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10/18/88

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: BARNEY RANCH PROSPECTS

ALTERNATE NAMES:

COCHISE COUNTY MILS NUMBER: 802

LOCATION: TOWNSHIP 14 S RANGE 19 E SECTION 18 QUARTER SW
LATITUDE: N 32DEG 12MIN 35SEC LONGITUDE: W 110DEG 26MIN 50SEC
TOPO MAP NAME: HAPPY VALLEY - 7.5 MIN

CURRENT STATUS: RAW PROSPECT

COMMODITY:
COPPER OXIDE

BIBLIOGRAPHY:
ADMMR BARNEY RANCH PROSPECT FILE
USGS BULL 1500

DEER CREEK

Deer Creek, a major tributary of Paige Creek, is approximately 5.6 km (3.5 mi) north of Watkins Ranch and about 0.8 km (½ mi) southwest of Barney Ranch. Prospect pits, adits, and a shaft are in the Deer Creek area in sec. 19, T. 14 S., R. 19 E., and unsurveyed sec. 24, T. 14 S., R. 18 E. Those in unsurveyed sec. 24 are in the Rincon study area and those in sec. 19 are less than 0.8 km (½ mi) east of the study area (pl. 2).

Four chip samples (36, 37, 40, and 45) taken from prospect workings along Deer Creek assayed greater than 0.5 percent copper; however, the mineralization appears to be in isolated pods. Sample 36, a 31-cm (12-in.) chip sample, contained 0.56 percent copper, 0.2 oz silver per ton (6.8 g/t), and a trace of gold. This sample was taken in a zone of copper mineralization in dolomitic limestone 9.2 m (30 ft) inside the portal of a partially caved adit that was estimated to be 20 m (65 ft) long. The copper mineralization consists of chrysocolla, azurite, and malachite.

About 31 m (100 ft) north of the partially caved adit is a small adit and a trench that contains malachite, azurite, and chrysocolla as fracture fillings in country rock of dolomite and altered limestone. Exposed at the face of the adit is a 31-cm (12-in.) thick, horizontal zone of copper mineralization containing bands of malachite and azurite. A 31-cm (12-in.) chip sample (37) taken across this zone contained 1.7 percent copper, 0.2 oz silver per ton (6.8 g/t), and a trace of gold.

Sample 40, a chip sample taken across a 1.2 m (4 ft) mineralized zone in an adit, contained relatively high copper and silver values. Figure 11 is a plan of the adit.

Sample 45, a 38-cm (15-in.) chip sample taken across a mineralized vein in the north wall of a prospect pit contained 7.5 percent copper and a trace of gold. The pit is in a sandy and carbonaceous buff-colored breccia and exposes the vein, in which chrysocolla, malachite, and hematite are visible. The major rock unit in this area is limestone containing lenses of marble.

BARNEY RANCH

Barney Ranch is in the south half of sec. 18, T. 14 S., R. 19 E. About 0.4 km (¼ mi) west of Barney Ranch, just outside of the Rincon study area, is an adit which, according to Ollie Barney, owner of the Barney Ranch, was driven in 1901 for exploration purposes. Samples 48-55 were taken in the adit (fig. 12; pl. 2).

About 0.8 km (½ mi) east of the ranch is an inaccessible shaft in schist associated with quartz dikes. The shaft was estimated to be 6.1 m (20 ft) deep, having a mineralized zone about 46 cm (18 in.) wide just

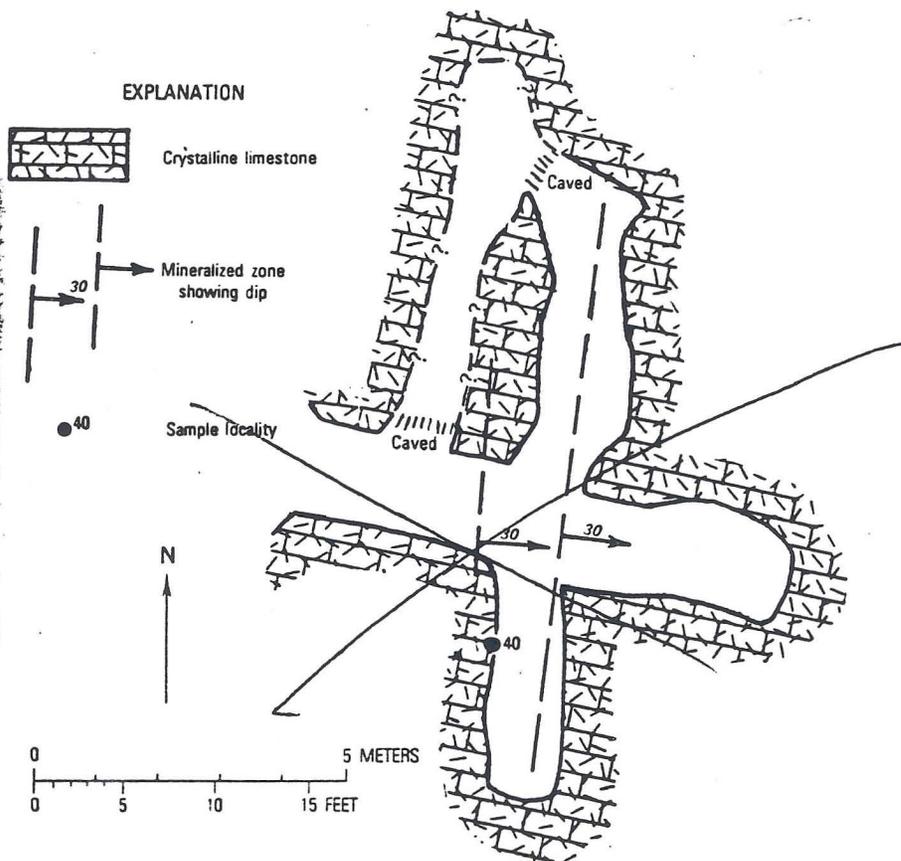


FIGURE 11.—Adit near Deer Creek.

[Assay data in inch-pound units; 1 oz/ton = 34.285 g/t]

Sample No.	Type	Length	Assay data			Remarks
			Au (oz/ton)	Ag (oz/ton)	Cu (percent)	
40	Chip	1.2 m (4 ft)	Tr	0.4	1.1	Mineralized zone, some bands of chrysocolla and malachite.

below the collar. The dump at the shaft appeared to be segregated into waste and mineralized rock containing chrysocolla. A grab sample (56) taken of the mineralized part of the dump contained 1.2 percent copper and a trace of gold.

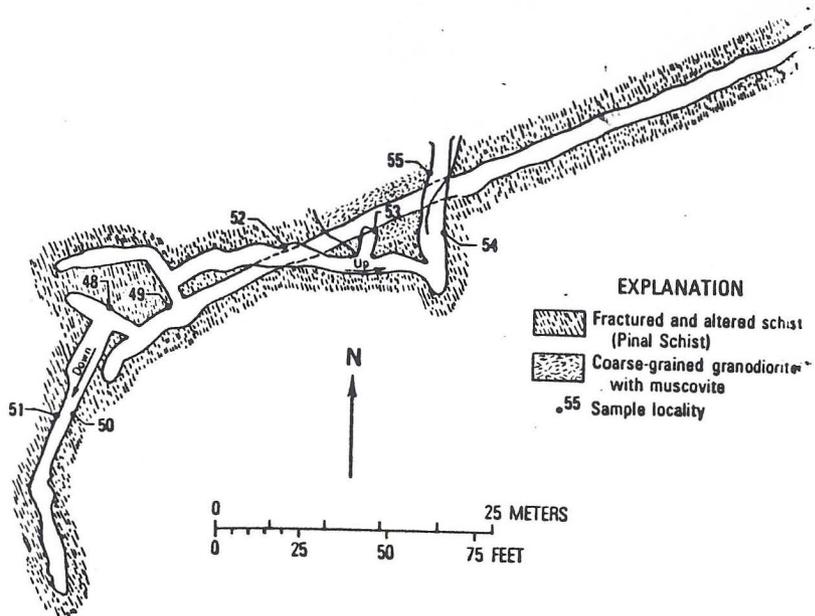


FIGURE 12.—Adit near Barney Ranch.

[All samples chip; Tr, trace; leaders (---), not detected. Assay data in inch-pound units; 1 oz/ton = 34.285 g/t]

Sample No.	Sample Length	Assay data						Remarks
		Au (oz/ton)	Ag (oz/ton)	Cu (percent)	Mo (percent)	Pb (percent)	Zn (percent)	
48	61 cm (24 in.)	---	---	0.048	0.001	0.008	0.006	Highly fractured and altered schist with copper staining.
49	76 cm (30 in.)	---	Tr	.26	.001	.008	.021	Altered schist with iron staining.
50	46 cm (18 in.)	---	0.3	.13	.001	.008	.010	Highly altered schist with limonite banding and copper staining.
51	38 cm (15 in.)	---	.2	.066	.001	.008	.006	Do.
52	61 cm (24 in.)	Tr	---	.08	.002	.008	.04	Brecciated zone in schist with limonite.
53	1.1 m (3.5 ft)	Tr	---	.55	.003	.064	.047	Highly fractured schist, chrysocolla in fractures.
54	1.2 m (4 ft)	Tr	---	2.0	.002	.013	.028	Chrysocolla and specular... in fractures and as cr...
55	0.8 m (2.5 ft)	Tr	---	2.2	.003	.021	.042	Do.