

GEOLOGICAL SURVEY OF WYOMING
MINERAL REPORT 88-7

ASSAY REPORT ON SAMPLES COLLECTED FROM
PURGATORY GULCH AND AT SOME OTHER LOCATIONS

by
W. Dan Hausel
1988

Two quartz vein samples were collected from a two to three foot wide milky quartz vein near the apex of the hill between Purgatory Gulch and the Encampment River. The vein trends N30 W, has a vertical dip, and conforms to the foliation of the host mafic schist. On the west side of a knob near the top of the hill, an inclined adit was driven into the vein.

Both quartz vein samples contained limonite pseudomorphs after pyrite, with traces of pyrite. One sample contained visible gold, and the second sample, number DEQ 17-6 assayed 19.0 ppm gold, 4.2 ppm silver, and 0.013% copper.

Some other samples listed on the attached assay report include (nd=not detected):

Sample no.	Description	Au (ppm)	Ag (ppm)	Cu (%)
DEQ 17-1	Copper-stained shear amphibolite gneiss col- on N10°E trend, 86°W dipping narrow shear (sec. 8, T.12N., R.81W).	nd	18.0	1.85
DEQ 17-2	Copper-stained amphibolite gneiss (SW/4 sec. 11, T12N., R.82W.).	nd	11.0	0.97
DEQ 17-9	Chlorite schist with minor quartz collected from mine dump (NE/4 SW/4 sec. 11, T.15N., R.87W.).	nd	4.4	0.014
V. Steiner Hanging Wall	Limonite-stained quartz from vein east of Lone Pine Mine, Lewis and Clark District	0.85	130.0	0.16
V. Steiner	Arsenopyrite-bearing vein east of Lone Pine mine	1.73	24.0	0.28

DIRECTOR AND
STATE GEOLOGIST
GARY B. GLASS

Serving Wyoming Since 1933

DEPUTY DIRECTOR
AND STAFF GEOLOGIST
-MINERALS (HARD ROCK)
W. DAN HAUSEL

SURVEY ADVISORY BOARD
D.L. BLACKSTONE, JR.
GENE R. GEORGE
WILLIAM H.B. GRAVES
ROBERT S. HOUSTON
BAYARD D. REA



STAFF GEOLOGISTS
JAMES C. CASE
-HAZARDS
RODNEY H. DE BRUIN
-PETROLEUM
RAY E. HARRIS
-MINERALS (SOFT
ROCK)
RICHARD W. JONES
-COAL
ALAN J. VER PLOEG
-STRATIGRAPHY

THE GEOLOGICAL SURVEY OF WYOMING
UNIVERSITY OF WYOMING
BOX 3008, UNIVERSITY STATION
LARAMIE, WYOMING 82071

EX OFFICIO:
GOV. MIKE SULLIVAN
DONALD L. VEAL
DONALD B. BASKO

EDITOR
SHEILA ROBERTS

(307) 742-2054 (307) 721-3920 (307) 766-2286

LABORATORY TECHNICIAN
JAY T. ROBERTS

LABORATORY REPORT

Client Sample No.: as listed

GSW Lab No.: 880822

Client: Dan Hausel

Sample Description: various

Analyses Requested: Au, Ag, Cu

Methods & Results:

Aqua regia attack, Au extracted into MIBK, AAS

<u>SAMPLE</u>	<u>Au, ppm</u>	<u>Ag, ppm</u>	<u>Cu, %</u>
DEQ 17-1	--	18.	1.85
DEQ 17-2	--	11.	0.97
DEQ 17-6 (Golden Crown)	19.	4.2	0.013
DEQ 17-9	--	4.4	0.014
V. Steiner Hanging wall	0.85	130.	0.16
V. Steiner Arsenopyrite	1.73	24.	0.28

-- = Au not detected, less than 0.05 ppm

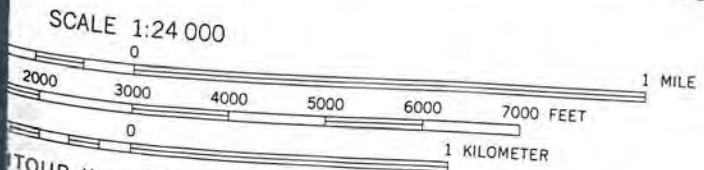
Analyst: Jay Roberts Date: September 6, 1988

Excess Sample: returned discarded xx store ⁶ months, discard store perm

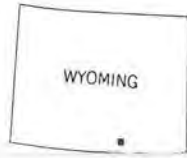
GSW Lab No. : 880822



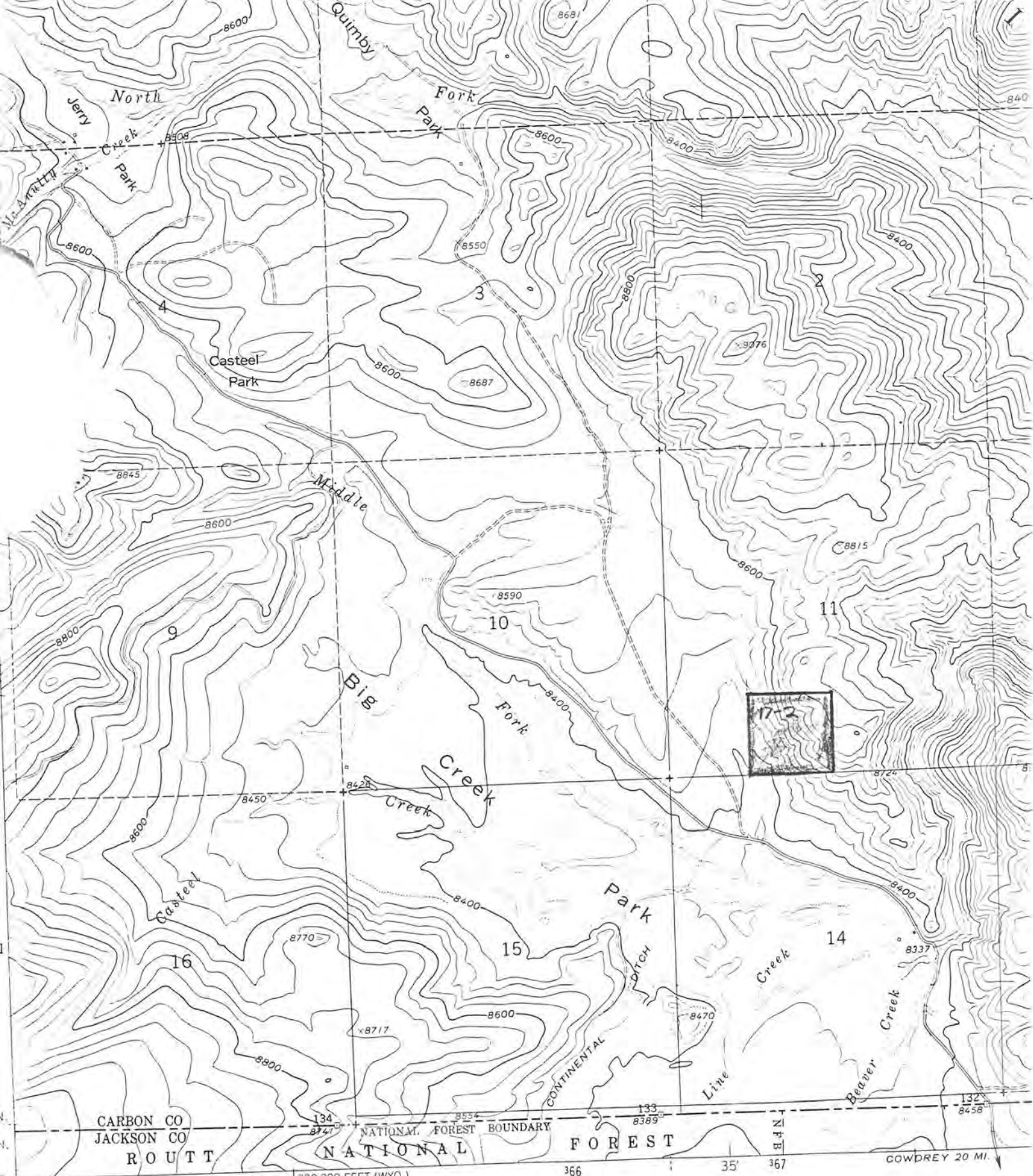
(DUDLEY CREEK)
4666 III SE



TOUR INTERVAL 40 FEET
ES REPRESENT 20-FOOT CONTOURS
EODETIC VERTICAL DATUM OF 1929



RC
Medium-duty
Unim;
Primary
hard su

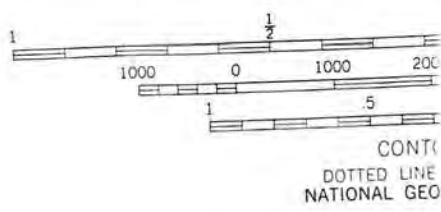
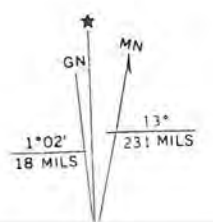


Mapped, edited, and published by the Geological Survey
as part of the Department of the Interior program
for the development of the Missouri River Basin

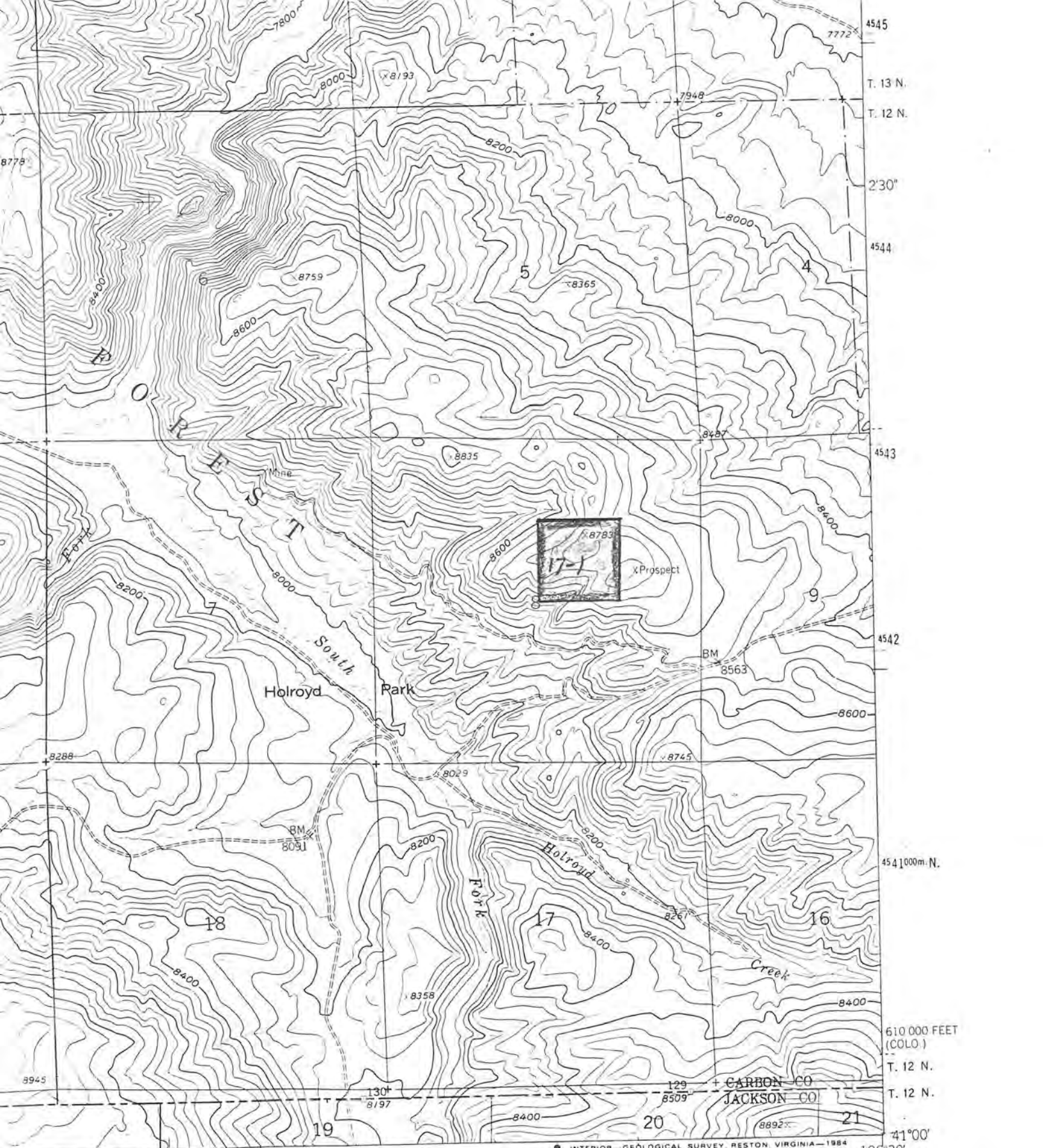
Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial
photographs taken 1953. Field checked 1961

30. Construction, 1927 North American Datum



CONTINENTAL
DOTTED LINE
NATIONAL GEO



1 MILE
 7000 FEET
 KILOMETER

There may be private inholdings within the boundaries of the National or State reservations shown on this map

ROAD CLASSIFICATION
 Heavy-duty ————— Light-duty
 Unimproved dirt =====
 ○ State Route

INTERIOR—GEOLOGICAL SURVEY RESTON, VIRGINIA—1984
 1 720 000 FEET (COLO.)
 372000m. E. 106°30' (INDEPENDENCE MOUNTAIN 4765-17-NW)

WYOMING