Geological Survey of Wyoming
Mineral Report 90-4

Keystone district, Medicine Bow Mountains

by

W. Dan Hausel
1990

Samples were collected from several mines in the Keystone district in the fall of 1989.

The Keystone trend is a N60°W trending vein in a shear, and is traceable for more than one mile. At the western edge of the shear, the Keystone mine was sunk on an ore shoot. In the area, I found evidence of isoclinal folding suggesting the possiblity that the ore shoot was controlled by folding. The eastern extent of the Keystone trend also has an ore shoot that was developed by the Florence mine.

Samples collected from the Keystone mine included:

KS2-89 (Quartz with pyrite and boxworks after sulfides) - 0.64 oz/ton Au 0.08 oz/ton Ag

KS3-89 (Milky quartz with limonite after siderite and pyrite) - 0.06 oz/ton Au, no Ag

KS4-89 (Quartz breccia, minor limonite after siderite) - no Au, no Ag

Samples collected at the Florence mine:

FL1-89 (Six inch channel in silicified diorite in back of adit) - 0.006 oz/ton Au, 0.06 oz/ton Ag

FL2-89 (Limonite-stained quartz diorite from dump) - 0.02 oz/ton Au, 0.04 oz/ton Ag

FL3-89 (Quartz with uncommon limonite) - 0.02 oz/ton Au, no Ag

FL4-89 (Quartz with uncommon limonite from dump) - 0.002 oz/ton Au, no Ag

FL5-89 (Diorite with siderite and limonite after pyrite) 0.03 oz/ton Au, no Ag

FL6-89 (Potassic altered quartz diorite with limonite after siderite) - no Au, no Ag

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LABORATORY REPORT

Client Sample No.: as listed GSW Lab No.: 890815

Client: Dan Hausel Sample Description:

Analyses Requested: Au, Ag, Co

Methods & Results:

Sample	Au, ppm	Ag, ppm	Co, ppm
FL 1-89	0.21	1.9	
FL 2-89	0.60	1.3	
FL 3-89	0.54	nd	
FL 4-89	0.08	nd	
FL 5-89	0.92	nd	
FL 6-89	nd	nd	
KS 2-89	22.	2.6	86.
KS 3-89	2.1	nd	14.
KS 4-89	nd	nd	
DH 1-89	nd	nd	
DH 2-89	nd	nd	

nd = not detected, Au less than 0.05 ppm
Ag less than 1.0 ppm

Analyst: Jay Roberts Date: October 26, 1989

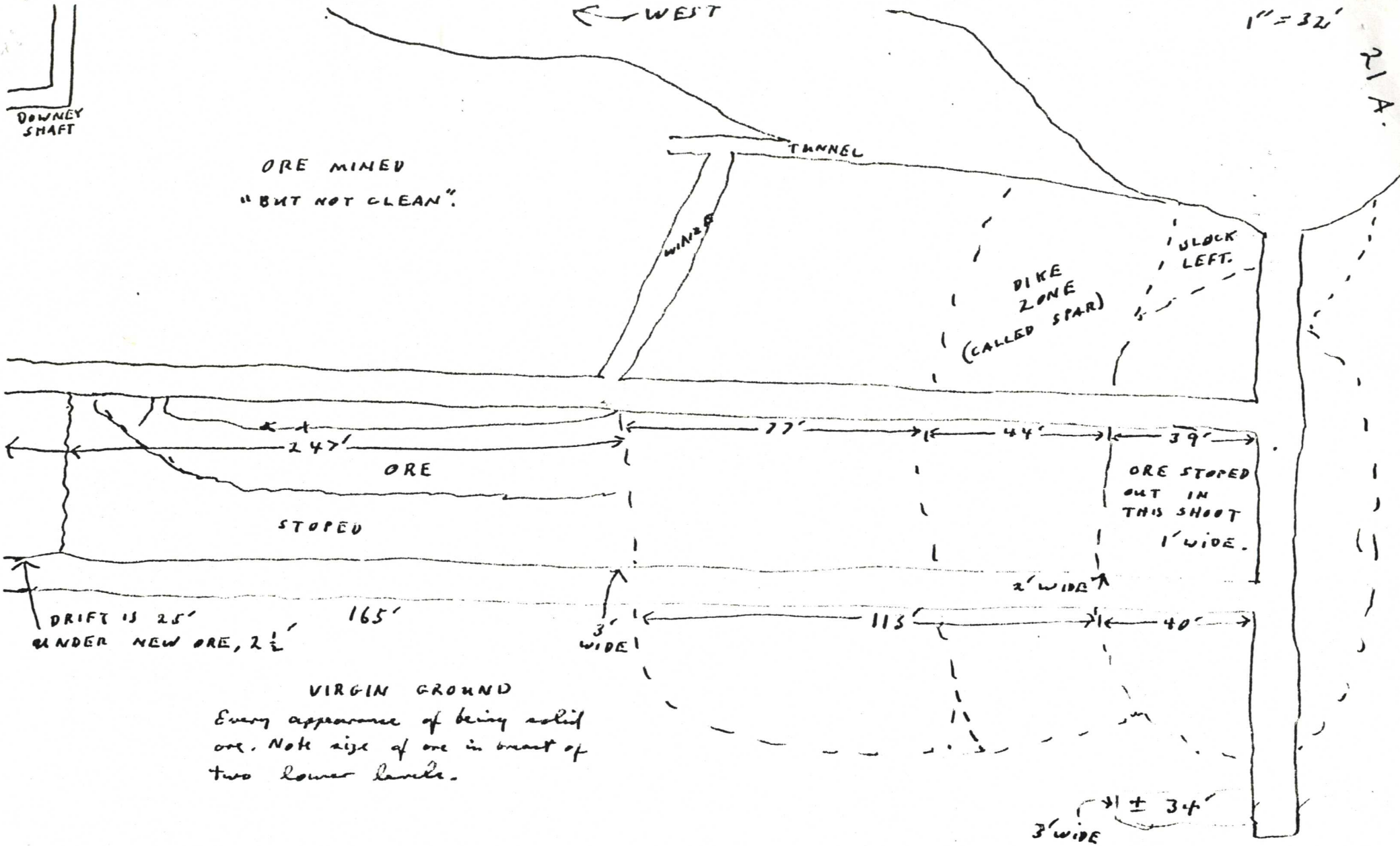
Excess Sample: __returned __discarded XX store6 months, discard __store perm

GSW Lab No.: 890815

Samples collected from the Keystone mine dump support earlier sample results from a number of sources (see Hausel, 1989, p. 124), and suggest the Keystone shoot is well-mineralized and possibly controlled by folding in a shear structure. Samples from the Florence mine were discouraging, but based on earlier sampling by other sources (see Hausel, 1989, p. 123) which produced some high-grade samples, and based on the overall lack of quartz and sulfides seen on the mine dump, this might indicate the mine dump has been thoroughly picked over by specimen collectors. Thus to obtain representative samples, there are three possible alternatives: (1) to dig down below the surface into the dump for bulk samples; (2) drill the shear zone; or (3) reopen the shaft or winze (see attached historic sketch map provided by Harrison Cobb, 3/12/90) and sample the mine workings.

Reference Cited

Hausel, W.D., 1989, The Geology of Wyoming's Precious Metal Lode and Placer Deposits: Geological Survey of Wyoming, Bulletin 68, 248 p.



UNDERGROUND WORKINGS OF FLORENCE MINE, AS DESCRIBED TO M.B TOMLBIN, BY ONE OF THE ORIGINAL MINERS.

FLORENCE