

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

**MAP SHOWING DISTRIBUTION AND OCCURRENCE OF GOLD-
BEARING SAMPLES FROM THE LIVENGOD QUADRANGLE,
ALASKA**

By

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INTRODUCTION

The U.S. Geological Survey conducted multidisciplinary reconnaissance studies in the Livengood 1:250,000-scale quadrangle, Alaska, from 1986 to 1988, to define the mineral resource potential of the area. The Livengood quadrangle covers about 14,500 square kilometers (5,600 square miles) between 65° and 66° north latitude and between 147° and 150° west longitude, and lies about 8 kilometers (5 miles) north of Fairbanks, Alaska. The Elliott, Dalton, and Steese Highways provide access to parts of the quadrangle. The Trans-Alaska Pipeline traverses the quadrangle from southeast to northwest.

The U.S. Geological Survey is required by the Alaskan National Interests Lands Conservation Act (Public Law 96-487, 1980) to survey certain Federal lands to determine their mineral values, if any. Results from the Alaskan Mineral Resource Assessment Program (AMRAP) must be made available to the public and be submitted to the President and the Congress. The gold bearing samples collected during these AMRAP studies, and those reported in the literature have been compiled to show the distribution of gold in the quadrangle.

SUMMARY OF GEOLOGY

The Livengood quadrangle lies within the western part of the Yukon-Tanana Upland as defined by Wahrhaftig (1965). It is underlain by a northeastward trending sequence of Precambrian to Tertiary sedimentary, metasedimentary, and lesser volcanic and metavolcanic rocks metamorphosed mainly to greenschist facies, and intruded by widely scattered granitoid plutons of Cretaceous and Tertiary ages that form prominent topographic features (Chapman and others, 1971; Weber and others, 1992, 1997). The major faults in the area are strike-slip splays of the Tintina fault zone, and northwest-verging thrust faults. The southeastern part of the quadrangle is underlain by crystalline rocks of the Yukon-Tanana metamorphic complex; the oldest rocks in the complex are crystalline schists. The metamorphic rocks range from greenschist and epidote-amphibolite facies to garnet-amphibolite facies (Robinson and others, 1990). The metamorphic grade generally decreases toward the northwest across the quadrangle. Scattered throughout the central and southern parts of the quadrangle are Cretaceous and Tertiary granitoid plutons. Precambrian-Cambrian argillites, Ordovician mafic volcanic rocks, Silurian to Devonian limestone, and Mississippian(?) quartzite form the White Mountains, a highly faulted and folded block in the central part of the quadrangle. Mesozoic basinal deposits, north and west of the White Mountains, extend southwestward across the quadrangle and consist of conglomerate, sandstone, siltstone, and shale. North of the basinal deposits is a belt of grit, slate, mafic-ultramafic rocks, dolomite, chert, conglomerate, shale, and limestone of Precambrian to Triassic age. In the western part of the quadrangle, a major structural feature is displayed in a Mesozoic sequence that is folded around a core of Paleozoic and Precambrian sedimentary and volcanic rocks. The northwestern third of the quadrangle is underlain by mafic volcanic and intrusive rock and related chert and

clastic sedimentary rocks of Mississippian to Triassic age. Gravel, sand, and silt of Holocene to Early Tertiary age blanket most of the area in the quadrangle.

DATA SOURCES

During a geochemical reconnaissance study of the quadrangle, stream-sediment samples were collected from 1,038 sites and heavy-mineral-concentrate samples were collected from 575 sites (Arbogast and others, 1991). Rock samples have been collected from a total of 1844 sites by numerous people during geologic investigations in the quadrangle from 1951 to 1988 (Bie and others, 1997). In all these samples detectable levels of gold were reported in 8 stream sediments, 125 concentrates, and 272 rocks. In addition, 55 samples of gold grains have been collected from placer gold operations (Cathrall and others, 1987, 1988, 1989). Where data were available, samples collected by the Alaska Division of Geological and Geophysical Surveys were also included (Albanese, 1982a, 1982b, 1983; Allegro, 1984). Table 1 lists the gold-bearing samples, the level of gold detected, the analytical method, and the original reference. The various methods of collection, analytical techniques, and detection limits have been described by the various authors.

DISCUSSION

The distribution of gold-bearing samples clearly outlines the Livengood (Tolovana), Rampart, and Fairbanks mining districts in the Livengood quadrangle (see McCammon and others, 1997, fig. 1). It has been previously noted that there is a spatial relationship between the distribution of gold-bearing samples and both structural features and Late Cretaceous or Early Tertiary plutons (Foster, 1968; Light and others, 1993; Newberry and others, 1995). This inferred spatial relationship between the plutons and the gold was cited by McCammon and others (1997) as supporting evidence for the probability of

undiscovered plutonic porphyry gold deposits in the Livengood district in the center of the quadrangle, and in near Pedro Dome in the southeast portion of the quadrangle.

Numerous gold-bearing samples occur outside of the proximity of known plutons. The factors controlling the localization of gold in these areas are for the most part unknown. They may represent migration of fluids along fault-controlled channelways, small dikes or veins with local gold concentrations, or buried plutons. Geochemical characterization of the mineralizing fluids and their environments would further define the physical and chemical controls on gold concentration in the Livengood quadrangle.

Table 1. Gold-bearing samples from the Livengood quadrangle, Alaska

Sample No.	Latitude (deg-min-sec)	Longitude (deg-min-sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
51CH204	65-21-40	149-32-18	Rock	3.0	AA	stibnite	Bie and others, 1997
51CH208	65-22-18	149-32-10	Rock	103.0	AA	stibnite	Bie and others, 1997
51CH212	65-21-40	149-32-18	Rock	53.0	AA	sandstone	Bie and others, 1997
51CH213	65-22-32	149-31-25	Rock	2.7	AA	antimony ore	Bie and others, 1997
51CH215	65-21-40	149-32-18	Rock	0.20	AA	qtz monzonite	Bie and others, 1997
51CH216	65-21-40	149-32-18	Rock	0.10	AA	fault gouge	Bie and others, 1997
69CH103	65-29-24	149-57-00	Rock	0.04	AA	monzonite dike	Chapman and Weber, 1972
70CH216	65-46-25	149-22-00	Rock	1.4	AA	diabase	Chapman and Weber, 1972
87MC2C	65-30-38	148-30-32	Rock	0.10	AA	feldspar porphyry	Bie and others, 1997
87MC2D	65-30-38	148-30-32	Rock	0.15	AA	feldspar porphyry	Bie and others, 1997
87MC3A	65-22-33	149-31-20	Rock	0.15	AA	hornfels	Bie and others, 1997
87MC3B	65-22-33	149-31-20	Rock	0.10	AA	qtz vein	Bie and others, 1997
87MC5B	65-22-20	147-32-00	Rock	2.7	AA	qtz vein	Bie and others, 1997
87MC7	65-30-20	148-30-37	Rock	1.3	AA	qtzite w/ pyrite	Bie and others, 1997
87MC8A	65-19-08	149-56-20	Rock	0.60	AA	qtzite w/ pyrite	Bie and others, 1997
87MC8B	65-19-08	149-56-20	Rock	0.10	AA	felsic dike	Bie and others, 1997
87RI49B	65-25-28	149-28-55	Rock	0.35	AA		Bie and others, 1997
87RI50A	65-22-37	149-34-29	Rock	0.80	AA		Bie and others, 1997
87WR180A	65-02-53	147-26-08	Rock	0.20	AA		Bie and others, 1997
87WR180B	65-02-53	147-26-08	Rock	6.7	AA	stibiconite	Bie and others, 1997
88KW16C	65-02-58	147-26-20	Rock	0.20	AA	rhyolite	Bie and others, 1997
88KW22F	65-22-45	149-34-32	Rock	0.90	AA	felsic dike	Bie and others, 1997
88RI1B	65-20-44	149-49-54	Rock	0.05	AA		Bie and others, 1997
88WR15A	65-03-45	147-27-47	Rock	0.20	AA	sulfide ore	Bie and others, 1997
88WR40	65-01-45	147-28-12	Rock	0.10	AA	qtz monzonite	Bie and others, 1997
88WR43B	65-02-57	147-30-58	Rock	0.10	AA	siliceous breccia	Bie and others, 1997
88WR43C	65-02-57	147-30-58	Rock	1.7	AA	siliceous breccia	Bie and others, 1997
BR026	65-30-30	148-30-10	Rock	0.4	AA	Olive Cr.	Eakins, 1974
BR028	65-30-30	148-30-10	Rock	0.1	AA	Olive Cr.	Eakins, 1974
BR030	65-30-30	148-30-10	Rock	0.2	AA	Olive Cr.	Eakins, 1974
BR031	65-30-30	148-30-10	Rock	0.1	AA	Olive Cr.	Eakins, 1974

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Sample No.	Latitude (deg-min-sec)	Longitude (deg-min-sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
BR119	65-33-10	148-27-00	Sediment	0.1	AA	Livengood Cr.	Eakins, 1974
BR124	65-26-00	148-23-00	Sediment	0.15	AA	unnamed cr.	Eakins, 1974
BR127	65-29-05	148-20-05	Sediment	0.07	AA	unnamed cr.	Eakins, 1974
BR131	65-30-42	148-32-20	Fault gouge	0.9	AA	Lillian Cr.	Eakins, 1974
E002S	65-29-45	148-30-00	Sediment	0.1	AA	Olive Cr.	Eakins, 1974
E026S	65-30-35	148-31-40	Sediment	0.3	AA	Ruth Cr.	Eakins, 1974
E027S	65-30-35	148-31-40	Sediment	0.1	AA	Ruth Cr.	Eakins, 1974
E031SA	65-27-15	148-33-50	Drill Hole	0.1	AA	Shorty Cr.	Eakins, 1974
E040S	65-28-00	148-30-00	Sediment	0.3	AA	Rainey Cr.	Eakins, 1974
E060	65-30-36	148-30-38	Rock	1.0	AA	Old Smokey	Eakins, 1974
E061	65-30-36	148-30-38	Rock	4.2	AA	Old Smokey	Eakins, 1974
E062	65-30-36	148-30-38	Rock	7.7	AA	Old Smokey	Eakins, 1974
E063	65-30-36	148-30-38	Rock	6.9	AA	Old Smokey	Eakins, 1974
E072	65-30-40	148-30-30	Rock	0.2	AA	Old Smokey	Eakins, 1974
E090	65-30-25	148-31-22	Rock	17.4	AA	Money Knob	Eakins, 1974
E099	65-29-48	148-30-10	Rock	0.1	AA	Olive Cr.	Eakins, 1974
E115	65-29-48	148-30-10	Rock	0.2	AA	Olive Cr.	Eakins, 1974
E128	65-30-42	148-32-20	Fault gouge	0.9	AA	Lillian Cr.	Eakins, 1974
E229	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E230	65-30-58	148-31-52	Rock	0.2	AA	Ruth Cr.	Eakins, 1974
E231	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E232	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E233	65-30-58	148-31-52	Rock	0.2	AA	Ruth Cr.	Eakins, 1974
E234	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E235	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E236	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E237	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E238	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E239	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E240	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E241	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E242	65-30-58	148-31-52	Rock	0.1	AA	Ruth Cr.	Eakins, 1974

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Sample No.	Latitude (deg-min-sec)	Longitude (deg-min-sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
E243	65-30-58	148-31-52	Rock	0.2	AA	Ruth Cr.	Eakins, 1974
E244	65-30-58	148-31-52	Rock	0.2	AA	Ruth Cr.	Eakins, 1974
E245	65-30-58	148-31-52	Rock	0.2	AA	Ruth Cr.	Eakins, 1974
E267	65-30-30	148-36-45	Rock	0.1	AA	Elliott Hwy.	Eakins, 1974
E278	65-30-36	148-30-38	Rock	0.6	AA	Old smokey	Eakins, 1974
E284B	65-30-38	148-32-55	Concentrate	41.6	AA	Lillian Cr.	Eakins, 1974
E284C	65-30-38	148-32-55	Concentrate	41.2	AA	Lillian Cr.	Eakins, 1974
E284D	65-30-38	148-32-55	Concentrate	20.6	AA	Lillian Cr.	Eakins, 1974
E284E	65-30-38	148-32-55	Concentrate	40.7	AA	Lillian Cr.	Eakins, 1974
E332	65-30-40	148-30-30	Rock	0.2	AA	Old Smokey	Eakins, 1974
E334	65-30-36	148-30-38	Rock	1.1	AA	Old Smokey	Eakins, 1974
E336	65-30-36	148-30-38	Rock	6.8	AA	Old Smokey	Eakins, 1974
E338	65-30-28	148-30-40	Rock	0.5	AA	Olive Cr.	Eakins, 1974
E339	65-30-28	148-30-40	Rock	0.2	AA	Olive Cr.	Eakins, 1974
E340	65-29-30	148-39-45	Rock	0.1	AA	quarry	Eakins, 1974
E341	65-29-30	148-39-45	Rock	0.2	AA	quarry	Eakins, 1974
E342	65-29-30	148-39-45	Rock	0.2	AA	quarry	Eakins, 1974
E386	65-30-36	148-31-55	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E388-2	65-30-56	148-31-55	Rock	0.3	AA	Ruth Cr.	Eakins, 1974
E395B	65-30-55	148-32-00	Rock	0.5	AA	Ruth Cr.	Eakins, 1974
E395C	65-30-55	148-32-00	Rock	0.1	AA	Ruth Cr.	Eakins, 1974
E395D	65-30-55	148-32-00	Rock	0.2	AA	Ruth Cr.	Eakins, 1974
E416	65-30-18	148-30-10	Rock	0.3	AA	Olive Cr.	Eakins, 1974
E417	65-30-18	148-30-10	Rock	0.3	AA	Olive Cr.	Eakins, 1974
E490A	65-30-55	148-32-00	Rock	1.0	AA	Ruth Cr.	Eakins, 1974
E490B	65-30-55	148-32-00	Rock	70.0	AA	Ruth Cr.	Eakins, 1974
E490C	65-30-55	148-32-00	Rock	20.4	AA	Ruth Cr.	Eakins, 1974
E490D	65-30-55	148-32-00	Rock	44.9	AA	Ruth Cr.	Eakins, 1974
E491A	65-30-55	148-32-00	Rock	2.6	AA	Ruth Cr.	Eakins, 1974
E491B	65-30-55	148-32-00	Rock	127.5	AA	Ruth Cr.	Eakins, 1974
E491C	65-30-55	148-32-00	Rock	19.9	AA	Ruth Cr.	Eakins, 1974
E491D	65-30-55	148-32-00	Rock	80.1	AA	Ruth Cr.	Eakins, 1974

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Sample No.	Latitude (deg-min-sec)	Longitude (deg-min-sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
E492B	65-27-30	148-21-50	Concentrate	0.6	AA	Wilbur Cr.	Eakins, 1974
E492C	65-27-30	148-21-50	Concentrate	33.6	AA	Wilbur Cr.	Eakins, 1974
E492D	65-27-30	148-21-50	Concentrate	3.6	AA	Wilbur Cr.	Eakins, 1974
JC3028	65-00-53	147-31-28	Au grains	--	--	Steamboat Cr.	Cathraill and others, 1989
JC3032	65-04-18	147-13-56	Au grains	--	--	Fairbanks Cr.	Cathraill and others, 1989
JC3034	65-00-13	147-30-47	Au grains	--	--	Pedro Cr.	Cathraill and others, 1989
JC3035	65-03-26	147-31-28	Au grains	--	--	Last Chance Cr.	Cathraill and others, 1989
JC3036	65-03-28	147-32-07	Au grains	--	--	Louis Cr.	Cathraill and others, 1989
JC3044	65-03-16	147-30-36	Au grains	--	--	Last Chance Cr.	Cathraill and others, 1989
JC3067	65-06-47	147-3018	Au grains	--	--	Cleary Cr.	Cathraill and others, 1989
JC3068	65-03-47	147-09-13	Au grains	--	--	Fairbanks Cr.	Cathraill and others, 1989
JC3069	65-31-37	148-25-58	Au grains	--	--	Amy Cr.	Cathraill and others, 1988
JC3070	65-31-29	148-33-11	Au grains	--	--	Livengood/Myrtle Cr.	Cathraill and others, 1988
JC3071	65-31-28	148-33-01	Au grains	--	--	Livengood/Myrtle Cr.	Cathraill and others, 1988
JC3072	65-31-46	148-33-04	Au grains	--	--	Livengood/Myrtle Cr.	Cathraill and others, 1988
JC3075	65-33-52	148-24-52	Au grains	--	--	Livengood Cr.	Cathraill and others, 1988
JC3095	65-36-58	148-24-41	Au grains	--	--	Discovery Pup Cr.	Cathraill and others, 1988
JC3098	65-01-55	147-28-01	Au grains	--	--	Rainbow lode	Cathraill and others, 1989
JC3099	65-00-05	147-45-31	Au grains	--	--	Scrattord mine	Cathraill and others, 1989
JC3103	65-04-16	147-25-12	Au grains	--	--	Chatham Cr.	Cathraill and others, 1989
JC3110	65-03-54	147-22-19	Au grains	--	--	Christina Vein	Cathraill and others, 1989
JC3111	65-00-07	147-17-26	Au grains	--	--	Fish Cr.	Cathraill and others, 1989
JC3112	65-01-48	147-35-19	Au grains	--	--	Dome Cr.	Cathraill and others, 1989
JC3117	65-03-24	147-28-26	Au grains	--	--	Newsboy mine	Cathraill and others, 1989
JC3120	65-04-02	147-26-56	Au grains	--	--	Cleary Cr.	Cathraill and others, 1989
JC3123	65-03-49	147-26-10	Au grains	--	--	Bedrock Cr.	Cathraill and others, 1989
JC3124	65-04-26	147-21-23	Au grains	--	--	American Eagle Cr.	Cathraill and others, 1989
JC3126	65-02-05	147-28-20	Au grains	--	--	Skoogy Gulch	Cathraill and others, 1989
JC3127	65-04-00	147-21-36	Au grains	--	--	lode prospect	John Cathraill, USGS, written commun.
JC3132	65-04-29	147-16-33	Au grains	--	--	Hi Yu mine	Cathraill and others, 1989
JC3133	65-03-54	147-21-02	Au grains	--	--	McCarthy mine	Cathraill and others, 1989

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Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
JC3134	65-04-08	147-26-40	Au grains	--	--	Cleary Cr.	Cathall and others, 1989
JC3135	65-04-16	147-16-21	Au grains	--	--	Moose Cr.	Cathall and others, 1989
JC3139	65-03-55	147-24-35	Au grains	--	--	Chatham Cr.	Cathall and others, 1989
JC3155	65-38-15	148-25-32	Au grains	--	--	Hess Cr.	Cathall and others, 1988
JC3158	65-04-57	147-22-39	Au grains	--	--	Wolf Cr.	Cathall and others, 1989
JC3165	65-32-22	148-26-39	Au grains	--	--	Amy Cr.	Cathall and others, 1988
JC3180	65-02-45	147-20-47	Au grains	--	--	Bellows Cr.	John Cathall, USGS, written commun.
JC3181	65-04-22	147-16-22	Au grains	--	--	Blue Bow lode	Cathall and others, 1989
JC3213	65-28-19	149-58-33	Concentrate	200	Emission spec.	Hunter Cr.	Cathall and others, 1988
JC3214	65-28-26	149-59-34	Concentrate	>1,000	Emission spec.	Hunter Cr.	Cathall and others, 1987; McDanal and others, 1988
JC3219	65-30-37	148-33-16	Au grains	--	--	Lillian Cr.	Cathall and others, 1988
JC3221	65-30-14	148-30-11	Au grains	--	--	Olive Cr.	Cathall and others, 1988
JC3224	65-30-01	148-30-16	Au grains	--	--	Olive Cr.	Cathall and others, 1988
JC3225	65-30-42	148-30-53	Au grains	--	--	Old Smokey	Cathall and others, 1988
JC3226	65-31-26	148-25-59	Au grains	--	--	Fannie Gulch I	Cathall and others, 1988
JC3227	65-31-31	148-25-52	Au grains	--	--	Fannie Gulch II	Cathall and others, 1988
JC3228	65-32-54	148-26-32	Au grains	--	--	Livengood Cr.	Cathall and others, 1988
JC3229	65-32-00	148-30-20	Au grains	--	--	Livengood Cr.	Cathall and others, 1987
JC3230	65-31-50	148-31-04	Au grains	--	--	Livengood Cr.	Cathall and others, 1988
JC3231	65-27-22	148-21-39	Au grains	--	--	Wilbur Cr.	Cathall and others, 1988
JC3257	65-30-39	148-32-40	Au grains	--	--	Lillian Cr.	Cathall and others, 1988
JC3275	65-26-59	149-40-44	Au grains	--	--	Gunnison Cr.	Cathall and others, 1988
JC3283	65-34-24	148-23-47	Au grains	--	--	near reservoir	Cathall and others, 1988
JC3284	65-32-32	148-26-32	Au grains	--	--	Amy Cr.	Cathall and others, 1988
JC3285	65-30-42	148-34-12	Au grains	--	--	Lillian Cr.	Cathall and others, 1988
JC3289	65-31-19	148-32-26	Au grains	--	--	Ruth Cr.	Cathall and others, 1988
JC3290	65-21-44	149-44-25	Au grains	--	--	Quail Cr.	Cathall and others, 1988
JC3328	65-01-46	147-42-40	Au grains	--	--	Vault Cr.	Cathall and others, 1989
JC3336	65-04-34	147-16-43	Au grains	--	--	Hi Yu mine	Cathall and others, 1989
JC3341	65-04-04	147-26-20	Au grains	--	--	Cleary Hill lode	Cathall and others, 1989

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Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
JC3342	65-04-05	147-26-09	Au grains	--	--	Cleary Hill lode	Cathall and others, 1989
LA0059C	65-27-48	147-38-26	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0080C	65-21-35	149-46-57	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0081C	65-21-44	149-50-23	Concentrate	>1,000	Emission Spec.	visible gold	Arbogast and others, 1991
LA0082C	65-21-59	149-51-25	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0083C	65-21-58	148-53-18	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0084C	65-21-54	149-53-10	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0087C	65-18-08	149-49-55	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0088C	65-18-07	149-50-21	Concentrate	>1,000	Emission Spec.	visible gold	Arbogast and others, 1991
LA0090C	65-20-16	149-46-32	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0112C	65-21-38	147-01-50	Concentrate	<20	Emission Spec.	visible gold	Arbogast and others, 1991
LA0114C	65-17-45	147-46-15	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0163C	65-25-58	147-46-15	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0164C	65-27-52	147-41-58	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0165C	65-30-42	147-39-13	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0166C	65-33-18	147-41-05	Concentrate	50	Emission Spec.	visible gold	Arbogast and others, 1991
LA0168C	65-38-23	147-36-12	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0294R	65-30-28	148-31-54	Rock	8.3	AA	qtz vein in monzonite	Bie and others, 1997
LA0297C	65-22-34	149-31-21	Rock	12	AA	minette	Bie and others, 1997
LA0298R1	65-12-18	149-32-10	Rock	0.25	AA	qtz vein w/ stibnite	Bie and others, 1997
LA0299R1	65-22-40	149-32-38	Rock	3.9	AA	qtz vein w/ arsenopyrite	Bie and others, 1997
LA0370C	65-43-28	147-13-20	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0378R1	65-31-34	148-26-09	Rock	0.35	AA	Amy Dome	Sutley and others, 1987
LA0378R2	65-31-34	148-26-09	Rock	0.80	AA	Amy Dome	Sutley and others, 1987
LA0378R3	65-31-34	148-26-09	Rock	0.15	AA	Amy Dome	Sutley and others, 1987
LA0378R4	65-31-34	148-26-09	Rock	0.15	AA	Amy Dome	Sutley and others, 1987
LA0379R1	65-30-40	148-30-51	Rock	33.0	AA	Amy Dome	Sutley and others, 1987
LA0379R2	65-30-40	148-30-51	Rock	0.10	AA	Amy Dome	Sutley and others, 1987
LA0379R3	65-30-40	148-30-51	Rock	1.10	AA	Amy Dome	Sutley and others, 1987
LA0379R4	65-30-40	148-30-51	Rock	16.0	AA	Amy Dome	Bie and others, 1997
LA0408C	65-20-51	147-06-04	Concentrate	>1,000	Emission Spec.	visible gold	Arbogast and others, 1991
LA0439C	65-32-30	147-06-10	Concentrate	700	Emission Spec.	visible gold	Arbogast and others, 1991

Table 1. Gold-bearing samples from the Livengood quadrangle, Alaska

Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
LA0447C	65-37-09	147-13-40	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0482C	65-19-53	147-09-32	Concentrate	<20	Emission Spec.	visible gold	Arbogast and others, 1991
LA0483C	65-18-29	147-12-55	Concentrate	1000	Emission Spec.	visible gold	Arbogast and others, 1991
LA0484C	65-17-19	147-30-34	Concentrate	300	Emission Spec.	visible gold	Arbogast and others, 1991
LA0500C	65-28-35	148-40-30	Concentrate	20	Emission Spec.	visible gold	Arbogast and others, 1991
LA0507C	65-23-30	147-17-20	Concentrate	150	Emission Spec.	visible gold	Arbogast and others, 1991
LA0514C	65-48-35	147-18-45	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0528C	65-23-54	147-17-14	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0529C	65-25-35	147-13-54	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0537C	65-17-17	147-30-43	Concentrate	1000	Emission Spec.	visible gold	Arbogast and others, 1991
LA0633C	65-23-27	147-06-05	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0634C	65-23-18	147-19-25	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0685C	65-19-51	147-09-24	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0704C	65-18-52	147-11-40	Concentrate	20	Emission Spec.	visible gold	Arbogast and others, 1991
LA0705C	65-17-59	147-27-34	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0747C	65-56-34	148-23-03	Concentrate	150	Emission Spec.	visible gold	Arbogast and others, 1991
LA0767C	65-40-32	148-20-41	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0774C	65-43-38	148-28-25	Concentrate	200	Emission Spec.	visible gold	Arbogast and others, 1991
LA0810C	65-45-18	148-16-51	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0821C	65-43-14	148-01-30	Concentrate	>1,000	Emission Spec.	visible gold	Arbogast and others, 1991
LA0826C	65-43-07	148-59-23	Concentrate	<20	Emission Spec.	visible gold	Arbogast and others, 1991
LA0838C	65-26-33	149-00-05	Concentrate	500	Emission Spec.	visible gold	Arbogast and others, 1991
LA0850C	65-21-16	149-14-49	Concentrate	N	Emission Spec.	visible gold	Arbogast and others, 1991
LA0860C	65-21-31	149-47-05	Concentrate	>1,000	Emission Spec.	visible gold	Arbogast and others, 1991
LA0861C	65-21-39	149-50-16	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA0862C	65-22-06	149-51-27	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA0867C	65-17-26	149-52-47	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA0878C	65-04-46	148-32-50	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA0885C	65-20-17	149-42-16	Concentrate	200	Emission spec.	visible gold	Arbogast and others, 1991
LA0894C	65-51-27	149-54-26	Concentrate	20	Emission spec.	visible gold	Arbogast and others, 1991
LA0941C	65-40-13	148-21-01	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA0968C	65-26-28	149-29-53	Concentrate	50	Emission spec.	visible gold	Arbogast and others, 1991

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Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
LA0970C	65-30-14	149-36-16	Concentrate	200	Emission spec.	visible gold	Arbogast and others, 1991
LA0973C	65-37-19	149-36-07	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1002R	65-10-18	149-53-32	Rock	0.20	AA	qtz w/ arsenopyrite	Bie and others, 1997
LA1062R1	65-03-43	147-27-45	Rock	2.1	AA	sulfides in prospect	Bie and others, 1997
LA1062R2	65-03-43	147-27-45	Rock	2.2	AA	sulfides in prospect	Bie and others, 1997
LA1062R4	65-03-43	147-27-45	Rock	1.6	AA	gossan in prospect	Bie and others, 1997
LA1062R5	65-03-43	147-27-45	Rock	0.7	AA	sulfides in prospect	Bie and others, 1997
LA1062R6	65-03-43	147-27-45	Rock	2.5	AA	sulfides in prospect	Bie and others, 1997
LA1062R7	65-03-43	147-27-45	Rock	0.25	AA	sulfides in prospect	Bie and others, 1997
LA1064R1	65-00-30	147-33-52	Rock	1.8	AA	gouge, silver Fox mine	Bie and others, 1997
LA1067R	65-00-30	147-33-52	Rock	3.3	AA	qtz-ser-py in diorite(?)	Bie and others, 1997
LA1070R	65-00-44	147-35-38	Rock	6.2	AA	qtz veins & py boxwork	Bie and others, 1997
LA1076R1	65-19-30	149-47-30	Rock	1.2	AA	hornfels	Bie and others, 1997
LA1078R	65-19-20	149-47-28	Rock	0.1	AA	qtz vein	Bie and others, 1997
LA1106C	65-28-28	149-54-03	Concentrate	300	Emission spec.	Forty-Seven Gulch	Arbogast and others, 1991
LA1111C	65-26-40	149-41-13	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1113C	65-25-10	149-36-28	Concentrate	30	Emission spec.	visible gold	Arbogast and others, 1991
LA1115C	65-38-46	149-48-22	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA1122C	65-38-23	149-34-27	Concentrate	50	Emission spec.	visible gold	Arbogast and others, 1991
LA1125C	65-13-33	149-58-57	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA1126C	65-14-12	149-57-51	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1127C	65-15-38	149-55-51	Concentrate	100	Emission spec.	visible gold	Arbogast and others, 1991
LA1184C	65-06-44	148-10-23	Concentrate	70	Emission spec.	visible gold	Arbogast and others, 1991
LA1194C	65-12-15	147-41-31	Concentrate	70	Emission spec.	Washington Cr.	Arbogast and others, 1991
LA1206C	65-29-19	149-38-37	Concentrate	50	Emission spec.	visible gold	Arbogast and others, 1991
LA1207C	65-29-10	149-38-18	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA1208C	65-26-56	149-40-29	Concentrate	1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1211C	65-25-06	149-41-44	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1213C	65-25-26	149-33-15	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1214C	65-22-58	149-42-46	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1222C	65-20-05	149-29-46	Concentrate	30	Emission spec.	visible gold	Arbogast and others, 1991
LA1228C	65-36-33	149-48-31	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991

Table 1. Gold-bearing samples from the Livengood quadrangle, Alaska

Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
LA1233C	65-41-04	149-42-27	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1236C	65-38-25	149-34-42	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA1238C	65-31-28	149-28-23	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1239C	65-33-12	149-23-27	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA1240C	65-34-59	149-15-59	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1250C	65-12-55	149-59-26	Concentrate	200	Emission spec.	visible gold	Arbogast and others, 1991
LA1251C	65-12-54	149-59-26	Concentrate	300	Emission spec.	visible gold	Arbogast and others, 1991
LA1262C	65-07-52	149-35-36	Concentrate	100	Emission spec.	visible gold	Arbogast and others, 1991
LA1271C	65-41-02	149-10-22	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1275C	65-42-23	149-24-59	Concentrate	100	Emission spec.	visible gold	Arbogast and others, 1991
LA1277C	65-36-18	149-20-03	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA1295C	65-07-26	147-57-31	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA1311C	59-09-59	147-49-08	Concentrate	N	Emission spec.	visible gold	Arbogast and others, 1991
LA1314C	65-10-38	147-44-55	Concentrate	1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1315C	65-10-32	147-44-48	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1317C	65-12-26	147-39-07	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1319C	65-09-16	147-29-39	Concentrate	>1,000	Emission spec.	Little Poker Cr.	Arbogast and others, 1991
LA1332C	65-15-32	147-16-53	Concentrate	<20	Emission spec.	visible gold	Arbogast and others, 1991
LA1334C	65-04-14	147-49-23	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1363C	65-28-10	149-58-52	Concentrate	<20	Emission spec.	visible gold	Arbogast and others, 1991
LA1373	65-29-29	148-29-16	Sediment	0.25	AA	visible gold	Arbogast and others, 1991
LA1373C	65-29-29	148-28-16	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1409C	65-34-57	149-19-46	Concentrate	n	Emission spec.	visible gold	Arbogast and others, 1991
LA1417C	65-13-29	149-58-41	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1437C	65-43-50	149-27-59	Concentrate	n	Emission spec.	visible gold	Arbogast and others, 1991
LA1439C	65-37-49	149-20-52	Concentrate	>1,000	Emission spec.	visible gold	Arbogast and others, 1991
LA1456C	65-02-13	148-14-26	Concentrate	700	Emission spec.	visible gold	Arbogast and others, 1991
LA1487R	65-23-40	149-30-52	Rock	0.11	AA	Sawtooth Mtn.	Bie and others, 1997
MDA0146	65-04-57	147-12-50	Concentrate	0.1	AA	Alder Cr.	Albanese, 1982a
MDA0169	65-02-44	147-03-18	Rock	0.01	AA	Clark Cr.	Albanese, 1982a
MDA0254	65-01-00	147-34-52	Rock	0.1	AA	near Pedro Dome	Albanese, 1982b
MDA0255	65-01-38	147-31-44	Rock	0.1	AA	near Pedro Dome	Albanese, 1982b

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Sample No.	Latitude (deg-min-sec)	Longitude (deg-min-sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
MDA0256	65-01-54	147-30-39	Rock	0.07	AA	near Pedro Dome	Albanese, 1982b
MDA0257	65-01-55	147-30-55	Rock	0.03	AA	near Pedro Dome	Albanese, 1982b
MDA0258	65-02-01	147-30-58	Rock	0.08	AA	near Pedro Dome	Albanese, 1982b
MDA0259	65-02-03	147-31-01	Rock	3.18	AA	near Pedro Dome	Albanese, 1982b
MDA0260	65-01-58	147-30-59	Rock	0.05	AA	near Pedro Dome	Albanese, 1982b
MDA0283	65-30-47	148-30-50	Rock	0.2	AA	stibnite & arsenopyrite vein	Albanese, 1983; Allegro, 1984
MDA0284	65-30-47	148-30-50	Rock	0.2	AA	hornfels(?)	Albanese, 1983; Allegro, 1984
MDA0285	65-30-47	148-30-50	Rock	0.1	AA	hornfels(?)	Albanese, 1983; Allegro, 1984
MDA0286	65-30-47	148-30-50	Rock	0.4	AA	altered intrusive rock	Albanese, 1983; Allegro, 1984
MDA0288	65-30-47	148-30-50	Rock	0.1	AA	altered intrusive rock	Albanese, 1983; Allegro, 1984
MDA0290	65-30-47	148-30-50	Rock	1.0	AA	shear zone	Albanese, 1983; Allegro, 1984
MDA0291	65-30-47	148-30-50	Rock	29.8	AA	shear zone	Albanese, 1983; Allegro, 1984
MDA0292	65-30-47	148-30-50	Rock	5.0	AA	clay alteration zone	Albanese, 1983; Allegro, 1984
MDA0294	65-30-47	148-30-50	Rock	0.1	AA	intrusive contact zone	Albanese, 1983; Allegro, 1984
MDA0296	65-30-47	148-30-50	Rock	0.7	AA	altered intrusive rock	Albanese, 1983; Allegro, 1984
MDA0298	65-30-47	148-30-50	Rock	0.8	AA	intrusive contact zone	Albanese, 1983; Allegro, 1984
MDA0300	65-30-47	148-30-50	Rock	0.4	AA	quartzite	Albanese, 1983; Allegro, 1984
MDA0301	65-30-47	148-30-50	Rock	0.2	AA	quartzite	Albanese, 1983; Allegro, 1984
MDA0302	65-30-47	148-30-50	Rock	0.3	AA	felsic sill	Albanese, 1983; Allegro, 1984
MDA0303	65-30-47	148-30-50	Rock	0.1	AA	sill in shale	Albanese, 1983; Allegro, 1984
MDA0306	65-30-47	148-30-50	Rock	0.8	AA	felsic quartzite	Albanese, 1983; Allegro, 1984
MDA0307	65-30-47	148-30-50	Rock	0.1	AA	altered zone	Albanese, 1983; Allegro, 1984
MDA0325	65-02-45	147-11-45	Concentrate	0.02	AA	Tecumseh Cr.	Albanese, 1982a
MDA0328	65-30-47	148-30-50	Rock	0.1	AA	qtz vein	Albanese, 1983; Allegro, 1984
MDA0330	65-30-47	148-30-50	Rock	4.4	AA	altered zone	Albanese, 1983; Allegro, 1984
MDA0331	65-30-47	148-30-50	Rock	0.1	AA	altered zone	Albanese, 1983; Allegro, 1984
MDA0334	65-30-47	148-30-50	Rock	0.8	AA	sandstone	Albanese, 1983; Allegro, 1984
MDA0335	65-30-47	148-30-50	Rock	0.1	AA	sandstone	Albanese, 1983; Allegro, 1984
MDA0336	65-30-47	148-30-50	Rock	1.7	AA	altered intrusive rock	Albanese, 1983; Allegro, 1984
MDA0337	65-30-47	148-30-50	Rock	4.3	AA	altered intrusive rock	Albanese, 1983; Allegro, 1984
MDA0338	65-30-47	148-30-50	Rock	0.8	AA	hornfels	Albanese, 1983; Allegro, 1984

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Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
MDA0339	65-30-47	148-30-50	Rock	0.5	AA	hornfels	Albanese, 1983; Allegro, 1984
MDA0340	65-30-47	148-30-50	Rock	2.0	AA	hornfels	Albanese, 1983; Allegro, 1984
MDA0341	65-30-47	148-30-50	Rock	1.5	AA	hornfels	Albanese, 1983; Allegro, 1984
MDA0342	65-30-47	148-30-50	Rock	1.9	AA	altered zone	Albanese, 1983; Allegro, 1984
MDA0343	65-30-47	148-30-50	Rock	1.4	AA	altered intrusive rock	Albanese, 1983; Allegro, 1984
MDA0344	65-30-47	148-30-50	Rock	0.3	AA	altered intrusive rock	Albanese, 1983; Allegro, 1984
MDA0345	65-30-47	148-30-50	Rock	0.1	AA	altered zone	Albanese, 1983; Allegro, 1984
MDA0346	65-30-47	148-30-50	Rock	0.1	AA	altered intrusive rock	Albanese, 1983; Allegro, 1984
MDA0347	65-01-42	147-32-52	Rock	0.04	AA	altered zone	Albanese, 1983; Allegro, 1984
MDA0348	65-30-47	148-30-50	Rock	0.1	AA	biotite monzonite	Albanese, 1983; Allegro, 1984
MDA0349	65-30-47	148-30-50	Rock	2.8	AA	altered zone	Albanese, 1983; Allegro, 1984
MDA0352	65-00-41	147-23-52	Rock	0.3	AA	unidentified rock	Albanese, 1982a
MDA0365	65-06-31	147-09-09	Concentrate	30.8	AA	Kokomo Cr., tributary	Albanese, 1982a
MDA0416	65-02-12	147-37-34	Rock	1.1	AA	unidentified rock	Albanese, 1982b
MDA0496	65-05-29	147-08-55	Rock	0.1	AA	Coffee Dome	Albanese, 1982a
MDA0497	65-05-29	147-08-55	Rock	1.6	AA	Coffee Dome	Albanese, 1982a
MDA0498	65-05-29	147-08-55	Rock	0.1	AA	Coffee Dome	Albanese, 1982a
MDA0499	65-05-29	147-08-55	Rock	0.3	AA	Coffee Dome	Albanese, 1982a
MDA0500	65-05-29	147-08-55	Rock	0.6	AA	Coffee Dome	Albanese, 1982a
MDA0501	65-05-29	147-08-55	Rock	0.1	AA	Coffee Dome	Albanese, 1982a
MDA0502	65-05-29	147-08-55	Rock	1.6	AA	Coffee Dome	Albanese, 1982a
MDA0503	65-05-29	147-08-55	Rock	1.2	AA	Coffee Dome	Albanese, 1982a
MDA0504	65-05-29	147-08-55	Rock	0.2	AA	Coffee Dome	Albanese, 1982a
MDA0505	65-05-29	147-08-55	Rock	0.1	AA	Coffee Dome	Albanese, 1982a
MDA0506	65-02-21	147-32-33	Rock	0.1	AA	near Pedro Dome	Albanese, 1982b
MDA0507	65-02-19	147-33-01	Rock	68.0	AA	near Pedro Dome	Albanese, 1982b
MDA0508	65-02-40	147-33-54	Rock	0.1	AA	near Pedro Dome	Albanese, 1982b
MDA0738	65-02-04	147-27-55	Rock	9.0	AA	Independence mine	Albanese, 1982a
MDA0807	65-02-57	147-25-27	Rock	1.13	AA	Cleary Summit	Albanese, 1982a
MDA0808	65-02-57	147-25-27	Rock	3.78	AA	Cleary Summit	Albanese, 1982a
MDA0809	65-02-57	147-25-27	Rock	0.11	AA	Cleary Summit	Albanese, 1982a
MDA0812	65-02-54	147-25-41	Rock	7.6	AA	Cleary Summit	Albanese, 1982a

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Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
MDA0813	65-02-33	147-26-25	Rock	0.1	AA	near Cleary Summit	Albanese, 1982a
MDA0821	65-02-51	147-27-35	Rock	0.2	AA	near Cleary Summit	Albanese, 1982a
MDA0827	65-00-41	147-35-20	Rock	0.1	AA	unidentified rock	Albanese, 1982b
MDA0830	65-00-32	147-34-02	Rock	1.4	AA	unidentified rock	Albanese, 1982b
MDA0831	65-00-32	147-34-02	Rock	0.2	AA	unidentified rock	Albanese, 1982b
MDA0833	65-03-44	147-28-20	Rock	0.7	AA	Johnson prospect	Albanese, 1982a
MDA0834	65-03-44	147-28-20	Rock	0.7	AA	Johnson prospect	Albanese, 1982a
MDA0835	65-03-20	147-28-26	Rock	1.3	AA	Newsboy mine	Albanese, 1982a
MDA0839	65-03-20	147-28-26	Rock	0.2	AA	Newsboy mine	Albanese, 1982a
MDA0926	65-06-23	147-05-29	Concentrate	0.03	AA	Miller Cr. (?)	Albanese, 1982a
MDA1047	65-26-50	147-46-00	Concentrate	0.1	AA	unnamed drainage	Albanese, 1983
MDA1141	65-28-10	147-44-55	Concentrate	1.0	AA	unnamed drainage	Albanese, 1983
MDA1149	65-27-40	147-27-40	Concentrate	0.1	AA	unnamed drainage	Albanese, 1983
MDA1158	65-31-30	148-51-35	Concentrate	0.1	AA	unnamed drainage	Albanese, 1983
MDA1165	65-30-45	148-51-15	Concentrate	0.1	AA	unnamed drainage	Albanese, 1983
MDA1171	65-30-50	148-49-45	Concentrate	0.1	AA	unnamed drainage	Albanese, 1983
MDA1185	65-34-55	148-26-20	Concentrate	0.2	AA	Snow Gulch	Albanese, 1983
MDA1200	65-34-48	148-11-25	Concentrate	0.1	AA	unnamed drainage	Albanese, 1983
MDA1217	65-23-50	148-07-00	Concentrate	0.1	AA	unnamed drainage	Albanese, 1983
MDA1230	65-00-39	147-42-50	Rock	0.1	AA	Wildcat Cr.	Albanese, 1982b
MDA1240	65-00-39	147-31-11	Rock	0.4	AA	Steamboat Cr.	Albanese, 1982b
MDA1279	65-03-46	147-24-24	Concentrate	0.4	AA	Tamarak Cr.	Albanese, 1982a
MDA1281	65-03-48	147-24-16	Concentrate	0.1	AA	Chatham Cr.	Albanese, 1982a
MDA1293	65-01-51	147-28-01	Concentrate	1.8	AA	Twin Cr.	Albanese, 1982a
MDA1298	65-01-14	147-37-18	Concentrate	0.1	AA	Moose Cr. No. 2	Albanese, 1982b
MDA1377	65-01-12	147-34-12	Concentrate	0.1	AA	Dome Cr.	Albanese, 1982b
MDA1401	65-03-05	147-01-37	Rock	0.1	AA	Fish Cr. tributary	Albanese, 1982a
MDA1402	65-03-05	147-01-37	Rock	0.1	AA	Fish Cr. tributary	Albanese, 1982a
MDA1492	65-04-23	147-26-38	Rock	0.1	AA	unidentified rock	Albanese, 1982a
MDA1653	65-03-40	147-35-36	Concentrate	0.1	AA	Spruce Cr.	Albanese, 1982b
MDA1752	65-02-41	147-26-33	Rock	0.04	AA	near Cleary Summit	Albanese, 1982a
MDA1753	65-02-41	147-26-33	Rock	0.07	AA	near Cleary Summit	Albanese, 1982a

Table 1. Gold-bearing samples from the Livengood quadrangle, Alaska

Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
MDA1756	65-02-29	147-26-50	Rock	0.07	AA	unidentified rock	Albanese, 1982a
MDA1776	65-02-56	147-26-27	Rock	0.1	AA	Cleary Summit	Albanese, 1982a
MDA1777	65-02-56	147-26-27	Rock	0.1	AA	Cleary Summit	Albanese, 1982a
MDA1778	65-02-56	147-26-27	Rock	3.8	AA	Cleary Summit	Albanese, 1982a
MDA1779	65-02-56	147-26-27	Rock	0.1	AA	Cleary Summit	Albanese, 1982a
MDA1780	65-02-56	147-26-27	Rock	0.1	AA	Cleary Summit	Albanese, 1982a
MDA1784	65-03-27	147-28-05	Rock	0.1	AA	near Cleary Summit	Albanese, 1982a
MDA2111	65-30-50	148-49-50	Rock	0.7	AA	fractured chert	Albanese, 1983
MDA2112	65-30-55	148-45-00	Rock	0.9	AA	bleached gravel	Albanese, 1983
MDA2113	65-34-40	148-31-00	Rock	0.7	AA	iron-stained chert	Albanese, 1983
MDA2114	65-35-08	148-29-05	Rock	0.8	AA	iron-stained chert	Albanese, 1983
MDA2118	65-31-02	148-31-50	Rock	0.3	AA	rhyolite w/ py & ars	Albanese, 1983
MDA2133	65-30-50	148-30-50	Rock	0.1	AA	altered zone	Albanese, 1983; Allegro, 1984
MDA2134	65-30-50	148-30-50	Rock	3.7	AA	altered zone	Albanese, 1983; Allegro, 1984
MDA2135	65-30-50	148-30-50	Rock	0.1	AA	qtz vein	Albanese, 1983; Allegro, 1984
MDA2136	65-30-50	148-30-50	Rock	0.2	AA	qtz vein	Albanese, 1983; Allegro, 1984
MDA2138	65-30-50	148-30-50	Rock	0.1	AA	qtz vein	Albanese, 1983; Allegro, 1984
MDA2139	65-30-50	148-30-50	Rock	2.9	AA	qtz vein	Albanese, 1983; Allegro, 1984
MDA2140	65-30-50	148-30-50	Rock	0.3	AA	qtz vein	Albanese, 1983; Allegro, 1984
MDA2141	65-30-50	148-30-50	Rock	0.2	AA	gouge zone	Albanese, 1983; Allegro, 1984
MDA2160	65-25-20	148-31-20	Rock	0.2	AA	shale w/ qtz veins	Albanese, 1983
MDA2161	65-25-20	148-31-20	Rock	0.1	AA	iron-stained shale	Albanese, 1983
MDA2164	65-25-20	148-31-20	Rock	0.2	AA	shale w/ qtz veins	Albanese, 1983
MDA2165	65-25-20	148-31-20	Rock	0.1	AA	shale w/ qtz veins	Albanese, 1983
MDA2173	65-25-20	148-31-20	Rock	0.1	AA	iron-stained shale	Albanese, 1983
MDA2175	65-25-20	148-31-20	Rock	0.4	AA	iron-stained shale	Albanese, 1983
MDA2455	65-25-20	148-31-20	Rock	1.3	AA	gossan	Albanese, 1983
MDA2807	65-25-20	148-31-20	Rock	0.5	AA	siltstone breccia	Albanese, 1983
MDA2811	65-31-45	148-45-05	Rock	0.6	AA	Mn-stained chert	Albanese, 1983
MDA2812	65-32-12	148-36-30	Rock	0.7	AA	chert	Albanese, 1983
MDA2813	65-32-00	148-26-50	Rock	0.3	AA	chert tuff(?) breccia	Albanese, 1983
MDA2814	65-32-00	148-26-30	Rock	0.7	AA	felsitic breccia	Albanese, 1983

Table 1. Gold-bearing samples from the Livengood quadrangle, Alaska

Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
MDA2815	65-32-12	148-26-25	Rock	0.1	AA	dolomite breccia	Albanese, 1983
MDA2816	65-30-12	148-30-05	Rock	1.1	AA	serpentinite	Albanese, 1983
MDA2817	65-30-12	148-30-05	Rock	1.1	AA	silicified cgl	Albanese, 1983
MDA2818	65-43-10	148-35-45	Rock	0.6	AA	ls/qtz breccia	Albanese, 1983
MDA2820	65-43-15	148-35-25	Rock	0.2	AA	diorite w/pyr	Albanese, 1983
MDA2826	65-27-25	148-54-15	Rock	0.1	AA	sheared diorite	Albanese, 1983
MDA2831	65-36-45	148-56-25	Rock	0.9	AA	silicified siltstone	Albanese, 1983
MDA2834	65-36-45	148-56-25	Rock	0.2	AA	gossan	Albanese, 1983
MDA3117	65-04-31	147-16-41	Concentrate	0.02	AA	Moose Cr.	Albanese, 1982a
MDA3163	65-29-45	148-49-00	Rock	1.1	AA	chert/sh breccia	Albanese, 1983
MDA3164	65-29-45	148-49-00	Rock	1	AA	chert/sh breccia	Albanese, 1983
MDA3178	65-30-28	148-30-40	Rock	0.6	AA	altered zone	Albanese, 1983
MDA3179	65-30-28	148-30-40	Rock	0.8	AA	felsite & siltstone	Albanese, 1983
MDA3180	65-30-28	148-30-40	Rock	0.1	AA	altered felsic dike	Albanese, 1983
MDA3181	65-30-42	148-31-10	Rock	0.1	AA	altered dike	Albanese, 1983
MDA3182	65-30-42	148-31-10	Rock	0.1	AA	altered felsite	Albanese, 1983
MDA3184	65-30-28	148-32-15	Rock	1.8	AA	alt silica-carbonate	Albanese, 1983
MDA3185	65-30-28	148-32-15	Rock	1.9	AA	altered soil	Albanese, 1983
MDA3186	65-30-28	148-32-15	Rock	1.3	AA	siliceous carbonate	Albanese, 1983
MDA3187	65-30-28	148-32-15	Rock	0.8	AA	siliceous carbonate	Albanese, 1983
MDA3188	65-30-28	148-32-15	Rock	1.4	AA	siliceous carbonate	Albanese, 1983
MDA3189	65-30-28	148-32-15	Rock	0.6	AA	siliceous carbonate	Albanese, 1983
MDA3190	65-30-28	148-32-15	Rock	0.1	AA	limonitic alteration	Albanese, 1983
MDA3191	65-30-28	148-32-15	Rock	0.2	AA	limonitic alteration	Albanese, 1983
MDA3192	65-30-28	148-32-15	Rock	0.4	AA	siliceous carbonate	Albanese, 1983
MDA3193	65-30-28	148-32-15	Rock	0.4	AA	siliceous carbonate	Albanese, 1983
MDA3194	65-30-28	148-32-15	Rock	0.7	AA	siliceous carbonate	Albanese, 1983
MDA3195	65-30-28	148-32-15	Rock	0.7	AA	siliceous carbonate	Albanese, 1983
MDA3196	65-30-28	148-32-15	Rock	0.1	AA	unidentified rock	Albanese, 1983
MDA3197	65-30-28	148-32-15	Rock	0.1	AA	unidentified rock	Albanese, 1983
MDA3198	65-30-28	148-32-15	Rock	0.1	AA	unidentified rock	Albanese, 1983
MDA3199	65-30-28	148-32-15	Rock	1.2	AA	unidentified rock	Albanese, 1983

Table 1. Gold-bearing samples from the Livengood quadrangle, Alaska

Sample No.	Latitude (deg-min- sec)	Longitude (deg-min- sec)	Sample Type	Gold content (ppm)	Analytical Method	Remarks	Reference
MDA3205	65-30-28	148-32-15	Rock	0.1	AA	unidentified rock	Albanese, 1983
MDA3211	65-31-05	148-32-00	Rock	0.1	AA	rhyolite(?) dike	Albanese, 1983
MDA3212	65-31-05	148-32-00	Rock	0.1	AA	rhyolite(?) dike	Albanese, 1983
MDA3213	65-31-05	148-32-00	Rock	0.1	AA	rhyolite(?) dike	Albanese, 1983
MDA3214	65-31-02	148-31-50	Rock	0.1	AA	rhyolite	Albanese, 1983
MDA3215	65-31-02	148-31-50	Rock	0.5	AA	rhyolite w/ pyr	Albanese, 1983
MDA3220	65-30-40	14832-25	Rock	1.0	AA	altered intrusive rock	Albanese, 1983
MDA3221	65-30-40	14832-25	Rock	1.3	AA	altered intrusive rock	Albanese, 1983
MDA3222	65-30-40	14832-25	Rock	1.0	AA	altered intrusive rock	Albanese, 1983
MDA3223	65-30-40	14832-25	Rock	1.1	AA	altered intrusive rock	Albanese, 1983
MDA3508	65-30-40	148-32-25	Rock	2.2	AA	qtz vein w/ ars	Albanese, 1983
MDA3509	65-30-45	148-31-15	Rock	0.2	AA	massive stibnite	Albanese, 1983
MDA3510	65-30-45	148-31-15	Rock	0.8	AA	ars in shear zone	Albanese, 1983
MDA3607	65-06-35	147-07-13	Rock	0.2	AA	Miller Cr.	Albanese, 1982a
MDA3654	65-02-44	147-28-33	Rock	0.1	AA	near Cleary Summit	Albanese, 1982a
MDA3657	65-02-44	147-28-33	Rock	0.4	AA	near Cleary Summit	Albanese, 1982a
MDA3668	65-02-35	147-29-09	Rock	0.4	AA	near Cleary Summit	Albanese, 1982a
MDA3675	65-02-38	147-27-41	Rock	0.1	AA	near Cleary Summit	Albanese, 1982a
MDA3677	65-02-38	147-27-41	Rock	0.1	AA	near Cleary Summit	Albanese, 1982a
MDA3678	65-02-38	147-27-41	Rock	0.2	AA	near Cleary Summit	Albanese, 1982a

REFERENCES

- Albanese, M.D., 1982a, Geochemical reconnaissance of the northern Fairbanks D-1 and southern Livengood A-1 quadrangles, Alaska; Summary of data on stream-sediment, pan-concentrate, and rock samples: Alaska Division of Geological and Geophysical Surveys Open-File Report 164, 23 p.
- Albanese, M.D., 1982b, Geochemical reconnaissance of the northern Fairbanks D-2 and southern Livengood A-2 quadrangles, Alaska; Summary of data on stream-sediment, pan-concentrate, and rock samples: Alaska Division of Geological and Geophysical Surveys Open-File Report 165, 23 p.
- Albanese, M.D., 1983, Geochemical reconnaissance of the Livengood B-2, B-4, C-3, and C-4 quadrangles, Alaska; Summary of data on stream-sediment, pan-concentrate, and rock samples: Alaska Division of Geological and Geophysical Surveys Open-File Report 83-1, 55 p.
- Arbogast, B.F., Lee, G.K., and Light, T.D., 1991, Analytical results and sample locality map of stream-sediment and heavy-mineral concentrate samples from the Livengood 1° x 3° quadrangle, Alaska: U.S. Geological Survey Open-File Report 91-23A, 121p.
- Allegro, G.L., 1984, Geology of the Old Smoky Prospect, Livengood C-4 quadrangle, Alaska: Alaska Division of Geological and Geophysical Surveys Report of Investigations 84-1, 10 p.
- Bie, S.W., Arbogast, B.F., Light, T.D., and Weber, F.R., 1997, Analytical results of rock samples from the Livengood 1° x 3° quadrangle, Alaska: U.S. Geological Survey Open-File Report, 97-446, 131 p.
- Cathrall, J.B., Antweiler, J.C., and Mosier, E.L., 1987, Occurrence of platinum in gold samples from the Tolovana and Rampart mining districts, Livengood quadrangle, Alaska: U.S. Geological Survey Open-File Report 87-330, 10 p.
- Cathrall, J.B., McDanal, S.K., Van Trump, George, and Mosier, E.L., and Tripp, R.B., 1988, Analytical results, geochemical signatures, mineralogical data, sample locality map of lode gold, placer gold, and heavy-mineral concentrates from the Tolovana mining district, Livengood quadrangle, Alaska: U.S. Geological Survey Open-File Report 88-578, 32 p.
- Cathrall, J.B., Antweiler, J.C., Van Trump, G., and Mosier, E.L., 1989, Gold analytical results and gold signatures from the Fairbanks and Livengood quadrangles: U.S. Geological Survey Open-File Report 89-490, 32 p.
- Chapman, R.M., Weber, F.R., and Taber, Bond, 1971, Preliminary geologic map of the Livengood quadrangle, Alaska: U.S. Geological Survey Open-File 71-66, 2 sheets, scale 1:250,000.
- Eakins, G.R., 1974, Preliminary investigations, Livengood mining district, Alaska: Alaska division of Geological and Geophysical Surveys Open File Report No. 40., 16 p.

- Foster, R.L., 1968, Potential for lode deposits in the Livengood gold placer district east-central Alaska: U.S. Geological Survey Circular 590, 18 p.
- Light, T.D., Moll, S.H., Bie, S.W., and Lee, G.K., 1993, Reconnaissance guidelines for gold exploration in Central Alaska: *Journal of geochemical Exploration*, v. 47, p. 89-108.
- McCammon, R.B., Light, T.D., Rinehart, C.D., Weber, F.R., Lee, G.K., and Bie, S.W., 1997, Map showing mineral resource potential of the Livengood quadrangle, Alaska: U.S. Geological Survey Open-File Report 97-484-B, 1 sheet, 1:250,000 scale, with accompanying text, 47 p.
- McDanal, S.K., Cathrall, J.B., Mosier, E.L., Antweiler, J.C., and Tripp, R.B., 1988, Analytical results, geochemical signatures, mineralogical data, and sample locality map of placer gold and heavy-mineral concentrates from the Manley Hot Springs, Tofty, Eureka, and Rampart mining districts, Tanana and Livengood quadrangles, Alaska: U.S. Geological Survey Open-File Report 88-443, 54 p.
- Newberry, R.J., McCoy, D.T., and Brew, D.A., 1995, Plutonic-hosted gold ores in Alaska: Igneous vs. metamorphic origins: *Resource Geology*, Special Issue, No., 18, p. 57-100.
- Sutley, S.J., Ryder, J.L., Light, T.D., and Weber, F.R., 1987, Analytical results and sample locality map of rock samples from the White Mountains, National Recreation Area, Livengood and Circle quadrangles, east-central Alaska: U.S. Geological Survey Open-File Report 87-284, 61 p.
- Weber, F.R., Wheeler, K.L., Rinehart, C.D., Chapman, R.M., and Blodgett, R.B., 1992, Geologic map of the Livengood quadrangle, Alaska: U.S. Geological Survey Open-File Report 92-562, 20 p., 1 sheet, scale 1:250,000.
- Weber, F.R., Wheeler, K.L., Rinehart, C.D., and Light, T.D., 1997, Generalized geologic map of the Livengood quadrangle, Alaska: U.S. Geological Survey Open-File Report 97-484-A, 1 sheet, scale 1:250,000.
- Robinson, M.S., Smith, T.E., and Metz, P.A., 1990, Bedrock geology of the Fairbanks mining district: State of Alaska Division of Geological and Geophysical Surveys Professional Report 109, 2 sheets.
- Wahrhaftig, C., 1965, Physiographic divisions of Alaska: U.S. Geological Survey Professional Paper 482, 52 p.