18	<50	177	<40	8	0.39	<100	147	1.1	18	1	157	143
92	00ARj039B	21	<0.02	<4	2.56	26	47	1.195	762	0.9	2.15	14	27	7	0.11	11	10	<1	17	<50	456	<40	<6	0.589	<100	105	1.1	22	2	101	95
93	00ARj039C	16	<0.02	<4	1.87	31	22	0.025	88	1.3	3.255	13	32	<3	0.005	15	15	<1	7	<50	122	<40	8	0.072	<100	5	1.6	22	2	72.8	71
94	00ARj039D	21	<0.02	<4	2.93	19	22	0.135	517	0.7	2.58	12	22	<3	0.03	11	12	<1	15	<50	175	<40	<6	0.138	<100	21	1.1	17	2	72.1	68
95	00ARj039E	24	<0.02	<4	2.27	21	32	0.67	1390	2.6	2.92	18	25	<3	0.1	10	9	<1	56	<50	371	<40	<6	0.495	<100	15	1.6	21	2	46.4	42
96	00JS050A	25	<0.02	<4	2.67	26	27	0.025	<4	6.5	0.18	17	28	<3	0.01	9	13	<1	5	<50	38	<40	10	0.08	<100	3	0.6	29	3	11.6	12
97	00JS050B	23	<0.02	<4	3.52	150	9	0.03	96	5.9	2.765	13	140	<3	0.01	13	15	<1	6	<50	100	<40	9	0.075	<100	3	1.3	70	5	182	184
98	00JS050C	28	0.02	5	3.39	42	18	0.075	255	5.4	1.25	19	49	<3	0.01	13	16	<1	9	<50	48	<40	14	0.095	<100	5	1.3	46	5	115	112
99	00JS050F	16	<0.02	<4	1.65	21	40	0.035	7	1.8	0.17	8	26	<3	0.005	8	8	<1	4	<50	36	<40	6	0.035	<100	2	0.5	21	2	11.4	13
100	99JS020A	19	<0.02	<4	3.2	34	17	0.033	73	3.9	1.985	11	26	<3	0.005	8	18	<1	5	<50	72	<40	9	0.062	<100	6	4.1	24	2	86.2	88
101	00JS027A	57	0.13	<4	0.08	<2	7	0.07	321	4.6	0.105	<4	11	17	0.095	<1	<4	115	7	<50	18	<40	<6	0.48	<100	258	19.2	6	2	34.8	39
102	02JS046D	5	<0.02	<4	0.34	7	141	2.682	623	0.5	0.058	<4	22	32	0.005	1	<4	4	5	<50	211	<40	<6	0.083	<100	37	<0.5	20	2	57.5	58
103	00JS032C	20	<0.02	<4	3.58	35	29	0.145	154	<0.1	1.2	10	30	<3	0.02	11	12	1	4	<50	126	<40	17	0.06	<100	19	<0.5	16	2	64.3	60
104	00ARj082B	22	<0.02	<4	2.19	27	24	0.525	916	1.5	2.865	15	31	3	0.075	9	12	<1	15	<50	444	<40	<6	0.325	<100	32	4.5	25	2	114	108
105	01JS035D	<4	<0.02	<4	0.03	<2	4	0.14	336	0.1	0.11	<4	<9	<3	<0.005	<1	<4	<1	3	<50	616	<40	<6	0.011	<100	8	<0.5	3	<1	3	5
106	00ARj046A	22	<0.02	<4	3.41	9	20	0.01	18	3	2.59	12	<9	<3	0.01	8	11	<1	8	<50	151	<40	<6	0.105	<100	2	1.7	11	1	22.8	22
107	00ARj046B	20	<0.02	<4	3.3	11	19	0.01	102	3.7	2.52	13	15	<3	0.01	6	8	<1	12	<50	150	<40	8	0.121	<100	4	1.1	13	2	61.1	61
108	01JS039A	19	<0.02	<4	1.85	22	75	1.85	2730	1.2	1.565	11	23	35	0.085	4	12	<1	21	<50	175	<40	<6	0.413	<100	223	1.2	13	2	81.1	74
109	01ANS024D	22	<0.02	<4	2.96	2	15	0.03	76	0.7	2.59	<4	<9	<3	0.02	3	50	<1	<2	<50	189	<40	<6	0.006	<100	<2	<0.5	<2	<1	2.28	<2
110	00ARj091	26	<0.02	<4	2.21	27	31	0.405	257	<0.1	3.08	15	24	<3	0.045	1	11	<1	3	<50	746	<40	<6	0.208	<100	19	1.3	6	<1	99.1	107
111	00JS026B	5	0.03	<4	0.27	19	5	0.39	264	0.1	0.055	<4	21	22	0.005	2	<4	<1	3	<50	16	<40	<6	0.03	<100	23	<0.5	6	<1	39.9	37
112	00JS026C	12	0.11	<4	1.11	15	<2	0.23	65	3.6	0.065	7	19	7	0.015	23	21	2	9	<50	9	<40	<6	0.13	<100	78	<0.5	5	<1	23.3	25
113	00JS026G	9	<0.02	<4	0.08	<2	8	0.825	1140	0.6	0.02	<4	27	32	0.005	4	4	<1	14	<50	114	<40	<6	0.035	<100	60	<0.5	14	<1	88.7	82
114	00JS026H	20	<0.02	<4	0.07	11	8	2.415	720	0.7	3.865	27	25	23	0.06	1	<4	<1	29	<50	78	<40	<6	0.78	<100	301	<0.5	19	2	20.5	32
115	02SC025C	12	0.04	<4	0.96	6	100	1.65	247	0.8	0.019	13	11	6	0.105	3	<4	8	16	<50	19	<40	<6	0.575	<100	138	0.8	8	2	37.1	41
116	02SC025D	12	0.06	<4	0.47	5	188	3.168	538	0.7	0.015	11	9	7	0.081	3	<4	6	14	<50	16	<40	<6	0.576	<100	128	0.7	6	2	63.1	70
117	02SC025E	8	0.07	<4	0.9	<2	151	0.321	58	0.5	0.009	10	<9	104	0.07	8	5	51	12	<50	7	<40	<6	0.41	<100	88	1.5	<2	1	23.5	27
118	02SC025F	12	<0.02	<4	1.41	18	93	1.207	458	0.4	0.033	6	19	63	0.094	6	<4	3	10	<50	40	<40	<6	0.213	<100	116	1.4	21	2	132	132
119	02SC025G	<4	<0.02	<4	0.19	3	13	0.085	1460	0.2	0.007	<4	<9	12	0.012	2	<4	<1	2	<50	12	<40	<6	0.015	<100	14	0.7	3	<1	21.7	21
120	02SC025H	<4	<0.02	<4	0.26	4	23	0.438	1430	0.3	0.009	<4	<9	24	0.02	3	<4	<1	4	<50	10	<40	<6	0.024	<100	25	0.7	5	<1	59.4	61
121	02SC025J	5	<0.02	<4	0.6	8	34	0.503	1120	0.3	0.017	<4	9	31	0.032	5	4	<1	5	<50	12	<40	<6	0.063	<100	52	0.9	15	1	57.3	62
122	00JS025E	8	0.06	<4	0.04	10	10	0.1	181	<0.1	1.795	8	10	19	0.015	2	<4	<1	6	<50	91	<40	<6	0.105	<100	33	1.1	6	<1	8.04	7
123	02JS033A	20	0.08	<4	3.13	2	18	0.013	14	0.9	0.149	11	<9	6	<0.005	10	8	2	2	<50	63	<40	<6	0.19	<100	18	3.3	3	<1	7.51	11
124	02JS033C	20	0.03	<4	3.19	7	26	0.043	26	1	0.11	10	<9	4	0.04	8	5	5	4	<50	62	<40	<6	0.186	<100	23	3.2	15	2	22.6	22
125	02JS033F	21	0.1	<4	3.26	6	19	0.045	83	1.5	0.124	9	<9	3	0.068	15	12	2	6	<50	47	<40	14	0.155	<100	25	5.2	14	2	65.1	69
126	00JS017A	34	<0.02	<4	0.62	6	25	4.195	1580	0.2	3.055	29	24	79	0.065	<1	<4	<1	45	<50	135	<40	<6	1.05	<100	356	5	24	2	28.6	53
127	00JS017B	38	<0.02	<4	1.01	5	8	2.495	1210	<0.1	2.8	26	22	53	0.05	2	<4	<1	34	<50	167	<40	<6	0.865	<100	325	1.9	19	2	23.3	45
128	00JS017C	45	0.03	6	1.43	6	8	2.085	831	1.5	3.255	30	14	38	0.055	2	<4	<1	35	<50	115	<40	<6	0.9	<100	323	2.3	17	2	25.2	39
129	00JS017E	22	1.56	<4	0.42	2	9	2.34	990	2.6	0.295	4	<9	110	0.02	23	19	2	13	<50	15	<40	<6	0.24	<100	80	3.6	13	1	101	85
130	01JS069B	17	<0.02	<4	2.22	14	41	0.745	787	1.4	2.59	8	13	5	0.035	3	12	<1	12	<50	467	<40	<6	0.264	<100	95	0.7	9	2	57.6	68
131	01ANS027L	15	<0.02	<4	0.02	4	8	1.57	840	0.5	0.085	5	11	27	0.045	6	5	<1	42	<50	19	<40	<6	0.649	<100	334	1	25	2	28.6	38
132	01ANS018A	22	<0.02	<4	0.49	8	13	2.89	1350	0.4	2.45	16	16	22	0.14	<1	<4	<1	38	<50	831	<40	<6	0.688	<100	315	1.2	29	3	36.1	96

Table 1. Analytical data for altered and mineralized rock samples from the northern Talkeetna Mountains, Alaska

Map No.	Field No.	Latitude (Deg. N)	Longitude (Deg. W)	Element - - - - - - - - - - -	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cu	Eu	Fe
				Sample description Analytical method[1] - -	1	2	1	3	2	2	1	2	1	2	2	2	1	2	2	2
				Units - - - - - - - - - - - -	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
133	00JS064A	62.760	-148.584	Fe-oxide stained, pyritic gray siliceous argillite	1.1	5.935	73	<0.005	1130	<1	2	1.43	3	34	6	34	59.3	62	<2	2.9
134	99JS008B	62.760	-148.58	Yellow-green weathering, altered material below limestone	0.2	7.574	12	<0.005	1900	<1	<1	0.655	0.48	24	3	6	11.4	13	<2	2.4
135	99JS008D	62.760	-148.58	Reddest weathering, altered material from limestone/siltstone outcrop	0.5	9.735	30	<0.005	2450	<1	<1	2.057	1.2	64	2	2	19.8	22	<2	2.1
136	00JS029A	62.760	-148.578	Dark gray, very-fine-grained dark-gray limestone	0.2	2.245	15	<0.005	598	<1	<1	26.7	0.96	22	2	2	9.1	11	<2	1
137	00JS029B	62.760	-148.578	Dark-red weathering chert	0.6	6.045	32	<0.005	1190	<1	<1	2.025	2.15	42	7	13	42.9	45	3	4.43
138	00JS029C	62.760	-148.578	Yellow effluoresence from fractures in siliceous argillite and imestone	0.9	5.405	59	ins	149	<1	2	0.985	20.1	34	30	9	131	122	2	11.1
139	00JS029D	62.760	-148.578	White effluorescent crust on gray dark siliceous shales	0.8	3.24	83	ins	154	<1	<1	11.4	11.6	46	30	9	145	159	4	4.74
140	01ANS027B	62.757	-148.199	Gossan zone in amygdaloidal Nikolai basalt flows	<0.08	5.62	4	<0.005	35	<1	<1	6.555	0.14	5	23	111	112	115	<2	4.21
141	01ANS019B	62.752	-148.594	White vein material commonly (≤25%) cross-cutting Tertiary columnar basalt	<0.08	8.88	<1	<0.005	136	<1	<1	4.075	<0.05	15	23	35	31.5	34	<2	3.7
142	99ARj020B1	62.747	-148.201	Nikolai greenstone with malachite stain	16.2	7.266	4	0.054	17	<1	<1	2.041	1.09	27	46	41	>500	33550	2	9.97
143	99ARj020B2	62.747	-148.201	Malachite-stained quartz vein	1.8	3.344	5	0.01	183	<1	<1	0.633	<0.05	<5	2	<2	>500	2990	<2	0.56
144	02JS011B	62.745	-148.611	Tertiary vesicular basalt with heavy iron-oxide alteration	<0.08	8.892	1	<0.005	188	1	<1	5.285	0.21	18	46	51	52.6	54	3	7.28
145	02JS011D	62.745	-148.611	Vein of orange-weathering Fe-oxide material in Tertiary pillow basalt	<0.08	3.9	<1	<0.005	140	1	5	2.383	0.37	6	101	27	56.2	56	5	18.7
146	00JS021A	62.740	-148.408	Brick-red to orange-red coating on altered sedimentary rock	0.4	8.84	17	<0.005	1060	<1	<1	0.53	0.07	31	7	8	43.4	40	<2	4.38
147	99JS014H	62.735	-148.117	Rusty orange-brown weathering, light-colored laminated chert	0.2	2.734	2	<0.005	1480	<1	<1	0.248	0.05	20	10	11	27	27	<2	2.05
148	00JS031A	62.734	-148.136	Very dark red weathering pyritic chert	0.8	7.295	8	<0.005	3810	<1	<1	9.54	0.28	11	21	87	142	155	<2	4.89
149	00JS031B	62.734	-148.136	Chalcopyrite-calcite-pyrite-garnet-pyroxene skarn	1.8	2.66	4	0.012	24	<1	2	17.9	1.92	22	21	5	>500	568	<2	14.7
150	01SC004	62.734	-148.069	Very coarse grained pyroxene-plagioclase gabbro	<0.08	9.16	4	<0.005	100	<1	<1	6.895	0.09	<5	37	10	156	157	<2	6.72
151	01MN006	62.734	-147.824	Hornblende-biotite granodiorite or gneiss	0.2	5.278	<1	<0.005	160	<1	<1	3.479	0.22	<5	29	56	>500	569	2	7.55
152	00JS058C	62.733	-148.145	Most altered, pyritic cherty argillite	0.4	7.715	1	<0.005	120	<1	1	7.32	0.46	20	22	224	112	105	<2	6.77
153	99JS014F	62.732	-148.117	Rare red-orange weathering volcaniclastic cobble in chert	<0.08	7.106	<1	0.006	357	<1	<1	5.187	0.21	<5	26	<2	73.6	69	<2	9.62
154	01JS012B	62.732	-148.097	Fe-oxide stained siliceous argillite near gabbro sill	0.2	7.76	11	0.009	13480	<1	<1	0.755	0.08	35	6	8	20.7	26	<2	3.13
155	00SC016C	62.731	-148.391	Sulfides in mafic(?) lava	0.1	3.68	1	<0.005	4750	<1	<1	0.715	<0.05	33	6	10	19.7	18	<2	2.35
156	00SC021A	62.731	-148.385	Pyritic silica, within thick mafic lava flows	<0.08	2.71	5	<0.005	278	<1	<1	0.65	<0.05	23	6	10	3.17	<2	<2	2.24
157	99ARj023	62.731	-148.23	Disseminated pyrite and pyrrhotite with epidote veinlets in equigranular mafic intrusion	<0.08	8.063	3	0.01	451	<1	<1	5.764	0.08	10	44	141	142	134	<2	7.97
158	01JS011A	62.731	-148.095	Veinlet and disseminated pyrhhotite, pyrite and Mn-oxide(?) in pale green aphanitic dacite(?)	<0.08	7.48	<1	0.014	77	<1	<1	8.365	0.13	<5	42	35	96.5	122	<2	7
159	01SC001B	62.731	-148.095	Quartz-veined, fine-grained mafic tuff(?)	<0.08	5.225	7	<0.005	1230	<1	<1	5.01	0.06	<5	16	9	49.9	51	<2	3.14
160	00AG007	62.724	-148.444	Very fine grained (pyrite) biotite-feldspar intrusion	0.2	8.935	11	<0.005	477	<1	<1	3.195	0.09	32	15	19	62.9	64	2	4.82
161	99ARj010C	62.724	-148.116	Grab sample of quartz veins in metavolcanic(?) rocks	<0.08	0.259	3	0.09	38	<1	<1	0.116	<0.05	<5	<2	15	<0.05	4	<2	0.16
162	00AG017C	62.723	-148.465	Locally pyritic argillite	0.5	6.045	9	<0.005	390	<1	<1	3.64	0.16	30	8	26	31.3	29	<2	3.44
163	00AG005	62.721	-148.441	Fine- to medium- grained feldspar-hornblende(?) hypabyssal intrusion(?) or flow with lithic clasts	0.3	8.505	4	<0.005	630	1	1	4.52	0.08	55	20	82	38	38	2	5.94
164	00AG003	62.720	-148.44	Pyrite-bearing diabase dike	0.3	8.605	5	<0.005	681	<1	2	5.355	0.13	33	26	49	108	103	<2	6.71
165	00AG010	62.720	-148.413	Quartz-calcite vein breccia from north-south float train	0.2	1.85	2	<0.005	26	<1	<1	6.55	<0.05	10	8	4	13.8	15	<2	1.56
166	00AG001A	62.719	-148.438	Rubble of epidote-altered fragmental tuff	0.3	8.615	5	<0.005	797	2	1	2.075	0.17	60	8	3	22.2	23	2	4.16
167	00AG009	62.719	-148.420	Fine grained, seriate feldspar-hornblende-(pyrite) intrusion	0.3	8.47	4	<0.005	1180	<1	<1	5.32	0.2	31	37	5	154	157	<2	7.98
168	00SC025	62.711	-148.463	Pyritic hornblende-rich mafic intrusion(?)	0.4	9.645	5	<0.005	25	<1	<1	9.72	0.09	26	22	24	88.7	93	<2	5.78
169	01JS058D	62.711	-148.177	Pyritic pale green-gray Nikolai mafic lava	<0.08	8.97	<1	0.009	636	<1	<1	4.81	0.07	<5	30	104	87.8	91	<2	6.45
170	01JS053D	62.706	-148.430	Red-orange stained, layered, medium grained mafic tuff(?)	<0.08	8.62	7	0.012	569	<1	<1	2.075	0.09	27	11	18	36.5	42	2	4.35
171	02JS017B	62.704	-148.473	Dark red weathering sulfidic black argillite	0.2	8.838	<1	<0.005	697	1	<1	2.618	0.21	18	14	22	88.7	88	3	7.13
172	01ANS020D	62.704	-148.122	Trace pyrite in sheared, epidote-rich, non-magnetic microgabbro	<0.08	8.39	<1	0.006	77	<1	<1	7.13	<0.05	<5	52	303	225	245	<2	6.8
173	00JS022H	62.697	-148.299	Rare quartz veinlets with Fe-oxide centerline cut mafic(?) sill	0.3	6.975	5	<0.005	37	<1	<1	5.755	0.14	12	20	76	17.6	19	<2	3.67
174	00ARj062	62.696	-148.210	Rusty weathering clots in white quartz lenses within argillite near contact with 2 m thick mafic sill with chilled margin	<0.08	0.125	<1	<0.005	30	<1	<1	0.565	<0.05	<5	<2	<2	5.65	4	<2	0.39
175	00ARj065A	62.695	-148.201	Disseminated sulfide in gabbro sill	<0.08	7.935	<1	0.008	634	<1	<1	6.17	0.14	<5	41	137	64.2	72	<2	6.56
176	00ARj065B	62.695	-148.201	Rusty-weathering siliceous argillite	<0.08	2.745	11	0.009	2910	<1	<1	0.14	0.07	18	2	5	21.1	23	<2	1.24

Table 1. Analytical data for altered and mineralized rock samples from the northern Talkeetna Mountains, Alaska

Map No.	Field No.	Ga	Hg	Ho	K	La	Li	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pb	Sb	Sc	Sn	Sr	Ta	Th	Ti	U	V	W	Y	Yb	Zn	Zn
		2	4	2	2	2	2	2	2	1	2	2	2	2	2	1	2	1	2	2	2	2	2	2	2	2	5	2	2	1	2
		ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
133	00JS064A	19	0.02	<4	1.36	11	26	0.58	251	13.8	1.045	6	19	34	0.065	5	6	5	14	<50	155	<40	<6	0.13	<100	354	0.6	21	3	269	288
134	99JS008B	19	<0.02	<4	2.4	13	26	0.754	133	9.5	1.1	7	9	8	0.04	5	13	4	9	<50	106	<40	<6	0.119	<100	113	2.4	12	2	47.7	48
135	99JS008D	25	<0.02	<4	3.01	34	20	0.671	148	8.1	1.5	15	39	4	0.365	4	18	7	17	<50	224	<40	8	0.26	<100	179	4.2	31	3	72.5	73
136	00JS029A	10	<0.02	<4	0.12	10	7	1.065	1480	2.3	1.175	<4	40	7	0.045	<1	<4	2	3	<50	397	<40	<6	0.085	<100	41	<0.5	12	1	57.5	71
137	00JS029B	21	<0.02	4	0.34	17	31	0.775	325	23.2	1.26	11	29	55	0.07	3	5	5	16	<50	227	<40	<6	0.225	<100	351	<0.5	27	3	228	215
138	00JS029C	36	<0.02	<4	1.01	10	45	0.915	276	21.7	0.77	<4	20	205	0.11	8	5	6	8	<50	80	<40	<6	0.08	<100	156	0.6	17	2	>500	1110
139	00JS029D	13	0.15	<4	0.43	14	19	0.665	1230	8.7	0.37	<4	39	52	0.045	2	4	7	8	<50	506	<40	<6	0.085	<100	98	<0.5	26	2	>500	493
140	01ANS027B	15	<0.02	<4	0.04	5	39	1.59	817	<0.1	0.055	5	13	60	0.03	<1	<4	1	27	<50	212	<40	<6	0.622	<100	186	2.9	10	<1	39.3	37
141	01ANS019B	10	<0.02	<4	0.41	7	35	4.445	892	0.1	2.315	13	9	47	0.09	1	<4	<1	15	<50	1210	<40	<6	0.501	<100	106	1.4	14	1	41.4	39
142	99ARj020B1	33	0.04	5	0.03	8	21	3.999	1140	1.6	2.105	21	21	49	0.02	<1	27	<1	38	<50	100	<40	<6	0.87	<100	293	2.4	23	2	66.1	105
143	99ARj020B2	8	<0.02	<4	0.99	<2	10	0.209	149	0.7	0.735	<4	<9	<3	0.005	<1	5	4	<2	<50	51	<40	<6	0.04	<100	15	8.2	<2	<1	5.48	5
144	02JS011B	21	0.03	<4	0.23	7	6	1.401	957	0.4	2.116	8	18	81	0.064	1	<4	<1	30	<50	307	<40	<6	0.737	<100	174	<0.5	28	4	49.9	53
145	02JS011D	8	<0.02	<4	0.14	3	10	6.728	1910	0.5	0.594	<4	<9	158	0.033	1	<4	2	20	<50	124	<40	<6	0.263	<100	148	<0.5	13	4	76.2	85
146	00JS021A	26	<0.02	<4	4.4	13	17	1.17	436	1.6	1.29	15	22	3	0.08	6	<4	<1	21	<50	199	<40	<6	0.415	<100	132	<0.5	22	3	49.4	50
147	99JS014H	10	<0.02	<4	1.06	14	21	0.765	1470	0.5	0.23	9	<9	41	0.015	4	8	<1	9	<50	43	<40	<6	0.164	<100	72	1.9	15	2	63.3	63
148	00JS031A	32	<0.02	<4	1.26	<2	5	3.765	1240	23.2	1.805	13	16	34	0.035	<1	<4	<1	38	<50	112	<40	<6	0.46	<100	299	0.9	19	2	18.9	54
149	00JS031B	38	0.05	<4	0.01	2	<2	0.655	6810	0.7	0.255	<4	26	11	0.035	22	18	1	<2	<50	253	<40	<6	0.03	<100	315	8.1	9	<1	146	160
150	01SC004	20	<0.02	<4	0.1	<2	5	2.795	1080	0.1	3.185	7	<9	42	0.035	<1	<4	<1	39	<50	102	<40	<6	0.462	<100	263	<0.5	28	3	55.6	55
151	01MN006	12	<0.02	<4	0.2	2	9	2.11	817	14.2	0.958	<4	<9	30	0.019	1	<4	<1	17	<50	171	<40	<6	0.123	<100	113	0.9	9	2	61.5	60
152	00JS058C	22	<0.02	<4	0.9	4	10	4.495	1020	5.5	0.96	10	18	79	0.035	19	21	1	37	<50	385	<40	<6	0.42	<100	256	0.7	15	2	94.8	114
153	99JS014F	31	<0.02	6	0.28	<2	6	2.398	1410	0.3	2.12	9	11	<3	0.035	<1	13	<1	46	<50	91	<40	<6	0.616	<100	471	2.7	26	3	76.6	83
154	01JS012B	13	0.02	<4	2.27	16	12	1.45	222	1.1	2.485	8	19	8	0.04	11	10	3	22	<50	219	<40	<6	0.523	<100	133	1.3	16	2	37.6	41
155	00SC016C	15	<0.02	<4	0.36	15	6	0.875	502	<0.1	1.475	9	20	30	0.03	6	6	<1	12	<50	100	<40	<6	0.22	<100	53	3.4	13	2	42.2	41
156	00SC021A	11	<0.02	<4	0.02	6	15	1.07	209	0.3	1.07	8	<9	24	0.01	9	9	<1	8	<50	63	<40	<6	0.165	<100	53	0.6	7	1	21.5	21
157	99ARj023	28	<0.02	<4	0.61	<2	11	4.648	1190	0.2	2.035	12	<9	78	0.045	<1	18	<1	46	<50	292	<40	<6	0.593	<100	347	2.8	19	2	57.7	69
158	01JS011A	18	<0.02	<4	0.05	4	3	3.66	1410	0.5	2.01	12	<9	53	0.03	<1	6	<1	42	<50	117	<40	<6	0.418	<100	271	1.1	19	2	31.3	63
159	01SC001B	7	<0.02	<4	0.54	<2	2	1.415	516	<0.1	0.865	<4	<9	21	0.01	<1	<4	<1	16	<50	62	<40	<6	0.165	<100	116	<0.5	8	1	16.3	25
160	00AG007	15	<0.02	<4	1.13	11	6	2.06	905	<0.1	2.925	17	12	13	0.08	<1	<4	<1	27	<50	866	<40	<6	0.465	<100	207	0.8	22	3	77.3	70
161	99ARj010C	4	<0.02	<4	0.13	<2	<2	0.022	165	0.2	0.025	<4	<9	8	<0.005	<1	<4	1	<2	<50	2	<40	<6	<0.005	<100	2	1.1	<2	<1	0.97	<2
162	00AG017C	20	0.04	<4	1.58	12	22	1.53	558	<0.1	1.125	9	20	19	0.05	6	<4	2	13	<50	180	<40	<6	0.285	<100	126	1.4	17	2	88.8	86
163	00AG005	30	<0.02	<4	1.44	20	8	2.84	1280	<0.1	2.195	13	30	58	0.125	2	<4	2	29	<50	659	<40	6	0.475	<100	172	<0.5	26	3	85.2	87
164	00AG003	39	<0.02	<4	1.26	8	7	2.53	1450	0.3	2.5	14	20	25	0.125	4	<4	<1	35	<50	480	<40	<6	0.555	<100	333	1.2	21	2	85.5	82
165	00AG010	7	<0.02	<4	0.02	3	7	0.79	619	<0.1	0.685	<4	<9	11	0.005	<1	<4	<1	10	<50	51	<40	<6	0.055	<100	59	1.2	5	<1	20.2	19
166	00AG001A	25	<0.02	4	2.06	27	5	1.54	993	0.7	2.805	18	32	<3	0.115	6	<4	1	18	<50	546	<40	7	0.44	<100	85	0.7	26	3	81.2	75
167	00AG009	29	<0.02	<4	1.13	7	7	3.28	1390	0.2	2.175	13	12	25	0.055	<1	<4	1	42	<50	193	<40	<6	0.435	<100	324	0.6	24	3	77.4	73
168	00SC025	38	<0.02	<4	0.02	6	8	2.085	1110	<0.1	0.09	14	20	21	0.075	<1	<4	<1	31	<50	49	<40	<6	0.505	<100	255	0.7	19	2	76.1	75
169	01JS058D	18	<0.02	<4	1.05	5	12	5.21	915	0.4	1.81	11	11	39	0.035	2	4	<1	52	<50	191	<40	<6	0.523	<100	317	<0.5	20	2	51.7	68
170	01JS053D	18	0.03	<4	2.21	13	14	1.545	944	5.1	1.955	7	19	6	0.085	7	6	<1	25	<50	273	<40	<6	0.523	<100	161	2.7	22	3	44.8	70
171	02JS017B	22	<0.02	<4	1.42	8	8	1.816	1180	1.3	2.001	7	14	12	0.065	4	<4	<1	32	<50	370	<40	<6	0.586	<100	261	1.8	19	3	101	105
172	01ANS020D	13	<0.02	<4	0.22	<2	6	5.32	1490	0.1	1.655	8	<9	156	0.015	<1	<4	<1	52	<50	120	<40	<6	0.242	<100	265	1	15	2	27	54
173	00JS022H	25	<0.02	<4	0.05	<2	13	1.635	1180	<0.1	0.65	<4	<9	46	0.025	<1	<4	1	17	<50	214	<40	<6	0.11	<100	168	0.9	6	1	28.5	31
174	00ARj062	<4	<0.02	<4	0.04	<2	<2	0.03	91	0.1	0.025	<4	<9	4	0.025	<1	<4	<1	<2	<50	10	<40	<6	0.006	<100	2	<0.5	2	<1	2.09	5
175	00ARj065A	16	<0.02	<4	0.33	5	9	4.935	1330	0.3	1.32	12	<9	47	0.04	1	5	<1	44	<50	143	<40	<6	0.479	<100	261	1	19	2	60.2	86
176	00ARj065B	<4	<0.02	<4	0.85	6	4	0.705	156	1.1	0.905	<4	<9	4	0.025	4	<4	2	6	<50	44	<40	<6	0.133	<100	39	1.4	3	<1	16.8	19

Table 1. Analytical data for altered and mineralized rock samples from the northern Talkeetna Mountains, Alaska

Map No.	Field No.	Latitude (Deg. N)	Longitude (Deg. W)	Element / Sample description / Analytical method[1] / Units	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cu	Eu	Fe
				Analytical method[1]	1	2	1	3	2	2	1	2	1	2	2	2	1	2	2	2
				Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
177	00ARj030A	62.694	-148.610	Boxwork veins in orange-weathering lava breccia with angular .5-3 cm fragments	<0.08	7.765	2	<0.005	521	<1	<1	4.065	0.11	<5	55	118	184	206	<2	9.93
178	00ARj002A	62.688	-148.337	Quartz veins in argillite	<0.08	8.44	8	0.014	743	<1	<1	4.895	0.14	<5	41	112	138	159	<2	6.14
179	00SC049	62.680	-148.240	Brown Fe-oxide-rich quartz vein float near mafic sill	<0.08	1.615	5	<0.005	23	<1	<1	4.61	0.1	26	8	10	57.8	60	<2	1.73
180	00SC049A	62.680	-148.240	Sheared quartz vein	0.2	1.755	5	<0.005	14	<1	<1	3.76	0.07	25	6	8	32	34	<2	1.38
181	01ANS023A	62.674	-148.580	Cu staining in 30 cm- thick silicified gossan at contact of mafic sill and sediments	0.2	0.69	74	0.014	61	<1	<1	0.295	0.5	<5	64	27	>500	46870	<2	10.4
182	00SC050	62.674	-148.243	Pyritic silceous argillite 5' from maifc sill	0.1	5.785	5	<0.005	1580	<1	<1	1.105	0.09	39	12	19	38.3	41	<2	2.84
183	01SC017A	62.664	-148.402	Epidote-veined and altered microgabbro sill	<0.08	7.75	1	<0.005	214	<1	<1	2.045	<0.05	<5	33	7	6.6	27	<2	13.3
184	01SC016C	62.664	-148.401	Boulder of pyrite/pyrrhotite in brecciated gabbro near limestone contact	0.1	7.69	6	<0.005	28	<1	<1	12.4	<0.05	<5	39	93	33	64	<2	5.52
185	00JS063C	62.658	-148.366	Oragne-brown weathering siliceous argillite	<0.08	3.39	8	<0.005	89	<1	1	1.68	0.22	23	<2	6	24.9	25	<2	0.74
186	01SC009E	62.656	-148.374	Orange-weathering, chert, interbedded with limestone and mafic sills	0.3	2.165	10	<0.005	250	<1	<1	0.3	0.12	25	2	2	29.9	31	<2	1.46
187	01AG022	62.655	-148.430	Trace pyrite in gray limestone	<0.08	2.475	<1	<0.005	23	<1	<1	7.56	0.06	18	3	4	5.44	9	<2	0.56
188	00SC063	62.632	-148.182	Hornblendite with sulfide	<0.08	8.36	5	<0.005	90	<1	<1	9.87	<0.05	10	56	61	127	139	<2	11.2
189	01ANS022E	62.605	-148.410	Pyrrhotite and chalcopyrite in orange-weathering gabbro sill intruding limestone	<0.08	7.625	2	<0.005	91	<1	<1	4.345	0.14	<5	44	7	197	222	<2	7.8
190	01ANS015B	62.600	-147.841	Pyritic (<5%) orange-weathering hornblende-biotite quartz diorite	<0.08	9.055	<1	<0.005	532	<1	<1	3.225	<0.05	19	10	7	79.4	80	<2	3.29
191	01JS022	62.591	-148.319	Pyritic biotite-quartz paragneiss	<0.08	5.765	49	0.006	69	<1	<1	11	0.07	15	10	4	50.5	50	<2	2.86
192	00ARj077B	62.583	-148.432	Minor malachite in coxcomb quartz veins cutting Nikolai Greenstone	68.1	0.05	10	0.046	23	<1	2	0.015	0.11	<5	<2	3	>500	2110	<2	1.06
193	00ARj077D	62.583	-148.432	Schistose quartz vein float with metallic Mn(?) rosettes	1.1	1.675	3	0.016	1070	<1	<1	0.025	0.86	9	<2	6	133	133	<2	0.75
194	01JS024A	62.535	-148.217	Rusty weathering, biotite-rich semischist / gneiss	0.3	3.085	<1	0.027	95	<1	<1	5.02	<0.05	<5	55	26	493	607	<2	7.11
195	00ARj074B	62.533	-148.400	White quartz veins cutting biotite schist	<0.08	0.085	<1	<0.005	27	<1	<1	0.02	<0.05	6	<2	<2	2	3	<2	0.07
196	01TK002A	62.503	-148.377	5% <2mm pyrite in dark gray quartz-feldspar gneiss	<0.08	6.09	3	<0.005	135	<1	<1	0.59	<0.05	12	7	<2	13.3	12	<2	1.24
197	01JS010H	62.479	-148.787	Vuggy quartz+clay altered felsic volcanic rock from trench at King and Queen prospect	<0.08	5.815	9	0.021	982	2	<1	0.375	0.06	51	<2	<2	4.46	9	<2	1.24
198	01JS010C	62.478	-148.785	Most orange-weathering, altered felsic volcanic rock	<0.08	6.6	61	0.05	1010	2	<1	0.33	<0.05	52	<2	3	3.67	5	<2	0.83
199	01TK072A	62.427	-148.221	<5% pyrite in dark gray biotite-quartz gneiss	<0.08	7.695	1	<0.005	67	<1	<1	4.895	<0.05	<5	17	2	28.5	32	<2	4.06
200	99ANS012A	62.050	-147.883	Altered zone in rhyolites	<0.08	6.166	10	<0.005	743	2	<1	0.49	0.05	51	<2	<2	<0.05	<2	2	1.44
201	99ANS019A	62.050	-147.883	Altered zone in rhyolites	<0.08	7.282	26	0.005	90	<1	<1	1.056	0.09	25	16	7	20.9	18	<2	4.59

[1]Analytical method:

1. 10-element ICP-AES DIBK extraction
2. 40-element ICP-AES total extraction
3. Fire assay - DCP - AES
4. CVAA
5. INAA

Data values between the upper and lower anomalous thresholds are highlighted in green
Data values above the higher anomalous threshold are highlighted in yellow.

Table 1. Analytical data for altered and mineralized rock samples from the northern Talkeetna Mountains, Alaska

Map No.	Field No.	Ga	Hg	Ho	K	La	Li	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pb	Sb	Sc	Sn	Sr	Ta	Th	Ti	U	V	W	Y	Yb	Zn	Zn
		2	4	2	2	2	2	2	2	1	2	2	2	2	2	1	2	1	2	2	2	2	2	2	2	2	5	2	2	1	2
		ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
177	00ARj030A	23	0.08	<4	1.72	8	17	4.685	1170	0.4	0.87	18	19	91	0.065	<1	<4	<1	40	<50	133	<40	<6	1.15	<100	376	0.8	26	2	95.6	90
178	00ARj002A	13	0.1	<4	3.9	<2	38	4.79	1100	<0.1	0.915	8	<9	106	0.015	<1	<4	<1	40	<50	442	<40	<6	0.27	<100	224	0.9	15	2	52	61
179	00SC049	9	<0.02	<4	<0.01	11	3	1.1	613	<0.1	0.18	9	17	39	0.02	<1	<4	<1	10	<50	14	<40	<6	0.205	<100	71	<0.5	11	1	27.9	61
180	00SC049A	7	<0.02	<4	<0.01	13	<2	0.645	499	0.7	0.255	6	15	34	0.015	1	<4	<1	7	<50	12	<40	<6	0.145	<100	63	1	11	1	30.5	55
181	01ANS023A	10	0.05	<4	0.02	4	3	0.34	360	1.2	0.04	10	9	76	0.01	11	14	<1	22	<50	42	<40	<6	0.033	<100	220	<0.5	18	2	256	353
182	00SC050	20	<0.02	<4	1.03	17	12	1.53	214	0.3	2.255	18	17	45	0.035	3	<4	<1	14	<50	150	<40	<6	0.295	<100	122	0.9	13	2	70.5	79
183	01SC017A	26	<0.02	<4	0.04	4	29	6.05	857	1.2	0.435	17	<9	11	0.035	<1	<4	<1	52	<50	92	<40	<6	0.506	<100	400	0.8	19	2	53.3	62
184	01SC016C	17	<0.02	<4	0.02	6	3	3.75	951	0.3	0.5	9	9	60	0.035	<1	<4	<1	47	<50	341	<40	<6	0.358	<100	255	1.4	16	1	4.56	23
185	00JS063C	6	<0.02	<4	0.03	8	<2	0.13	87	5.4	1.495	<4	11	8	0.03	1	<4	<1	6	<50	29	<40	<6	0.15	<100	121	0.6	10	1	18.8	18
186	01SC009E	<4	<0.02	<4	0.04	11	6	0.68	225	23.4	0.995	<4	14	7	0.015	3	<4	<1	7	<50	36	<40	<6	0.145	<100	96	0.8	17	2	12.3	13
187	01AG022	<4	<0.02	<4	0.03	11	3	0.38	193	0.5	1.735	<4	14	29	0.015	<1	<4	<1	7	<50	134	<40	<6	0.143	<100	48	<0.5	12	<1	11	11
188	00SC063	44	<0.02	<4	0.33	<2	6	5.015	1360	1.3	0.775	20	17	79	0.02	<1	<4	<1	57	<50	423	<40	<6	0.96	<100	651	1.7	15	2	35.9	70
189	01ANS022E	18	<0.02	<4	0.24	8	6	2.22	1510	0.8	4.27	14	15	13	0.085	<1	<4	<1	51	<50	163	<40	<6	0.869	<100	411	0.8	36	4	46	76
190	01ANS015B	16	<0.02	<4	1.06	16	9	1.205	575	0.8	2.795	8	13	4	0.045	<1	<4	<1	17	<50	427	<40	<6	0.336	<100	129	1.1	13	2	38.9	45
191	01JS022	10	<0.02	<4	0.11	13	35	0.095	1720	2.2	0.035	5	22	7	0.045	4	6	4	21	<50	55	<40	<6	0.27	<100	123	3.7	33	3	51.5	47
192	00ARj077B	<4	0.17	<4	<0.01	<2	<2	0.01	36	0.3	0.015	<4	<9	<3	0.01	32	39	<1	<2	<50	<2	<40	<6	0.006	<100	12	0.6	<2	<1	6.71	7
193	00ARj077D	<4	0.03	<4	0.62	2	2	0.38	667	0.5	0.02	<4	<9	5	0.01	25	24	<1	3	<50	3	<40	<6	0.05	<100	28	2.3	3	<1	54	65
194	01JS024A	12	<0.02	<4	0.2	10	2	1.11	1200	0.9	0.355	6	15	10	0.025	<1	<4	<1	11	<50	58	<40	<6	0.248	<100	108	1.7	19	1	3.82	43
195	00ARj074B	<4	<0.02	<4	0.02	<2	<2	0.015	49	0.3	0.03	<4	<9	<3	<0.005	<1	<4	<1	<2	<50	3	<40	<6	<0.005	<100	<2	<0.5	<2	<1	0.55	3
196	01TK002A	<4	<0.02	<4	0.34	6	2	1.035	67	0.3	3.39	<4	<9	<3	0.01	<1	<4	<1	8	<50	86	<40	<6	0.017	<100	26	3.8	<2	<1	2.37	5
197	01JS010H	11	0.02	<4	2.37	21	64	0.045	103	0.5	2.12	10	22	<3	0.005	8	12	2	4	<50	50	<40	<6	0.061	<100	4	1.5	24	3	32.8	36
198	01JS010C	10	1.07	<4	3.84	19	35	0.015	33	0.6	1.885	11	18	<3	0.01	10	13	3	4	<50	59	<40	7	0.077	<100	6	3	20	2	9.68	11
199	01TK072A	13	<0.02	<4	0.1	<2	<2	1.11	689	0.2	1.24	6	<9	<3	0.05	<1	<4	<1	18	<50	160	<40	<6	0.149	<100	117	1.5	4	<1	15.3	30
200	99ANS012A	22	<0.02	6	1.95	25	23	0.182	205	1.5	2.58	12	30	<3	0.01	2	13	12	2	<50	55	<40	8	0.085	<100	27	4.9	103	11	82	99
201	99ANS019A	21	0.11	<4	0.28	8	86	1.408	556	0.3	0.965	13	15	11	0.06	2	13	4	17	<50	37	<40	<6	0.367	<100	112	2.4	35	4	64.7	67