

GEOLOGICAL SURVEY OF WYOMING

Aug. 25, 1980

MINES OF THE CENTENNIAL RIDGE DISTRICT, ALBANY COUNTY, WYOMING

During August of 1980, accessible mines within the Centennial Ridge district were mapped for future reference. To date, three mines have been mapped and these include the Independence, Columbine, and the SW/4 SW/4 SW/4 section 17 mines. All three mines were in fair to good condition and accessible. Some additional mines were examined, however, it was decided that we would not enter these mines in that they were considered unsafe. The Empire mine in the N/2 section 17, T. 15 N., R. 78 W., the Platinum City mine in the N/2 N/2 section 16, T. 15 N., R. 78 W., and one of the Utopia adits in the N/2 N/2 section 9, T. 15 N., R. 78 W., were accessible but these were considered unsafe for entrance.

The Centennial Mine (SE/4 section 4, T. 15 N., R. 78 W.) was blasted shut by a previous owner, however, the extent of caving (as indicated at the surface) appeared to be restricted to a few feet at the adit opening. It appears that it would take little effort to reopen the caved portion of the adit.

In that the Centennial mine was undoubtedly one of the richer lodes in the district, according to old reports (for example, see Hausel, 1980), it might be worthwhile to reopen this mine and examine the geology. Apparently, the Centennial vein was faulted and the footwall vein extension was never located. Unfortunately, no known maps nor assay reports are known to exist for this mine.

Three mines in the district were granted patents. These were the Cliff, Utopia, and Centennial mines. Both the Utopia and Centennial patents are owned by Catherine Wiegand of Laramie.

Mineralization in the district occurs primarily in quartz veins, or in shear zone tectonites. Gold mineralization is found in quartz veins paralleling foliation and schistosity of biotite and hornblende gneisses and schists of McCallum's (1968) Mafic series. Some gold is also found in shear zone tectonites associated with sulfides.

Both gold and platinum are found in shear zones associated with sulfide-rich zones in mafic host rocks. The greatest sulfide concentrations generally occur in association with graphitic fault gouge, brecciated mylonites, and strongly chloritized wall rock.

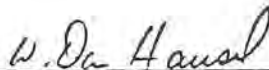
Reported assays for the Independence mine gave 0.01 and 0.08 ounces of gold, 0.8 and 0.22 ounces of silver, 0.27 ounces of platinum, 0.46 ounces of iridium, 0.0302 ounces of rhodium, and 0.1 ounces of osmium per ton of ore (McCallum, 1968, p. 11; Osterwald et. al., 1966, p. 81 and 151).

Assays for the Columbine mine gave only copper values (McCallum, 1968). No assay reports were available for the SW/4 SW/4 SW/4 section 17 mine.

REFERENCES

- Hausel, W. Dan, 1980, Gold districts of Wyoming: Geological Survey of Wyoming, Report of Investigations, No. 23.
- McCallum, M. E., 1968, The Centennial Ridge Gold-Platinum District, Albany County, Wyoming: Geological Survey of Wyoming, Preliminary Report, No. 7.
- Osterwald, F. W., and others, 1966, Mineral resources of Wyoming, Geological Survey of Wyoming, Bull. 50.

Signed,

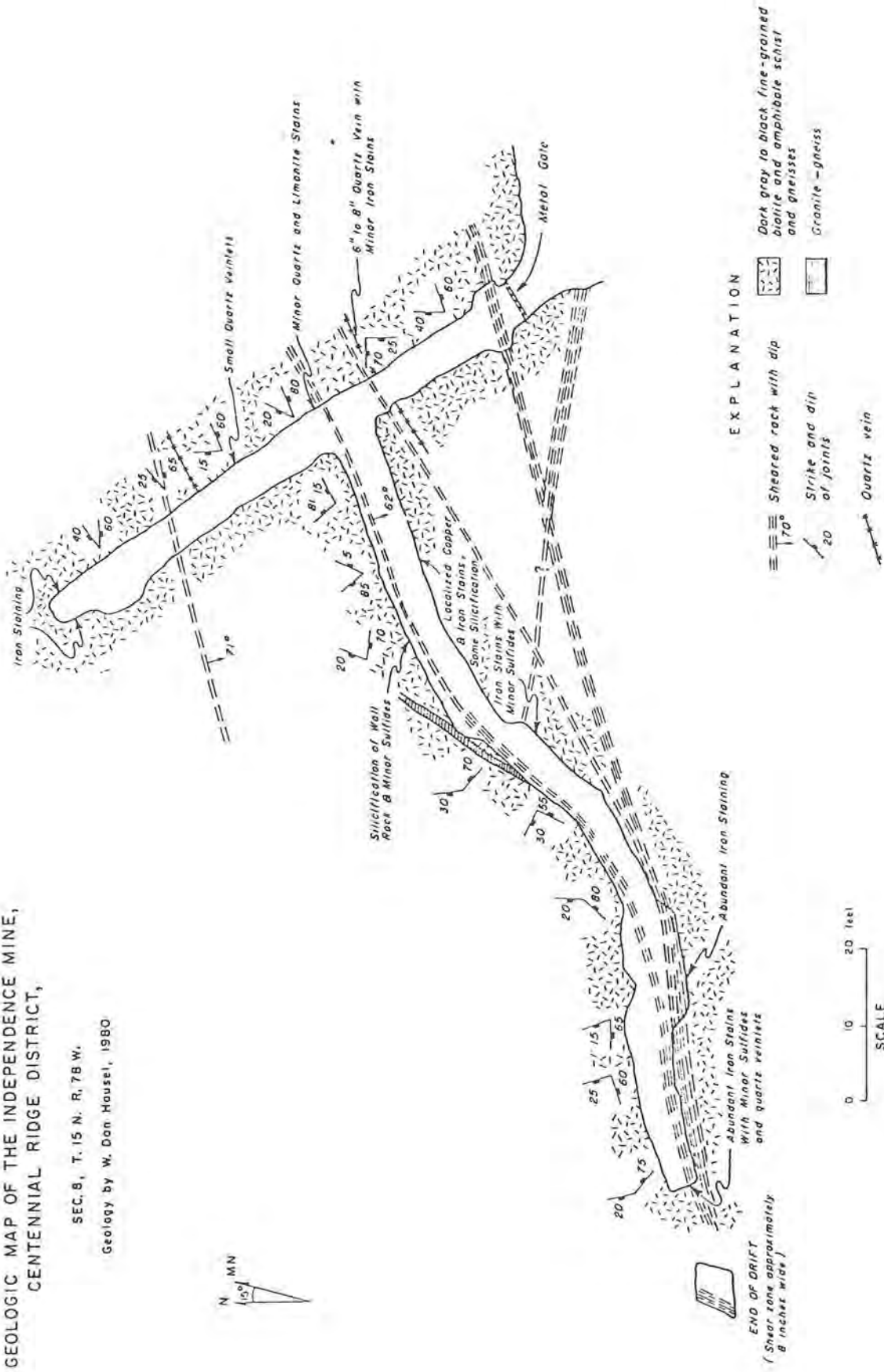


W. Dan Hausel
Staff Minerals Geologist
Geological Survey of Wyoming

GEOLOGIC MAP OF THE INDEPENDENCE MINE,
CENTENNIAL RIDGE DISTRICT,

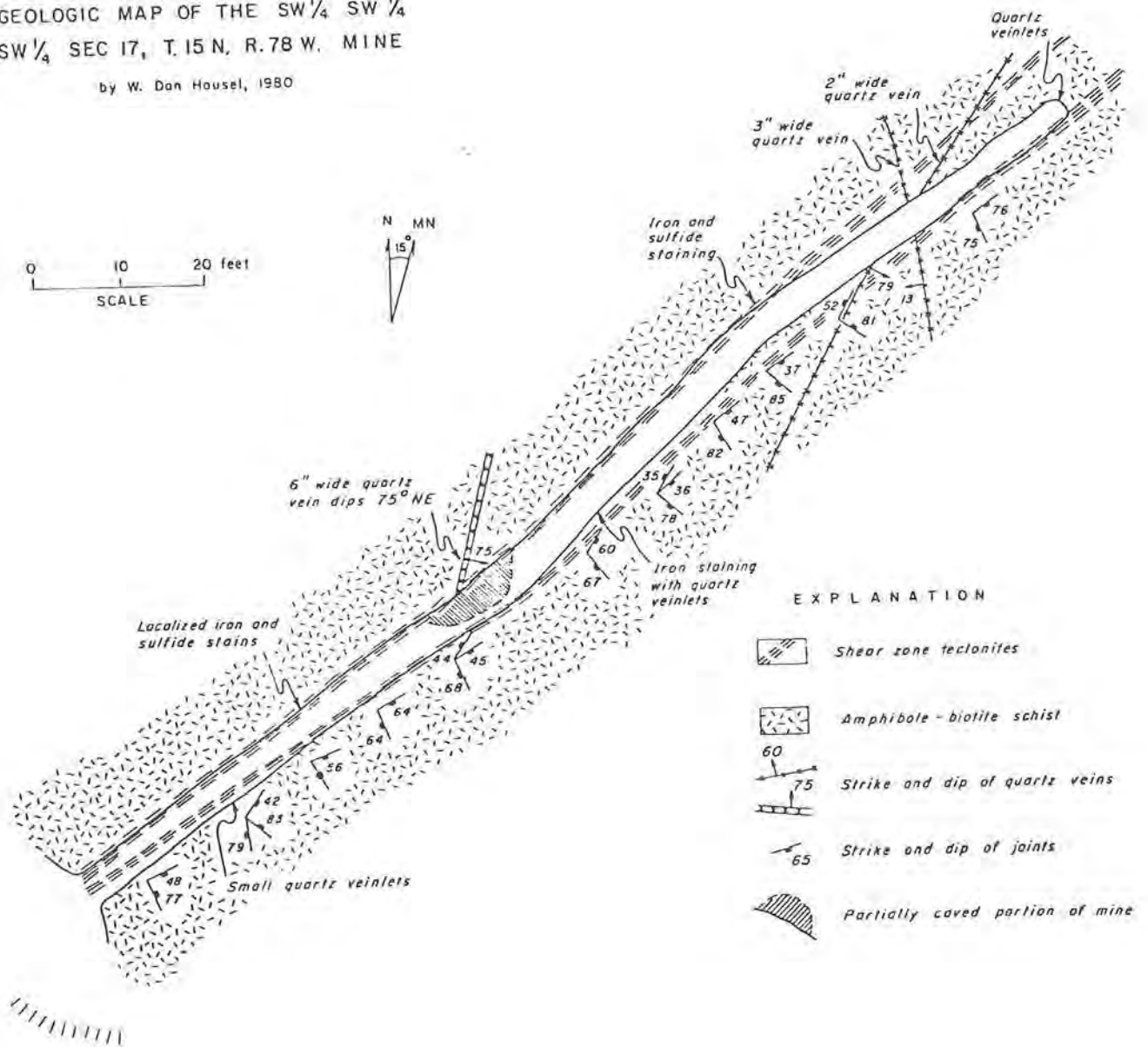
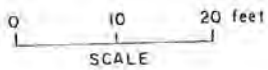
SEC. 8, T. 15 N. R. 78 W.

Geology by W. Don House, 1980



GEOLOGIC MAP OF THE SW $\frac{1}{4}$ SW $\frac{1}{4}$
 SW $\frac{1}{4}$ SEC 17, T. 15 N, R. 78 W. MINE

by W. Dan Hausel, 1980

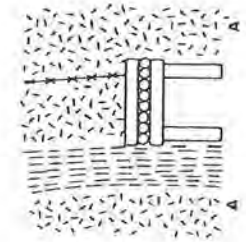
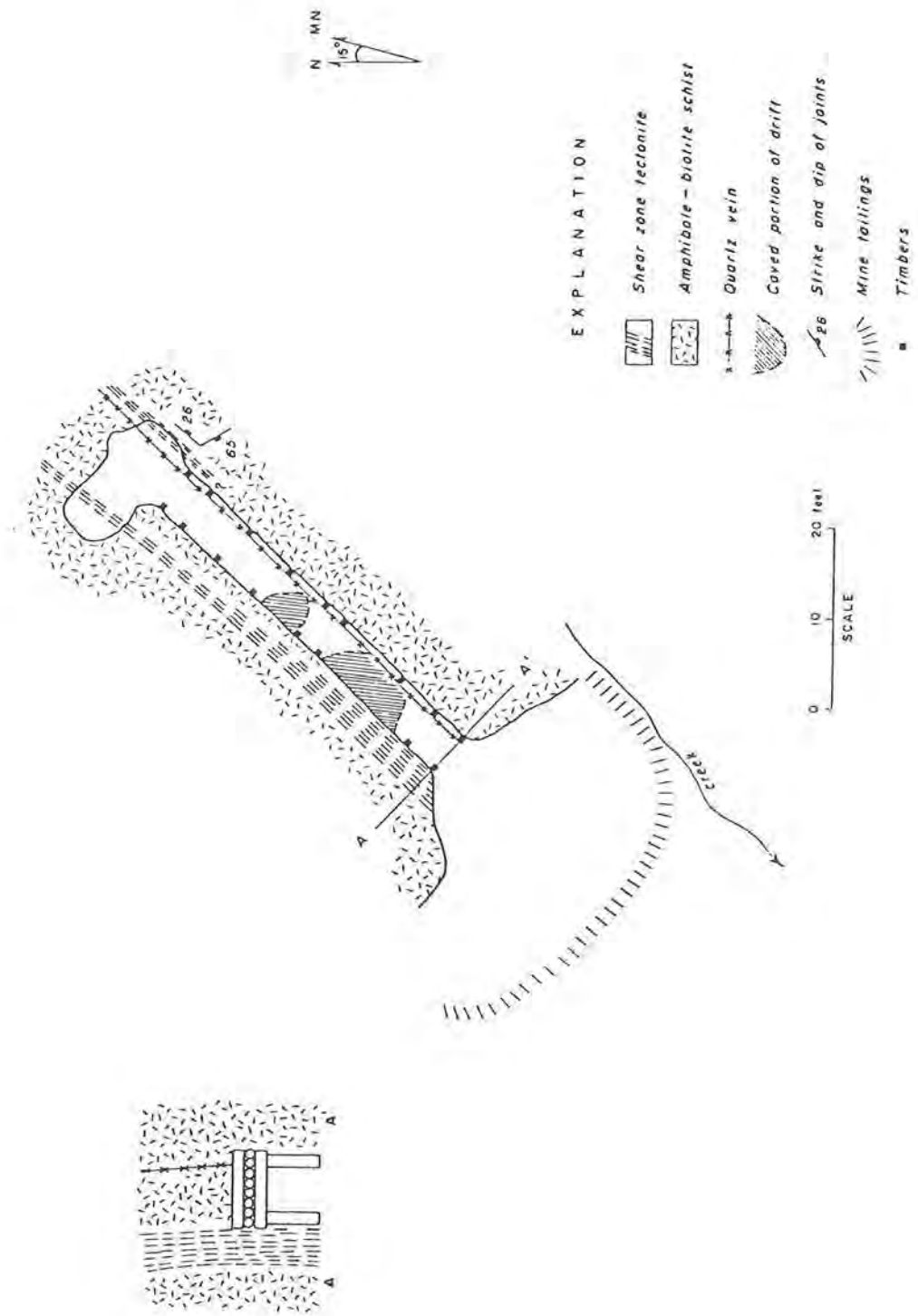


EXPLANATION

- Shear zone tectonites
- Amphibole-biotite schist
- 60/75 Strike and dip of quartz veins
- 65 Strike and dip of joints
- Partially caved portion of mine

GEOLÓGIC MAP OF THE COLUMBINE MINE,
CENTENNIAL RIDGE DISTRICT

Geology by W. Don House, 1980





WYOMING ANALYTICAL LABORATORIES, INC.

Box 638 • 605 South Adams

(307) 742 7995

LARAMIE, WYOMING 82070

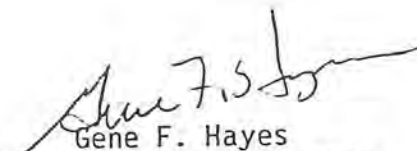
W.K. Rogers
915 Ord
Laramie, WY 82070

Request No. 782-117
Date: 30 June 1981

REPORT OF ANALYSIS*

Customer ID	Sack of Rocks
Lab No.	6466
Gold	<0.01 oz/ton
Platinum	0.50 oz/ton

*Telephoned results to Bill Rogers, 6-29-81, 0852


Gene F. Hayes
Laboratory Director



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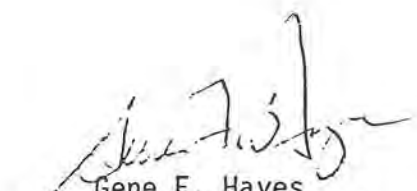
LARAMIE, WYOMING 82070

Dan Hausel
Wyo. Geol. Survey
Box 3008, Univ. Sta.
Laramie, WY 82070

Request No. 1288-063
Date: 25 August 1982

REPORT OF ANALYSIS

Customer ID	Lab No.	Unit	Gold	Platinum
Independence Mine, Shear 0	9450	oz/ton	0.03	<0.01
Independence Mine, Shear 1	9451	oz/ton	0.03	<0.01
Independence Mine, Shear 2	9452	oz/ton	0.01	<0.01
Independence Mine, Shear 3	9453	oz/ton	0.01	<0.01


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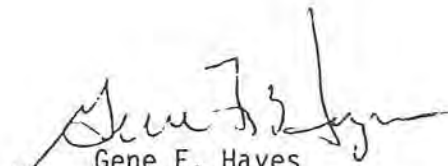
LARAMIE, WYOMING 82070

Dan Hausel
State of Wyoming
Wyoming Geological Survey
P.O. Box 3008, Univ. Station
Laramie, WY 82071

Request No. 815-063
Date: 20 July 1981

REPORT OF ANALYSIS

Customer ID	Gold Hill	Gold Hill 2	Independence Float	Independence Lodge
Lab No.	6629	6630	6631	6632
Gold oz/ton	<0.01	<0.01	--	--
Platinum oz/ton	--	--	<0.01	<0.01


Gene F. Hayes
Laboratory Director



WYOMING ANALYTICAL LABORATORIES, INC.

Box 638 • 605 South Adams

(307) 742-7995

LARAMIE, WYOMING 82070

Dan Hausel
Wyoming Geological Survey
Box 3008 University Station
Laramie, WY 82071

Request No.: 1600-063
Date : October 28, 1983

REPORT OF ANALYSIS

Lab No.	Customer ID	Gold	Platinum
A0992	8/12/83 Independence Mine ID-1 oz/ton	0.23	<0.01
A0993	8/12/83 Independence Mine ID-2 oz/ton	0.08	<0.01
A0994	8/12/83 Independence Mine ID-3 oz/ton	0.15	<0.01
A0995	8/12/83 Independence Mine ID-4 oz/ton	<0.01	<0.01
A0996	8/12/83 Independence Mine ID-5 oz/ton	<0.01	<0.01
A0997	8/12/83 Independence Mine ID-6 oz/ton	<0.01	<0.01
A0998	8/12/83 Independence Mine ID-7 oz/ton	<0.01	<0.01
A0999	8/12/83 Independence Mine ID-8 oz/ton	<0.01	<0.01
A1000	8/12/83 Independence Mine ID-9 oz/ton	0.82	<0.01
A1001	8/12/83 Independence Mine ID-10 oz/ton	<0.01	<0.01
A1002	8/12/83 Independence Mine ID-11 oz/ton	<0.01	<0.01
A1003	8/12/83 Independence Mine ID-12 oz/ton	<0.01	<0.01
A1004	8/12/83 Independence Mine ID-13 oz/ton	<0.01	<0.01
A1005	8/12/83 Independence Mine ID-14 oz/ton	<0.01	<0.01
A1006	8/12/83 Independence Mine ID-15 oz/ton	<0.01	<0.01

Sonja G. Ringen
Chemist

July 24, 1981

Bill Rodgers
915 Ord Street
Laramie, WY 82070

Dear Bill:

I've enclosed a copy of WAL's assay report on two of the arsenopyrite-bearing samples that we collected from the Independence. As you can see we did not find the mineralized vein that you obtained the 0.5 ounces/ton platinum from. Unfortunately, these poor assays will require us to place the Independence Mine within our low priority projects and I'm not sure when we will be able to examine the property.

The differences in platinum assays are difficult to explain, especially when the samples had the appearance of coming from the same vein.

Sincerely,

W. Dan Hausel
Deputy Director/Minerals Geologist

WDH:eb
Enclosure

COLORADO ANALYTICAL LABORATORY

ANALYSIS REPORT

40 South First Avenue
 Brighton, Colorado 80601

Phone 659-2313

REPORT TO BENNEDA MINING CO., INC.
4765 Milwaukee St., Denver, Colo. 80216
 BILL TO _____

LAB NO. I-6517A
 DATE RCVD. 1-6-70
 COMPLETED 1-14-70
 SPECIAL SERVICE _____

ANALYSIS REQUESTED:

Kentucky Derby | Spectrographic Analysis

CERTIFICATE OF ANALYSIS.

Qualitative-semiquantitative emission spectrochemical analysis:

<u>Element Found</u>	<u>Percent (Estimate Only)</u>
Iron	Major*
Silicon	10.0
Sodium	5.0
Calcium	2.0
Aluminum	1.0
Magnesium	0.5
Titanium	0.3
Boron	0.1
Manganese	0.05
Chromium	0.05
Barium	0.05
Nickel	0.05
Lead	0.05
Copper	0.0005
Vanadium	0.001

* Concentration above 10%.

Elements not reported were not detected.

Dean Lansing
 ANALYST

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 CHARGES:

TOTAL DUE

SEPARATE BILL WILL BE RENDERED PAYABLE 10TH PROXIMO

**COLORADO ANALYTICAL LABORATORY
ANALYSIS REPORT**

240 South First Avenue
Brighton, Colorado 80601

Phone 657-2317

REPORT TO BENNEDE MINING CO., INC.
4765 Milwaukee St., Denver, Colo. 80216

LAB NO 1-6261

BILL TO PAID

DATE RECEIVED

10-24-69

SPECIAL SERVICE

ANALYSIS REQUESTED

Placer Sand Au, Ag, Ir, Pt, Pd
Taken directly below the Independence Mine

CERTIFICATE OF ANALYSIS

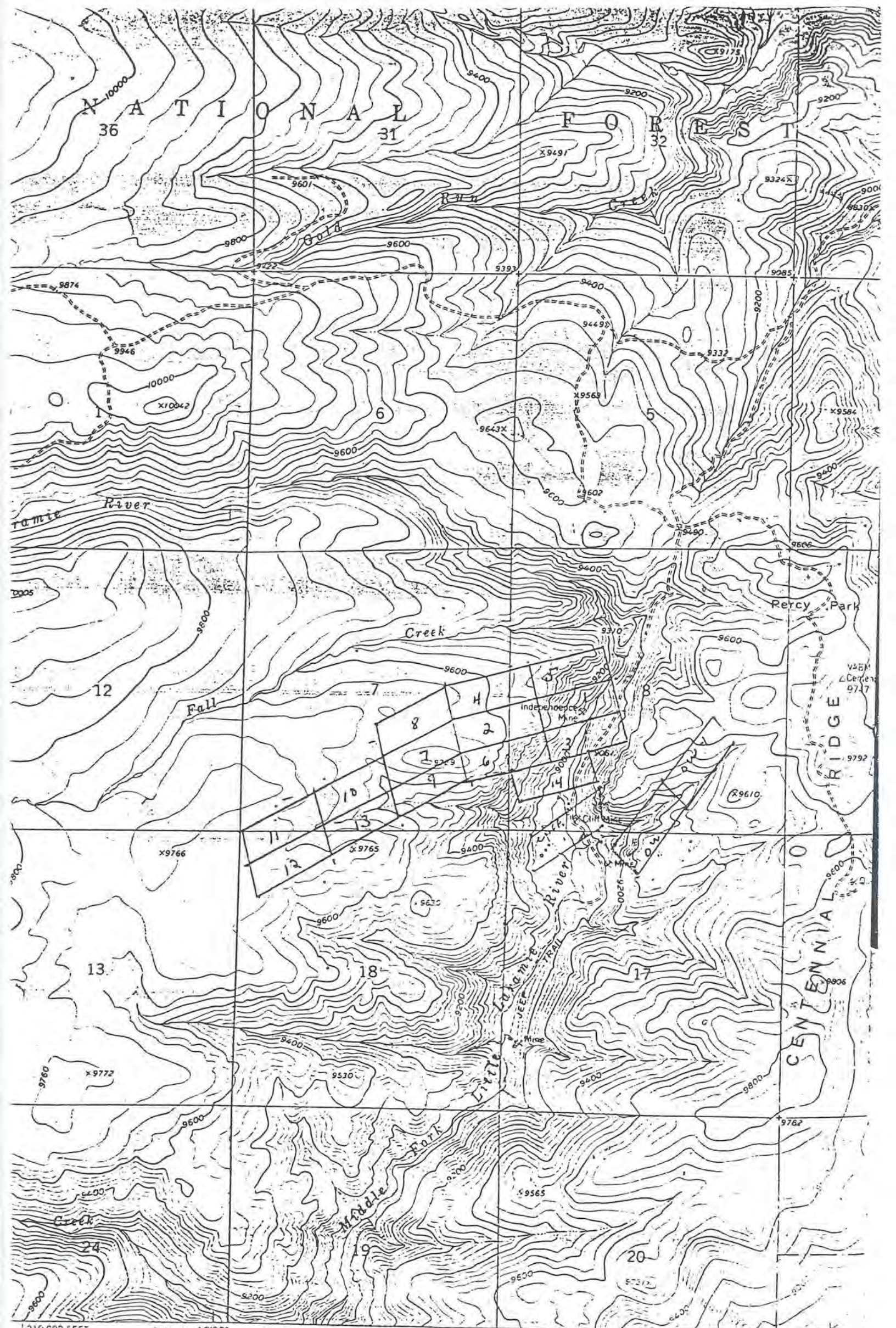
	<u>Oz/Ton</u>
Gold	1.3
Silver	LT .1
Platinum	.006
Palladium	LT .005
Iridium	LT .005

LT - less than

THIS REPORT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF THE ANALYST

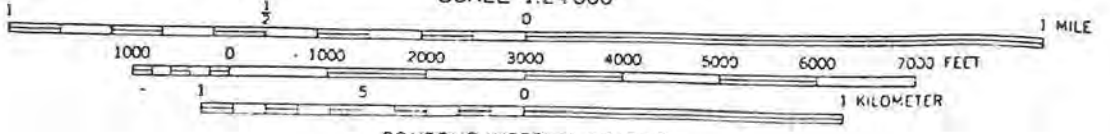
Au & Ag	\$ 4.50
Pd	10.00
Pt	4.00
Ir	15.00

. (PAID)
\$33.50



121000 FEET R. 79 W. 1230' R. 78 W. 400 1 ALBANY 4766 11 NW 401 402 10

SCALE 1:24 000



CONTOUR INTERVAL 40 FEET

