

Table 7. Geochemical determinations of selected samples from rock types, mineral occurrences, and mineral deposits in the Sleetmute C-7, D-7, C-8, and D-8 Quadrangles, Alaska¹

Map no.	Field no.	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	As (ppm)	Sb (ppm)	Fe (%)	Ba (ppm)	Cr (ppm)	V (ppm)	W (ppm)	La (ppm)	Bi (ppm)	Sm (ppm)	Ce (ppm)	Sc (ppm)	Zr (ppm)	Nb (ppm)	Ta (ppm)	U (ppm)	Th (ppm)	Sr (ppm)	Hg (ppm)	Remarks
1	91BT121c	ND	ND	16	7	66	8	78	9	ND	23	ND	3.27	633	94	119	ND	20	7	4.9	58	16	39	10	ND	1.8	5.1	ND	0.232	Ferricrete breccia in siliceous sandstone (Kssq)
2	91GL23	ND	0.8	11	28	574	2	10	2	ND	136	229	≥10.00	105	63	21	ND	4	ND	--	--	--	--	--	--	--	--	21	≥50.00	Metacinnabar in trench sample
3	91GL24	ND	0.3	17	5	67	ND	6	10	ND	9	ND	4.51	62	87	125	ND	3	ND	--	--	--	--	--	--	--	--	12	0.035	Quartz-carbonate vein in TKgp unit
4	90BT43	ND	ND	14	5	64	3	13	4	ND	33	ND	4.27	1,600	134	37	ND	14	ND	--	--	--	--	--	--	--	--	ND	0.326	Hematite zone in ash flow tuff (TKat)
5	90BT47	ND	0.3	25	3	120	ND	15	11	ND	16	ND	8.75	1,300	69	37	ND	20	ND	--	--	--	--	--	--	--	--	ND	0.065	Ferricrete breccia in coarse grained tuff (TKgrt)
6	90BT41	ND	0.3	12	3	57	ND	5	2	ND	ND	ND	1.12	1,600	226	4	ND	3	ND	--	--	--	--	--	--	--	--	ND	3.221	Limonite flooding in tuffaceous felsite
7	90BT42	ND	ND	3	6	90	ND	2	ND	ND	ND	ND	0.94	1,700	20	3	ND	3	ND	--	--	--	--	--	--	--	--	7	0.684	Reddish oxide zone in tuffaceous felsite (TKgp)
8	90BT56	ND	0.2	6	5	175	2	5	ND	ND	ND	ND	5.49	2,800	18	ND	ND	13	ND	--	--	--	--	--	--	--	--	ND	4.446	Yellow oxide zone in ash flow tuff (TKat)
9	90GL39	ND	0.2	19	9	44	ND	3	7	ND	ND	ND	3.68	1,200	56	33	ND	14	ND	--	--	--	--	--	--	--	--	8	0.288	Fault breccia in mafic volcanic (TKvm)
10	82BT120B	ND	ND	16	20	370	ND	ND	10	ND	14	2.6	4.90	1,300	54	--	ND	29	13	7.1	53	13.0	ND	10	ND	4.2	8.0	ND	0.017	Ferricrete alteration in vesicular volcanic (TKgvm)
11	92BT122A	ND	ND	54	6	610	ND	210	45	ND	11	1.7	7.60	1,800	1,000	--	ND	17	21	4.7	25	26.0	ND	7	ND	2.0	4.1	22	ND	Ferricrete breccia in vitreous volcanic (TKvv)
12	90HA21	ND	0.3	20	9	70	2	27	20	ND	16	ND	5.52	930	236	105	ND	10	ND	--	--	--	--	--	--	--	--	10	0.137	Sulfide bearing, fine grained volcanic
13	90GL55	ND	ND	20	6	64	2	25	12	ND	32	ND	3.77	730	150	50	ND	14	ND	--	--	--	--	--	--	--	--	6	0.102	Sulfide bearing contact between syenite and volcanic roof pendant
14	90HA20	24	ND	77	26	260	6	51	21	ND	40	2.3	≥10.00	1,700	310	--	2	85	ND	8.7	320	17.0	255	48	2	5.8	21.0	ND	9.233	Gossan in dacite-andesite flows
15	90BT80A	8	0.5	6	8	132	ND	4	1	ND	8	9	0.50	170	175	2	ND	13	ND	--	--	--	--	--	--	--	--	40	0.569	N25W trending tourmaline greisen-like vein fault in syenite below roof pendants of andesite flows; 1.5 m chip channel
	90BT80B	ND	0.5	16	15	369	ND	5	2	ND	44	12	0.62	150	168	2	ND	10	ND	--	--	--	--	--	--	--	--	32	2.055	Same as above; 2 m chip channel
	90BT80C	ND	0.5	9	8	172	ND	7	2	ND	ND	5	0.67	100	246	2	ND	11	ND	--	--	--	--	--	--	--	--	36	0.488	Same as above; 1.5 m chip channel
	90BT80D	ND	0.2	12	12	203	ND	7	3	ND	15	10	0.89	210	189	3	ND	8	ND	--	--	--	--	--	--	--	--	38	3.436	Same as above; 1 m chip channel
16	90HA16	ND	0.8	33	37	146	1	27	13	ND	33	ND	4.43	830	82	28	ND	18	ND	--	--	--	--	--	--	--	--	ND	1.016	Axinite bearing, felsite dikes
17	90HA15	ND	0.4	10	24	114	3	26	12	ND	132	10	2.71	950	94	14	ND	19	ND	--	--	--	--	--	--	--	--	ND	0.317	Felsite dikes with heavy ferricrete gossan
18	90GL43	ND	ND	58	11	37	5	79	13	ND	75	ND	3.89	1,000	112	49	ND	11	ND	--	--	--	--	--	--	--	--	10	0.315	Shear zone at syenite - hornfels contact
19	90BT77	54	1.3	44	40	1,179	3	12	12	3	37	22	6.09	400	58	36	ND	21	ND	--	--	--	--	--	--	--	--	17	0.767	Axinite-quartz veins in dacite tuff
20	90BT79	ND	6.8	119	2,302	401	2	3	ND	7	924	321	3.29	1,100	136	ND	ND	21	ND	--	--	--	--	--	--	--	--	32	13.430	Extensive tourmaline-axinite greisen-like zone in syenite contains galena
21	90GL47	ND	0.3	25	3	120	ND	15	11	ND	16	ND	8.75	1,300	69	37	ND	20	ND	--	--	--	--	--	--	--	--	ND	0.065	Chalcopyrite bearing shear zone in syenite
22	90BT65B	ND	0.3	20	8	52	ND	23	9	ND	24	ND	3.52	1,500	152	34	ND	23	ND	--	--	--	--	--	--	--	--	18	0.049	Axinite-tourmaline bearing syenite
23	90BT66a	1,752	5.9	49	24	15	ND	7	8	7	1,108	82	0.80	ND	312	ND	ND	2	165	--	--	--	--	--	--	--	--	22	3,121	N20E trending, 10 cm wide, chip-channel, quartz-arsenopyrite vein in syenite rubble, traced discontinuously for 1 km
	90BT66b	221	2.3	219	7	12	1	6	1	1	179	76	0.59	ND	393	2	ND	ND	7	--	--	--	--	--	--	--	--	41	0.570	Same as above; 20 cm chip channel
	90BT67a	14,500	29.2	75	464	42	ND	6	3	21	≥2,000	≥2,000	1.34	350	342	4	ND	7	11	--	--	--	--	--	--	--	--	ND	11,098	N15E, 10-20 cm wide, chip-channel, quartz-galena vein in syenite; traced discontinuously for 300 m
	90BT67b	267	3.2	56	62	27	1	6	2	ND	98	27	1.10	200	389	7	ND	11	ND	--	--	--	--	--	--	--	--	10	2,708	Same as above; 10 cm wide chip channel
25	92BT130	ND	ND	21	5	123	ND	79	ND	ND	15	2.3	4.03	1,000	130	116	ND	29	2	6.0	63	15.0	65	10	ND	3.0	6.8	18	0.247	Ferricrete zone in Kssq sandstone
26	92BT139	ND	ND	21	11	210	ND	65	18	ND	12	1.4	4.20	990	100	123	ND	24	ND	4.0	59	12.0	53	6	1	5.0	2.3	18	0.097	Background sample; light gray fine sandstone
27	92BT133	ND	ND	20	3	210	ND	62	16	ND	5	1.5	4.40	730	100	115	ND	22	ND	3.6	41	11.0	65	8	ND	2.4	5.2	17	0.346	Background sample medium grained sandstone
28	90BT91a	ND	ND	17	4	24	ND	9	4	1	237	28	1.57	900	195	13	ND	19	ND	--	--	--	--	--	--	--	--	30	0.165	Extensive zone of N20E vertical and N60W vertical joints infilled with tourmaline, axinite, quartz, and ferricrete gossan
	90BT91B	514	18.9	40	53	25	ND	13	5	4	642	48	1.60	400	284	21	ND	9	7	--	--	--	--	--	--	--	--	13	14,277	Same as above; 1 m chip channel sample
	90BT90	ND	0.2	23	10	88	1	32	23	ND	153	ND	4.55	1,100	153	53	ND	11	ND	--	--	--	--	--	--	--	--	7	0.812	Same as above; 1.5 m chip channel sample
29	90HA29	ND	0.3	11	10	64	1	23	7	ND	34	ND	2.89	1,400	170	52	ND	17	ND	--	--	--	--	--	--	--	--	13	0.046	Porphyritic intrusion with black unidentified mineral
30	90GL64	113	1.4	171	11	35	ND	12	15	1	171	82	0.67	2,300	166	4	ND	26	2	--	--	--	--	--	--	--	--	16	0.656	Tourmaline greisen in felsite dike that intrudes syenite
31	92BT101	ND	ND	3	10	560	ND	ND	12	ND	13	17	4.70	1,700	ND	63	ND	20	ND	4.8	28	12.0	91	6	ND	1.6	3.0	ND	0.010	Olive colored hornfels with ferricrete shears
32	92BT100	ND	ND	20	19	360	ND	18	18	ND	25	218	5.30	290	130	120	3	28	ND	5.2	41	12.0	71	8	2	1.7	6.6	23	0.059	Kssq section background
33	91GL32	ND	ND	17	10	30	4	31	10	ND	11	1.9	3.80	1,700	110	83	ND	15	ND	3.0	26	11.0	48	21	ND	1.3	3.1	ND	0.295	Reddish vein in hornfels
34	91GL27B	ND	ND	17	8	210	3	12	12	ND	ND	4.7	5.50	240	73	33	ND	38	ND	6.3	75	17.0	145	23	ND	3.8	10.0	ND	0.725	Fuzzy black alteration zone in andesite
35	92BT124	ND	ND	10	13	280	ND	16	18	ND	11	1.5	2.90	1,600	80	28	ND	32	ND	6.0	66	8.8	29	6	1	3.9	9.1	22	0.030	30 m wide felsic dike in volcanics
36	92GL92	ND	ND	23	15	230	ND	33	14	ND	50	9.0	4.00	810	78	116	ND	30	ND	5.1	67	14.0	36	ND	1	3.1	6.9	9	0.279	Ferricrete veined breccia in hornfels
37	92BT109	ND	ND	19	9	220	ND	45	9	ND	8	6.8	4.10	850	110	117	ND	26	ND	3.8	52	12.0	64	7	1	2.6	5.6	14	0.267	Background sample, medium grained non calcareous sandstone
38	91BT67	10	ND	6	ND	6	3	6	ND	ND	6	3.9	0.50	130	11	12	ND	ND	ND	--	--	1.4	ND	ND	ND	ND	ND	ND	0.105	Ferricrete breccia in Kssq sandstone
39	91BT71A	ND	ND	22	16	44	4	50	14	ND	113	38.2	6.80	440	220	152	ND													