

Mineral Resources of the Idaho Primitive Area and Vicinity, Idaho

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STUDIES RELATED TO WILDERNESS — PRIMITIVE AREAS

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*An evaluation of the mineral
potential of the area*



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numerous fissures filled with iron-stained opal. The largest fissure trends N. 10° E. and dips west. It is bounded on the east by white tuffaceous breccia and on the west by pink porphyritic rhyolite. The opal fill is 1 foot wide by 110 feet long and is exposed to a depth of 20 feet. A sample across the opal contained 0.34 ounce gold per ton and 0.2 ounce silver per ton. The gold content is too low, and the size is too small for mining.

BIG CREEK PLACER AREA

Thirteen alluvial deposits are scattered along Big Creek and tributaries in the center of the district (fig. 114). The deposits are in alluvial terraces above the creek bed, alluvial fans, or low-lying deposits (table 29). All but two contain 21,000 to 280,000 cubic yards; the two largest terraces contain about 1.7 and 4 million cubic yards. Most are almost barren of vegetation; a few are covered with brush and small conifers. Placer claims were recorded for almost all of the terraces in the late 1800's; a few were relocated in the 1950's. No production has been recorded.

Altitudes range from 4,600 feet at Monumental Bar to 3,400 feet at the mouth of Big Creek. Average fall of the creek is 60 feet per mile; the fall is greater in narrow stretches of the canyon.

Depositional features of the deposits indicate that the material is reworked glacial debris. Material size ranges from fine sand to large boulders. More than 70 percent is less than 1 inch across, and more than 85 percent is less than 6 inches across. Less than 10 percent are boulders larger than 1 foot across.

Depending on nearby source rock, the composition of the deposits varies from 5 to 75 percent quartzite, 20 to 30 percent other metamorphic rocks, 10 to 90 percent granitic rocks, and 20 to 70 percent volcanic rocks.

The deposits were sampled from test pits and by channels cut into creek banks. One cubic foot of sample was taken per foot of depth. Gold values did not increase with depth, but gold was observed from top to bottom at most sites (table 30). The best values were at Mile Flat, where values were

TABLE 29. — Summary data, Big Creek placers

Deposit	Site (fig. 113)	Size (acres)	Estimated volume (cu yd)	[Tr, trace]	
				Range of gold values ¹ (cents per cu yd)	Estimated black sands (lb per cu yd)
Mile Flat placer	2	5.9	143,000	Tr to 21.7	9.5
Hard Boil Bar	9	0.6	21,000	0 to 1.2	6.9
Over Easy Bar	10	1.1	71,000	0 to 1.4	11.0
Soft Boil Bar	11	2.3	45,000	0.3 to 0.6	5.8
Coxey Creek Bar	12	5.7	185,000	0 to Tr	10.4
No Name placer	13	4.5	72,000	0 to 0.3	4.8
Coxey Creek placer	14	4.0	77,000	0 to Tr	.8
John Vine Bar	16	109.3	4,056,000	0 to 3.7	7.0
Cave Creek placer	18	45.0	280,000	0 to 4.2	.3
Cabin Creek Bar	19	105.5	1,702,000	0 to 4.2	7.5
Point placer	20	5.0	64,500	Tr	13.6
Cougar Creek placer	21	3.7	30,000	Tr to 1.6	12.3
Goat Creek placer	22	13.1	180,000	0 to Tr	2.7

¹Gold values are based on a price of \$47.85 per troy ounce.

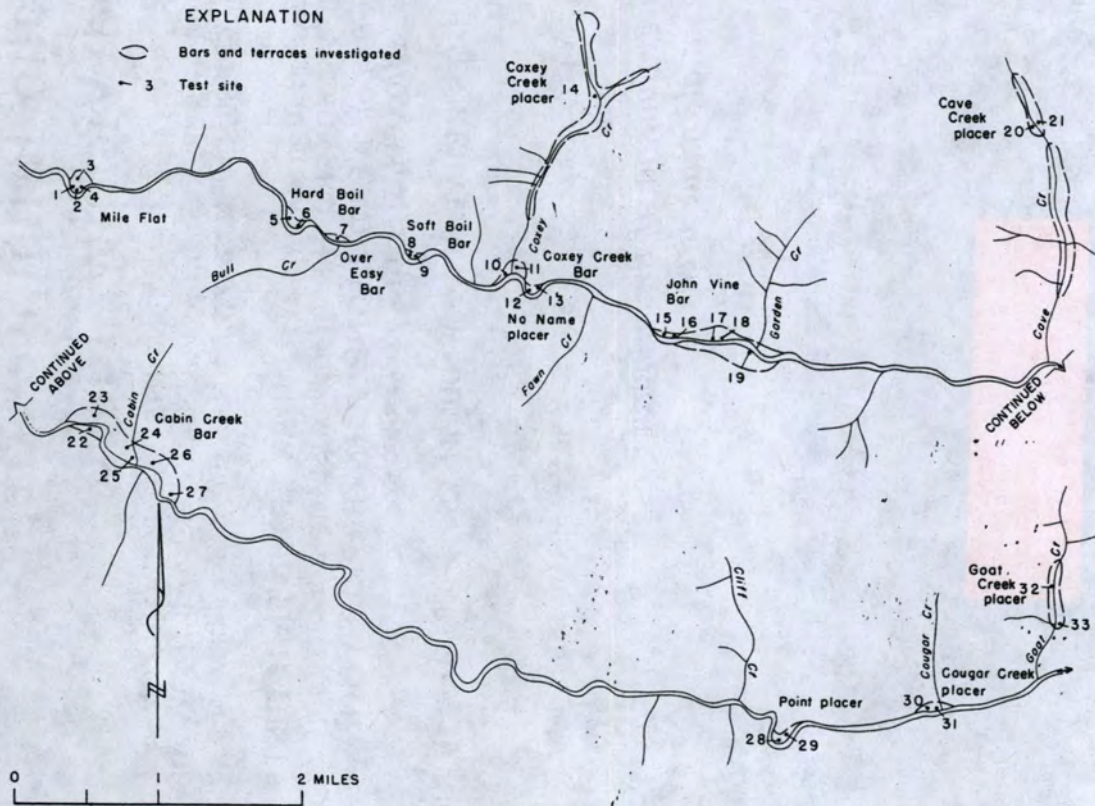


FIGURE 114. — Big Creek placer area.

TABLE 30. — *Sample data for Big Creek district placers*

[Placer locations and site numbers are shown in fig. 114. Tr, trace; N.d., not detected]

Site	Depth interval ¹ (feet)	Gold content		Black sands (lb per cu yd)
		Colors ²	Value ³ (cents per cu yd)	
Mile Flat placer				
1	0.0 - 5.34	5f.	0.1	8.2
	5.34- 5.60	11v.f.	1.4	152.3
	5.60- 5.75	2m.	4.9	146.5
2	0.0 - 4.75	2v.f.	Tr	4.1
3	0.0 - 6.00	4f.	.3	2.0
4	0.0 - 4.16	2f.	.1	3.0
	4.16- 4.50	20f., 12m.	21.7	83.8
	4.50- 5.91	5f., 2m.	.8	9.3
	5.91- 6.25	3m., 11f.	5.6	71.3
Hard Boil Bar				
5	0.0 - 7.25	2v.f., 1m.	0.1	4.2
	7.25-14.20	N	N	3.8
	14.20-18.4	28v.f., 3m.	.8	6.4
6	0.0 - 3.50	11v.f.	1.0	19.8
	3.50-10.40	19v.f.	.6	3.6
	10.40-15.90	9f.	.6	10.6
Over Easy Bar				
7	0.0 - 5.80	1f., 4m.	0.1	13.5
	5.80-11.40	29f., 11m.	1.4	8.6
	11.40-17.10	27f., 5m.	1.0	8.5
	17.10-22.50	21f., 4m.	1.0	15.0
	22.50-28.60	3f.	Tr	8.9
	28.60-29.10	5f.	.6	18.0
Soft Boil Bar				
8	0.0 - 2.00	6v.f.	0.4	7.6
	2.00- 5.30	12v.f.	.3	8.1
9	0.0 - 7.80	26v.f., 2m.	.6	4.3
Coxey Creek Bar				
10	0.0 - 2.30	N	N	2.0
	2.30- 6.30	N	N	1.8
11	0.0 - 2.30	2v.f.	Tr	9.9
	2.30- 5.80	2v.f.	Tr	11.2
	5.80-10.80	3v.f.	Tr	17.9
	10.80-15.90	3v.f.	Tr	13.2
No Name placer				
12	0.0 - 5.60	11f., 3m.	0.1	4.1
	5.60- 9.10	6v.f., 2m.	.1	6.1
	9.10-13.10	3f.	.1	3.5
	13.10-18.00	1f.	Tr	2.8
	18.00-21.00	3v.f.	.1	9.5
	21.00-25.30	7v.f., 1m.	.3	1.7
13	0.0 - 2.70	3v.f., 8f.	.3	10.3
Coxey Creek placer				
14	0.0 - 1.08	N	N	1.0
	1.08- 4.30	2f.	Tr	.7
John Vine Bar				
15	0.0 - 4.00	16f., 2m.	0.8	5.1
	4.00- 8.50	31f., 7m.	2.5	9.2
	8.50-12.50	12f., 1m.	.8	5.0
16	0.0 - 2.50	4f., 1m.	1.2	4.7
17	0.0 - 2.50	6f., 1m.	2.2	8.2
	2.50- 8.00	10f., 8m.	1.0	1.1
18	0.0 - 2.30	3v.f.	Tr	4.5
	2.30- 3.80	26f., 8m.	3.7	29.0
19	0.0 - 4.50	6f., 3m.	.4	10.6

TABLE 30. — *Sample data for Big Creek district placers* — Continued

Site	Depth interval ^{1/2} (feet)	Gold content		Black sands (lb per cu yd)
		Colors ²	Value ³ (cents per cu yd)	
Cave Creek placer				
20	0.0 - 8.00	6v.f.	Tr	0.3
	8.00-12.00	N	N	.4
21	0.0 - 6.00	N	N	.3
Cabin Creek Bar				
22	0.0 - 5.30	42f., 6m., 3c.	4.2	9.0
	5.30- 9.30	20f., 3m.	1.4	7.1
23	0.0 - 2.50	14f., 1m.	.7	15.0
24	0.0 - 3.30	N	N	.6
25	0.0 - 3.20	7v.f.	.4	18.5
26	0.0 - 1.30	5f., 1m.	.6	8.3
27	0.0 - 2.30	N	N	.8
	2.30- 3.80	N	N	4.1
Point placer				
28	0.0 - 2.50	4v.f.	Tr	8.7
	2.50- 4.80	5v.f.	Tr	14.6
29	0.0 - 2.00	3v.f.	Tr	22.2
	2.00- 9.00	17v.f.	Tr	12.5
Cougar Creek placer				
30	0.0 - 2.00	3f.	0.7	23.6
	2.00- 8.60	66f., 30m.	1.6	13.0
31	0.0 - 2.20	3f.	Tr	7.1
	2.20- 4.50	2f.	Tr	6.8
	4.50- 9.10	5f.	Tr	11.8
Goat Creek placer				
32	9.5	2v.f.	0.7	5.4
	0.5	1f.	Tr	.6
33	0.0 - 3.0	N	N	.1
	3.0 - 6.0	N	N	.1
	6.0 - 9.0	N	N	.1

¹All samples are 1 cubic foot in volume per foot of depth.

²Colors are the number of particles of gold observed in the sample. Relative size of particles are as follows: v.f. (very fine) requires 1,000 or more colors to equal 1 cent; f. (fine) requires 300 to 1,000 colors to equal 1 cent; m. (medium) requires 10 to 300 colors to equal 1 cent; c. (coarse) takes less than 10 colors to equal 1 cent worth of gold.

³Gold values are based on a price of \$47.85 per troy ounce.

as much as 21.7 cents gold per cubic yard. A few samples from other prospects contained more than 1 cent gold per cubic yard.

Black sand (ilmenite and magnetite) concentrates from deposits along Big Creek averaged 7.4 pounds per cubic yard; those from along tributaries averaged less. The average ilmenite content of deposits along Big Creek was estimated to be 2.7 pounds, worth 2.5 cents, per cubic yard. The magnetite content is estimated to average 3.6 pounds per cubic yard. Traces of scheelite were seen in concentrates submitted for petrographic examinations.

The deposits along Big Creek are estimated to total almost 7 million cubic yards but are too low in grade to be considered a potential source of ilmenite or gold.

INDIAN CREEK DISTRICT

No major mines or mine workings are in Indian Creek district. The