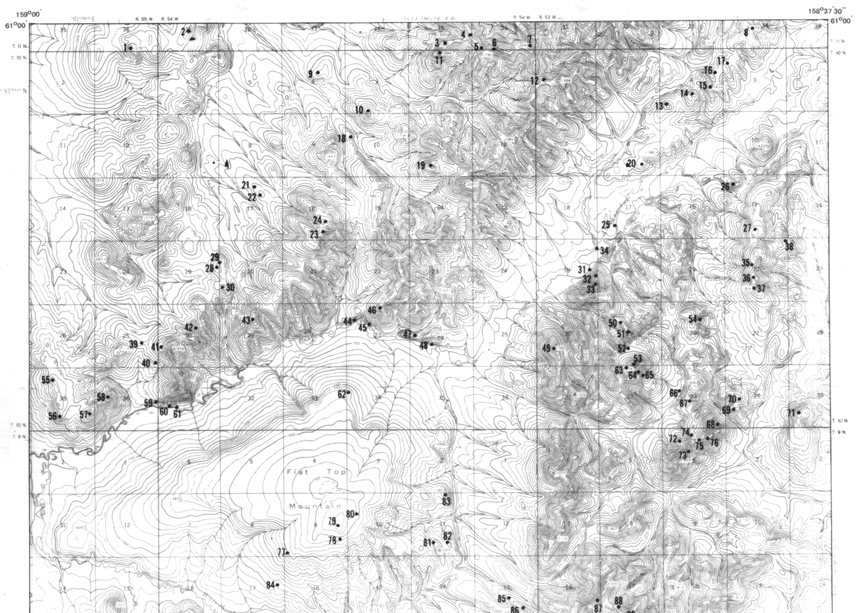
ALASKA DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS
IN COOPERATION WITH THE U.S. GEOLOGICAL SURVEY

REPORT OF INVESTIGATIONS 85-4

TAYLOR MOUNTAINS D-8 QUADRANGLE

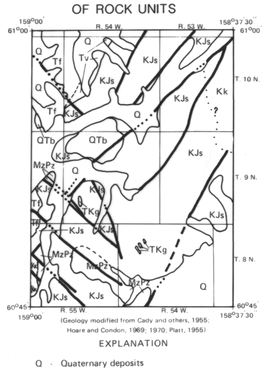


This report is a preliminary publication of DGGS. The authors are solely responsible for its content and will appreciate candid comments on the accuracy of the data as well as suggestions to improve the report.

INTRODUCTION

This map is one in a series of geologic data bases (scale 1:63,360) from southwest Alaska. The series is scheduled for release by DGGS during 1985. Each map is a summary of geologic field data, analytical data, field reports, resource information, and land status available for that quadrangle. Geologic data were obtained primarily from U.S. Geological Survey (USGS) field notes collected from 1941 to 1975. Field locations were replotted on modern topographic base maps from the original trimetrogon air photos and reconnaissance topographic maps. The map numbering sequence, which follows a normal written-page progression using the township and range mile-square blocks, starts in the northwest corner of the quadrangle and ends in the southeast corner. Where necessary, original station numbers were modified to fit the format: year, geologist, and field number (table 1). Original station numbers commonly consisted of the date followed by a number for each observation point, starting each day with number 1, for example, 6/11-1. The modified number preserves the original number but adds the year and geologist to eliminate confusion and ambiguity. For example, 47HR/11-1 was the first station occupied by Joseph M. Hoare on June 11, 1947. Rock descriptions (table 2) and structural data (table 3) were compiled from field notes exactly as written; no attempt was made to modify or interpret the original data. Fossil age assignments (table 5) are based on archived fossil-collection data and have been updated in this report as noted. Radiometric age data (table 6) has been updated using the current (1976) potassium-argon constants. We appreciate the review by M.S. Robinson (DGGS) and Stephen E. Box.

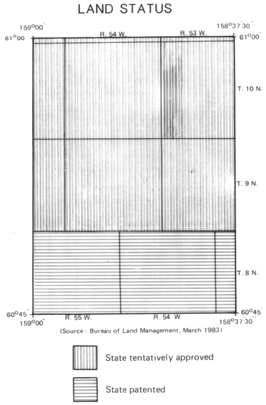
GENERALIZED DISTRIBUTION OF ROCK UNITS



EXPLANATION

- Q - Quaternary deposits
- QTb - Basalt and locally diabasic intrusive
- Tv - Volcanogenic sedimentary rocks
- Tf - Felsic porphyry
- TKg - Granite, porphyritic granite, and dikes and sills of rhyolite
- Kk - Kuskokwim Group sedimentary rocks
- KJs - Argillite and graywacke
- MzPz - Predominantly graywacke, fractured argillite, and chert (undivided)

LAND STATUS



State tentatively approved

State patented

Map symbols

- 78 map number, corresponds to table numbers
- A mine or prospect (table 4)
- extent of mine or prospect

Table 1. Correspondence of map numbers and field stations.

Map no.	Field station*	Map no.	Field station*	Map no.	Field station*	Map no.	Field station*
1	70Co243	44	70Co264	88	70Co139	146	43Ca7-7-2
	70Hr108	45	70Hr117	89	70Co138	147	43Ca7-7-5
2	70Co127	46	70Co263	90	70Ca141	148	43Ca7-7-4
	70Hr49		70Hr118	91	70Hr120	149	70Ca171
3	70Hr55	47	70Co262		70Ca266	150	70Ca172
4	70Hr56	48	70Co261	92	43Ca7/21-5	151	70Co174
5	70Hr57	49	70Hr92	93	43Ca7/20-12	152	70Co173
6	60Hr58		70Co202	94	43Ca7/20-13	153	70Co175
7	70Hr59	50	45Ca7/18-5	95	70Co137	154	70Co176
8	45Ca7/19-9	51	45Hr7/18-11	96	70Co136	155	70Co177
	45Hr7/19-10	52	45Hr7/18-10	97	70Co142	156	43Ca7/2-2
9	70Co126		45Hr7/18-9	98	43Ca7/21-7	157	43Ca7/20-2
10	70Co124	53	70Co8/9-201	99	43Ca7/21-6	158	43Ca7/20-3
	70Hr48		70Hr91	100	43Ca7/20-11	159	70Co163
11	70Hr54	54	70Co200	101	43Ca7/20-10	160	70Co162
12	70Co252		70Hr90	102	70Co132	161	70Co161
13	45Ca7/19-5	55	70Co233	103	43Ca7/20-9	162	70Co160
	45Hr7/19-6		70Hr104	104	70Co131	163	43Ca7/22-11
	70Co253	56	70Co235	105	70Co133	164	43Ca7/26-12
	70Hr114	57	70Co231	106	70Co134	165	43Ca7/5-2
15	45Ca7/19-6	58	70Hr103	107	70Co135	166	43Ca7/26-13a
	45Hr7/19-7	59	70Co232	108	70Co147	167	43Ca7/5-1
16	45Ca7/19-7	60	70Hr116	109	70Co146	167A	59SaM796
	45Hr7/19-8	61	70Co260	110	70Co145	167B	59ASn129c
17	45Ca7/19-8	62	69Co220	111	70Co144	168	43Ca7/5-10
	45Hr7/19-9		69Hr222	112	70Co143	169	43Ca7/5-11
18	70Co125	63	45Ca7/18-9	113	43Ca7/22-1	170	43Ca7/12-5
19	70Co123		45Hr7/18-8	114	70Co130	171	43Ca7/12-4
	60Hr47	64	45Ca7/18-8b	115	43Co7/20-7	172	43Ca7/12-3
20	45Ca7/19-4		45Hr7/18-8b	116	43Co7/20-8	173	70Co167
	45Hr7/19-4	65	45Ca7/18-8a	117	43Co7/20-6	174	70Co168
21	70Co242		45Hr7/18-8a	118	70Co153	175	70Co169
22	70Hr107	66	45Ca7/18-7	119	70Co152	176	43Ca7/4-1
	70Co241		45Hr7/18-7	120	70Co151	177	70Ca170
23	70Hr52	67	45Hr7/18-6	121	70Co150	178	43Ca7/12-1
24	70Hr51		45Ca7/18-6	122	70Co149	179	43Ca7/12-2
25	45Ca7/19-3	68	45Hr7/18-3	123	70Co148	180	43Ca7/4-2
	45Hr7/13-3	69	45Ca7/18-2	124	43Ca7/22-3a	181	43Ca7/4-3
26	70Hr63		45Hr7/18-2	125	43Ca7/22-2	182	70Co164
27	70Hr62	70	45Hr7/18-1	126	43Ca7/11-2	183	70Co165
28	70Hr106		45Ca7/18-1	127	43Ca7/7-1	184	70Co166
29	70Co239	71	70Hr64	128	43Ca7/20-1	185	43Ca7/26-9
30	70Co240	72	45Ca7/18-5	129	43Ca7/20-4	186	43Ca7/26-10
31	45Hr7/19-1	73	45Ca7/18-4	130	43Ca7/20-5	187	43Ca7/26-13b
	45Ca7/19-1	74	45Hr7/18-5	131	70Hr93	188	43Ca7/5-3
32	45Ca7/18-12	75	45Hr7/18-4		70Co203	189	69Hr85
33	45Hr7/18-12	76	45Ca7/18-3	132	70Co154	189A	A70Hr71
34	45Ca7/19-2	77	43Ca7/21-3c	133	70Co155	190	70Hr72
	45Hr7/19-2	78	43Ca7/21-3b	134	70Co156	191	43Ca7/5-4
35	45Hr7/17-7	79	69Co218	135	70Co157	192	70Hr73
	45Ca7/17-7		69Hr221	136	70Co158	193	70Hr74
36	70Hr61		82MR322	137	43Ca7/22-3b	194	70Hr75
37	70Hr60	80	43Ca7/21-3a	138	43Ca7/22-4	195	43Ca7/2-1
	45Hr7/17-6	81	43Ca7/21-2	139	43Ca7/22-5	196	43Ca7/26-8a
38	45Ca7/17-6	82	43Ca7/21-1	140	43Ca7/22-6	197	43Ca7/26-7
39	70Co238	83	70Hr119	141	43Ca7/13-3	198	43Ca7/26-6
	70Hr105		70Co265	142	70Ca181	199	43Ca7/26-5
40	70Co237	84	43Ca7/21-4	143	70Ca180	200	69Hr87
41	70Co236	85	43Ca7/20-15	144	70Ca179	201	43Ca7/5-7
42	70Hr50	86	43Ca7/20-14	145	70Ca178	202	43Ca7/5-8
43	70Hr53	87	70Co140				

* Year-geologist-month/day-field number or year-geologist-field number. Co = W.H. Condon, Hr = Joseph Hoare, Ca = W.M. Cady, ASa = C.L. Sainsbury, Sa = Russell Schaeffer, MR = M.S. Robinson, ASn = C.L. Sainsbury

Table 2. Rock descriptions from field notes.

Map no.	Rock description
1	Porphyritic intrusive
2	Olive-brown, biotite-quartz-feldspar porphyry
3	Graywacke and argillite with 5-ft-thick diabase sill
4	Argillite and graywacke
5	Argillite and graywacke
6	Thin-bedded argillite and graywacke
7	Thin-bedded argillite and graywacke
8	Sheared mudstone locally with 0.5 in. well-rounded quartz pebbles
9	Green chert with sill
10	Black, red, and green chert and cherty argillite
11	Medium-grained graywacke and argillite and diabase sill
12	Fine-grained graywacke
13	Massive, sheared argillite and basalt dike
14	Dark-green-weathering, basaltic argillite (tuff?)
15	Sheared, massive argillite
16	Diabase sill (5 ft thick) and sheared massive mudstone
17	Interbedded siltstone, mudstone, and argillite
18	Bedded chert
19	Fine and medium-grained, biotite diabase and argillite hornfels
20	Sheared, massive argillite
21	Porphyritic intrusive
22	Apple-green, coarse and fine-grained, feldspathic tuff
23	Basaltic dikes or flows
24	Medium- to coarse-grained graywacke
25	Subconchoidally fracturing mudstone
26	Banded, green cherty argillite
27	Thin-bedded, fine-grained graywacke
28	Acidic tuff(?)
29	Medium-grained tuff or tuffaceous sediments with quartz, feldspar, and green grains
30	Apple-green to greenish-laminated tuff, green siltstone, and fine-grained graywacke-tuff
31	Interbedded siltstone and mudstone
32	Interbedded mudstone and siltstone
33	Interbedded mudstone and siltstone
34	Interbedded mudstone, siltstone, and limestone with 1 to 2 in. offset on many small faults
35	Interbedded graywacke and shale
36	Thin-bedded, fine-grained argillite, shaley siltstone, and two dikes
37	Thin-bedded, fine-grained slates
38	Shaley fracturing, black shale with three 1.5-to 3 ft-thick basalt sills
39	Contact between coarse-grained graywacke and feldspar-biotite porphyry
40	Hornfels with small silvery sulfide grains
41	Altered, finely conglomeratic graywacke containing olive-gray argillite and chert fragments
42	Coarse-grained graywacke with volcanic rock, round chert, and mud and minor angular chert (to 0.75 in.) fragments
43	Folded graywacke and minor argillite
44	Thin-bedded, faulted, contorted chert, and brownish-red, shaley, siliceous rocks with white mineral in lenticular zones
45	Contorted, thin-bedded, green, black, brown, and red cherty tuffs and minor limestone
46	Graywacke and graywacke-like tuff
47	Graywacke or graywacke tuff
48	Graywacke or graywacke tuff
49	Thin-bedded, cherty or siliceous argillite
50	Massive siltstone with thin shaley interbeds
51	Fractured, interbedded mudstone and shale
52	Fractured, interbedded mudstone and shale
53	Thin-bedded, cherty argillite and graywacke
54	Thin-bedded, cherty argillite
55	Fine and medium-grained, olivine basalt flow (35 ft thick) with vesicular top
56	Porphyritic intrusive
57	Porphyry with coarse-grained, olive-brown matrix
58	Quartz-biotite-feldspar porphyry with 1 to 3 in.-thick flow planes(?)
59	Altered sediments
60	Thin- to thick-bedded, light-gray to green siliceous tuff and chert
61	Chert, light-green tuff, and pebble-bearing tuff
62	Columnar-jointed, fine-grained basalt
63	Thin-bedded quartzite
64	Interbedded red, green, and black slate and quartzite
65	Interbedded mudstone, siltstone, and quartzite
66	Interbedded mudstone and siltstone
67	Fractured siltstone, mudstone, and minor quartzite
68	Blocky-fracturing, bluish-gray argillite and mudstone
69	Bluish-gray shale and mudstone
70	Fractured shale and mudstone
71	Thin-bedded graywacke and shale
72	Interbedded mudstone, siltstone, and quartzite
73	Quartzite and minor mudstone
74	Fractured, massive argillite and mudstone
75	Massive, siliceous argillite and mudstone
76	Bluish-gray shale and mudstone
77	Subhorizontal, sciaraceous, olivine basalt
78	Red and black shale underlying olivine basalt
79	Subhorizontal, coarse-grained, olivine basalt
80	Analcime-augite-olivine-porphyritic basalt with pyroxene rosettes
81	Interbedded graywacke and shale
82	Fine-grained diorite
83	Tuff, siliceous rocks and thin limestone bed cut by six diabase dikes
84	Graywacke and shale cut by sulfide-bearing porphyritic dike
85	Shale and porphyry
86	Fossiliferous limestone
87	Coarse-bedded argillite and graywacke to quartzite
88	Fractured argillite and cross-bedded graywacke
89	Fractured argillite and cross-bedded graywacke
90	Quartz- and argillite-bearing conglomeratic graywacke
91	Volcanic graywacke and green argillite or tuff
92	Graywacke and shale with minor limey beds
93	Reddish- and bluish-gray shale
94	Reddish- and bluish-gray shale
95	Bluish-gray graywacke to quartzite and argillite
96	Graywacke and argillite
97	Biotite-quartz-feldspar latite porphyry
98	Shale and graywacke
99	Altered granite
100	Shale and graywacke with pencil cleavage
101	Slate
102	Fine-grained graywacke and subconchoidal fracturing shale
103	Graywacke and shale
104	Current- and ripple-marked, fine-grained graywacke and subconchoidal-fracturing shale
105	Grayish-green-weathering, subconchoidal-fracturing siltstone
106	Cross-bedded graywacke and siltstone
107	Cross-bedded, purple-gray, shaley siltstone and graywacke
108	Porphyritic border phase and medium-grained graywacke and siltstone
109	(Float) argillite and graywacke hornfels and coarse-grained, biotite-quartz-feldspar porphyry
110	Green graywacke with angular, cherty argillite clasts
111	Aphanitic dike (20 ft wide), graywacke, and conglomerate
112	(Float) fine-grained graywacke with argillite clasts to 1 mm
113	Interbedded shale and graywacke
114	Fine-grained graywacke and subconchoidal-fracturing shale
115	Laminated sandstone
116	Chert, reddish-gray sandstone, and porphyry
117	Chert and shale
118	(Float) metasediments and aphanite
119	Siliceous breccia and gray green, igneous rocks
120	Siliceous metaclastic rock and dark-gray, fine-grained, igneous rock
121	(Float) metasedimentary rocks
122	(Float) mafic border-phase and minor porphyry and metasedimentary rocks
123	(Float) mafic border phase and minor porphyry and metasedimentary rocks
124	Interbedded graywacke and shale
125	Interbedded graywacke and shale
126	Interbedded graywacke and shale, small yellow rock bodies, and one 10-ft-wide sill
127	Rusty-brown, massive graywacke and shale
128	Sedimentary rocks
129	Diorite, graywacke, and shale
130	Siliceous graywacke and shale
131	Diabase and argillite
132	Massive argillite
133	Gray-green, siliceous, volcanic rocks with argillite inclusions
134	Siliceous breccia
135	(Float) angular to rounded, coarse-grained, clastic rocks, green chert, and fault zone(?)
136	Argillite, graywacke, tuffaceous graywacke, and reddish-gray siltstone
137	Interbedded graywacke and shale
138	Interbedded graywacke and shale
139	Interbedded graywacke and shale, locally cherty and siliceous
140	Andesite or basalt(?)
141	Interbedded graywacke and shale
142	Chert
143	(Float) limestone
144	Black and gray chert
145	Limestone
146	Interbedded, massive graywacke and shale
147	Sheared, interbedded graywacke and shale
148	Interbedded graywacke and shale
149	Limestone; stratigraphically 100 ft below chert layer
150	Graywacke in fault zone and sandy limestone float
151	Massive argillite and fine-grained graywacke
152	Massive argillite and fine-grained graywacke
153	Graywacke-argillite sequence with minor limestone cobbles
154	Limestone or limey chert
155	Cherty argillite
156	Massive graywacke
157	Diorite and graywacke
158	Diorite and graywacke
159	Graywacke above purple-red argillite with minor gray-chert bands
160	Fine-grained graywacke, conglomerate, and breccia
161	Red chert and jasper with angular fractures and a few white-quartz bands
162	Red chert and jasper with angular fractures and a few white-quartz bands
163	Sheared, contorted, interbedded graywacke and shale, and chert and dolomite
164	Interbedded graywacke and shale
165	Amygdaloidal andesite or basalt flows interbedded with a shale and chert sequence
166	Interbedded pillow basalt and tuffaceous graywacke
167	Interbedded chert and graywacke
167A	Fossiliferous, argillaceous limestone and lava flows
167B	Fossiliferous black limestone and shale
168	(Float) pectinoid fossil in sedimentary rocks
169	Massive andesite or basalt and shale(?)
170	Interbedded graywacke and shale with "yellow rock" (porphyritic sill?)
171	Interbedded graywacke and shale with "yellow rock" (porphyritic sill?)
172	Interbedded graywacke and shale with "yellow rock" (porphyritic sill?)
173	Dark-gray to black chert
174	Mineralization (Cu, Hg, Fe); dark-gray to black, angular-fracturing argillite and dark-gray, aphanitic dike rubble. Sparse fossil fragments in tailings
175	Black, well-bedded chert
176	Interbedded, cherty graywacke and shale
177	Dark-gray chert (2-to-5 in. thick beds)
178	Shaley chert (reddish- to green-gray and black), limestone (with brachiopods and pelecypods) and dolomite(?)
179	Graywacke shale and float of yellow rock (altered porphyry?)
180	Interbedded graywacke and shale
181	Interbedded graywacke and shale
182	Graywacke and cherty strata separated by a fault
183	Medium-grained graywacke
184	Graywacke, locally tuffaceous, and dark-gray, silty argillite
185	Interbedded graywacke and shale
186	Interbedded graywacke and shale
187	Pillow basalt and tuffaceous graywacke
188	Slate and chert sequence
189A	Fossils (*Halobia*) in limestone with chert, green argillite, and green, amygdaloidal flows
190	Fine and medium-grained graywacke and green shale sequence; overlies volcanic sequence(?)
191	Chert, graywacke and shale
192	Graywacke and cherty argillite
193	Thick-bedded graywacke and thin-bedded argillite
194	Thick-bedded graywacke and thin-bedded argillite
195	Interbedded slate, chert, and graywacke
196	Interbedded graywacke and shale
197	Interbedded graywacke and shale
198	Interbedded graywacke and shale
199	Interbedded graywacke and shale
200	Contorted, fine-grained graywacke and argillite
201	Graywacke, shale, chert, and dike (float)
202	Graywacke, shale, and chert

Table 3. Structural data.

Map no.	Attitude of bedding and volcanic flow planes (f)	Other structural data	Map no.	Attitude of bedding and volcanic flow planes (f)	Other structural data
3	N35E, 60NW		100	N05W, 36NE	
4	N40E, 65NW		101	N70W, 49NE	
	N80W, 42SW		102	N50E, 45NW	
5	EW, 50S		103	N55E, 68NW	
6	N25E, 32SE		104	N40E, 75SE	
	N65W, 35SW		106	N55E, 80NW	
7	N30W, 90		107	N70E, 80NW	
8	N15W, 85SW		110	N15W, 75NE	
10	N-S, 50E		113	N27W, 35SW	
11		sill N33E, SE	114	N40E, 55SE	
13	N21E, 72SE		115	N60W, 48SW	
15	N15E, 74SE		116	N55E, 68NW	
	N07E, 50SE		120		
16	N05W, 70NE		124	N46W, 83SW	
17	N-S, 72W		125	N53W, 83SW	
19		dike N80W, ??	126	N21W, 65SW	joint N83W, 73SW
20	N30E, 70SE		127	N39W, 78SW	
	N33E, 64SE		128	N-S, 59E	
25	N15E, 86SE		129	N40W, 71SW	right side up
27	N30E, 40NW		130	N83E, 81NW	
31	N05E, 49NW		137	N05E, 30NW	
32	N07E, 47NW		138	N05W, 81SW	
33	N07E, 47NW		139	N58W, 35SW	
34	N30E, 56NW		141	N45W, 75SW	
35	N08E, 68NW		146	N40W, 50NE	right side up cleavage N25W, 79E
36	N05E, 30SE	dike NE, ??			joint N85E, 85NW
37	N35W, 45SW				joint N86E, 72NW
38	N50E, 56NW		147	N35W, 52SW	
49	N20W, 75SW		148	N20W, 64SW	
50	N02W, 27SW		153		fold axes N10W, SE
51	N02W, 27SW		156	N05W, 67SW	
52	N23E, 21SE		158		dike N18W, ??
53	N60E, 90		163	N60W, 78SW	
54	N35E, 65SE		164	N40W, 87SW	
59	NW, 15NE		166	N75W, 55SW	
60	N70W, 35NE		167		joint N38E, 83NW
61	N70W, 35NE				joint N42W, 83NE
63	N76W, 09NE		170	N70W, 45SW	
64	N48E, 50SE		171	N34W, 63NE	
		right side up cleavage N53E, 70SE	172	N23W, 67SW	
65	N72E, 32SE	cleavage N72E, 68SE	173	N35E, 45SE	cleavage E-W, 90
66	N44E, 61SE		175	N05W, 60NE	
67	N25E, 79SE		176	N15W, 64SW	
68	N37E, 40SE		177	N30W, 35SW	
69	E-W, 60S		178	NS, 50W	
70	N72E, 62SE		179	N15E, 72NW	
72	N66E, 23SE		180	N06W, 73W	
73	N75E, 44SE		181	N02E, 66NW	joint E-W, 90
74	N66E, 23SE		185	E-W, 36S	
75	N70E, 43SE		186	N15E, 30SE	
76	N37E, 40SE		187	N70W, 45SW	
77	N20W, 015W (f)		188	N23W, 64SW	
	N70E, 02NW (f)		189	N15W, 25SW	cleavage N10E, 70SE
79	N40E, 40NW		189A	E-W, 65S	
81	N55E, 84NW		190	N45W, 70SW	
82		dike N32W, ??	191	N30W, 80SW	
83	N30W, 60SW	dike N55W, ??	192	N20W, 85SW	
84	N05E, 73SW		193	N20W, 60SW	
86	N34E, ??		194	N15W, 35SW	
88	N50E, 60SE		195	N12E, 26NW	
89	N60E, 65SE		196	N75W, 40SW	
90	N15E, 35NW		197	E-W, 55S	
92	N13W, 55SW		198	N66W, 66SW	
93	N20E, 53NW		199	N30W, 60SW	
94	N15E, 27SE		200	N35W, 90	
95	N80E, 80SE		201	N20W, 75SW	
96	N80E, 60SE		202	N33W, 51SW	
98	N02W, 63SW				

Table 4. Mines and prospects* (modified from Eberlein and others, 1977).

Map letter	Name	Map coordinates	Development category	Resources*	Form	Type	Brief description	Principal references
A	Broken Shovel	60°48'33"N, 158°50'44"W	m	Hg (Sb)	Fracture and breccia fillings	Hydrothermal (low temperature and placer)	Hydrothermally altered diabase sill or dike, 1-3 ft thick, in siltstone of Gemuk Group (Permian to Cretaceous). Fault follows one margin of dike and contains discontinuous quartz veins with local stibnite. Cinnabar known only from float. Native mercury also reported.	Cady and others, 1955, p. 115
B	Cinnabar Creek	60°48'19"N, 158°52'08"W	M	Sb, Hg (Zn, Au)	Veinlets and disseminations	Hydrothermal (low temperature and placer)	Diabase dike, hydrothermally altered with much dickite, cuts sheared and faulted graywacke and siltstone of the Gemuk Group (Permian to Cretaceous). Ore along vertical faults parallel to dike and consists of small irregular veinlets mainly of cinnabar, stibnite, and quartz. Cinnabar contains to 0.14 ppm gold locally.	Sainsbury and MacKevett, Jr., 1965, p. 38-40; Cobb, 1976, p. 62-63
C	Cinnabar Creek (placer)	60°48'19"N, 60°47'30"N, 158°52'08"W, 158°53'30"W	p	Sb, Hg	Disseminated	Placer	Placer deposits extend downstream from Cinnabar Creek lode mine. Cinnabar in stream gravels and on terrace remnants about 60 ft above creek. Mining section 5-14 ft thick with mercury content from <0.1 to 0.84 pound per cubic yard. Amount recovered probably small.	Condon, 1970, unpublished field notes
D	Pink Lady	158°50'52"N, 60°47'13"W	p	Hg	Disseminated	Lode	Fractured, Mn-stained, dark-gray to black argillite, altered red siltstone, iron-stained, aphanitic dike, black chert, gray chert, and *Monotis*-bearing cherty argillite. Cinnabar in quartz veins, breccia, and on slickensided surfaces.	Condon, 1970, unpublished field notes

Key: Development category
M - mine with known or probable activity since 1960.
m - mine with no activity since 1960.
Mine is defined as a mineral deposit with recorded production.
p - prospect work, but has no known activity since 1960.
Prospect is defined as a deposit that has been staked with subsequent exploratory or development work, but has no known production.
*Minor constituent(s) or potential byproducts in parentheses.
*Note: Analyses for mercury and other metallic elements in stream-sediment deposits in this quadrangle are reported by Clark and others (1971).

Table 6. Radiometric age data.

Map no.	Field no.	Lab no.	Rock type	Mineral dated	K_2O (wt %)	Sample wt (g)	$^{40}Ar_{rad}$ (mol/g) x 10^{-11}	$^{40}Ar_{rad}$ / ^{40}K x 10^{-3}	$^{40}Ar_{rad}$ / $^{40}Ar_{total}$	Age ± 1 δ (m.y.)
79	82MR322	83020	Basalt	Whole rock	1.113 1.080 $\bar{x}$ = 1.097	6.1676	0.745	0.274	0.358	4.72 ± 0.1
79	82MR322	83048	Basalt	Plagioclase	0.840 0.852 0.850 $\bar{x}$ = 0.847	3.9399	0.565	0.269	0.282	4.62 ± 0.14

Note: rad = radiogenic; δ = standard deviation; $\lambda_e + \lambda_\beta = 0.581 \times 10^{-10}$ yr^{-1}; $\lambda_\beta = 4.962 \times 10^{-10}$ yr^{-1}; ^{40}K: K total = 1.67 x 10^{-4} mol/mol; $\bar{x}$ = mean
K-Ar age determinations by J.D. Blum and D.L. Turner, Alaska Division of Geological and Geophysical Surveys, University of Alaska, Fairbanks Geophysical Institute, Cooperative Geochronology Laboratory.

Table 5. Fossil-occurrence data.

Map no.	Specimen no. (USGS museum no.)	Fossil type	Age	Identified by	References	Remarks
86	43ACa64	?	?	W.M. Cady	Cady, 1943 unpublished field notes	Fossiliferous limestone
167A	59SaM796 (M796)	*Halobia H. ornatissima* Smith(?), terebratuloid and spiriferid (?)pisoidea) brachiopod	Late Triassic	N.J. Silberling	Sainsbury and MacKevett, Jr., 1965, p. 37	From argillaceous limestone between lava flows (location approximate). The age is probably late Carnian
167B	59ASn129c (59ASn129c)	*Halobia* *Monotis*(?)	Late Triassic	N.J. Silberling	Sainsbury and MacKevett, Jr., 1965, p. 37	From block limestone and shale (location approximate)
168	43ACa28 (19409)	Pectinoid fossils	Late Triassic	J.B. Reed-side, Jr.; R.W. Imlay	Cady and others, 1955, p. 33	Float fragments from burrow, containing *Halobia* sp. indet., *Myophoria* aff. M. *vestita* Albert, and *Myophoria*? sp.; from Upper Triassic
174	68ACk901	*Monotis*	?	W.H. Condon	Condon, 1970, unpublished field notes	Found in chert or siliceous limestone from Pink Lady prospect tailings
178	43ACa39 (18927)	*Monotis, subcircularis* brachiopods, pelecypods, ostracods(?)	Late Triassic (Norian)	J.B. Reed-side, Jr.; R.W. Imlay	Cady, 1943 unpublished field notes; Cady and others, 1955, p. 33	Coquina of *Monotis subcircularis* (Gabb); limestone, some lithographic, occurring with shaley chert siliceous shale and chert
189A	- -	*Halobia*(?)	?	J.M. Hoare	Hoare, 1970, unpublished field notes	Found in limestone

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