

Geological Survey of Wyoming Mineral Report 90-2

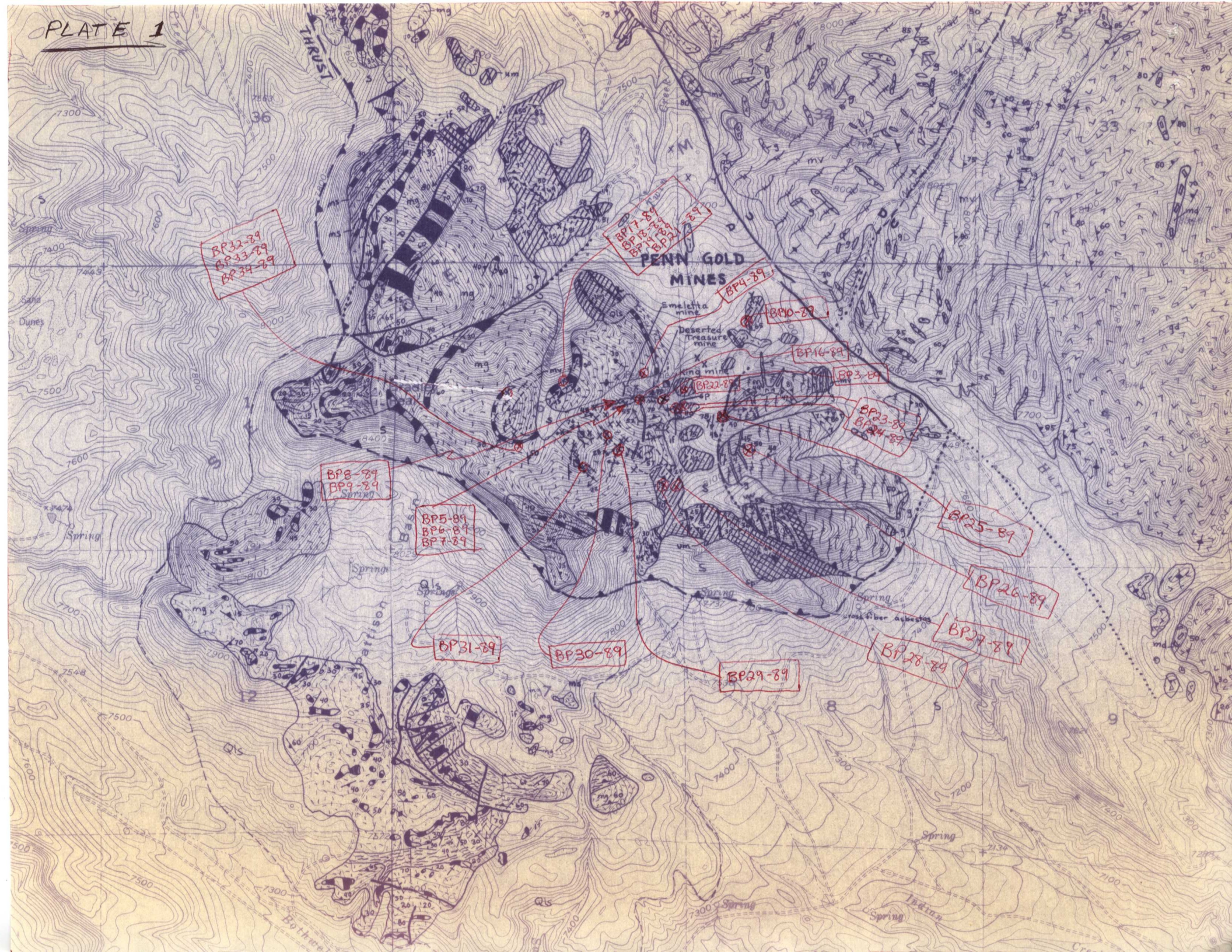
**Au, Ag, Cu, Zn Pb, Cr, and Ni anomalies from
rock samples from Bradley Peak, Seminoe Mountains**

by

W. Dan Hausel
1990

The Metals and Precious Stones Division of the Wyoming Geological Survey is currently examining and mapping the mineral resources and geology of the Seminoe Mountains greenstone belt. Samples are being collected to study gold mineralization and content of veins, and stockworks, and to study nickel and chromium anomalies associated with rocks of komatiite affinity.

The Bradley Peak area consists of amphibolite facies Archean metatholeiites (basalt, gabbros) that have been affected by chlorite-quartz-calcite-sulfide alteration. These metatholeiites are flanked by a thick unit of spinifex-textured basaltic komatiites, and peridotitic komatiites. Table 1 has a description of the samples and Plate 1 shows the samples locations.



BP32-89
BP33-89
BP34-89

BP17-89
BP18-89
BP19-89
BP20-89

BP4-89

BP10-89

BP16-89

BP3-89

BP22-89

BP23-89
BP24-89

BP8-89
BP9-89

BP5-89
BP6-89
BP7-89

BP25-89

BP26-89

BP27-89

BP31-89

BP30-89

BP28-89

BP29-89

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TABLE 1

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LABORATORY REPORT

Client Sample No.: as listed GSW Lab No.: 881205

Client: Dan Hausel Sample Description:

Analyses Requested: Au, Ag, Cu

Methods & Results:

Aqua regia digest, Au extracted into MIBK, AAS

Sample	Au, ppm	Ag, ppm	Cu, %
BP 2-88	28.	18.	0.39
BP 3-88	20.	18.	0.38
BP 4-88	0.87	--	0.058

milky quartz w/ sulfides & limonite boxworks from King mine dump
milky quartz w/ sulfides from Deserted Treasure mine dump
vein with bornite - chalcocite - pyrite from King dump

Sample No.	Au, ppm	Ag, ppm	Cu, ppm	Ni, ppm	Co, ppm	Cr, ppm	Zn, ppm	Pb, ppm
BP 5-89	4.6	5.2	1200.				22.	54.
BP 6-89	12.	55.	37500.				250.	25.
BP 7-89	9.8	12.	8100.				85.	10.
BP 8-89	2.2	3.5	1100.	2.4	9.5	31.	28.	5.4
BP 9-89	0.12	nd	930.	74.	40.	160.	120.	3.0
BP 11-89	nd	nd	42.	59.	19.	26.		12.
BP 12-89	nd	nd	110.	32.	18.	130.		9.3
BP 16-89	0.34	nd	150.					7.2
BP 17-89	nd	nd	88.					220.
BP 18-89	nd	nd	420.				2820.	170.
BP 19-89	nd	nd	27.					30.
BP 21-89	nd	nd	51.					11.
BP 29-89	8.8	6.8	3700.				120.	23.
BP 30-89	11.	9.3	9400.				480.	75.
BP 31-89	2.2	26.	16100.				110.	11.
BP 32-89	nd	nd	200.				160.	5.2
BP 33-89	nd	3.3	280.				43000.	3890.
BP 34-89	0.05	8.1	2800.				25000.	2180.

Quartz from fold closure in pit south of Deserted Treasure
Cupriferous - limonite - stained fracture. This is subsidiary fracture to fold.
Limonite zone in wallrock between samples BPS and BP6-89.
Stockwork sample collected south of Deserted Treasure
Stockwork (mixed veinlet & wallrock).
Silicified gossan in Bradley Peak ultramafics.
Silicified gossan in BP ultramafics
Quartz vein (crosscutting) in banded iron formation.
BIF with massive carbonate.
BIF with quartz - carbonate breccia.
BIF with abundant carbonate + limonite + pseudomorphs after pyrite.
BIF with carbonate containing pyrite cubes.
Selected sample of quartz vein w/ pyrite & copper stains from small adit dump.
Quartz with pyrite & minor malachite. Quartz consists of two quartz generations.
Quartz with chalcocite, covellite & pyrite from pit south of decline.
BIF from pit at gabbro - BIF contact.
Banded quartz - chert from same pit.
Boxwork limonite & copper - stained chips from same pit.

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

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

Sample descriptions

- BP3-89, chloritized metadiabase (for whole rock)
BP4-89, BIF with limonite boxwork on one fracture surface.
BP10-89, Metabasalt collected along Penn mine road east of mines (whole rock).
BP13-89, Non-spinifex amphibolite collected near spinifex amphibolite (whole rock).
BP14-89, Spinifex-texture amphibolite (whole rock).
BP15-89, Spinifex-textured amphibolite (whole rock).
BP22-89, massive, non-magnetic serpentinite (whole rock).
BP23-89, Metaperidotite (?) (whole rock).
BP24-89, Cumulate metaperidotite (?) (whole rock).
BP25-89, Serpentinized chlorite schist.
BP26-89, Fine-grained hornfelsic amphibolite.
BP27-89, Spinifex tremolite-actinolite schist.
BP28-89, Spinifex-textured amphibolite

W

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 30-NOV-89

REPORT: V89-32804.0

PROJECT: NONE GIVEN

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SAMPLE NUMBER	ELEMENT UNITS	Tb PPM	Te PPM	Th PPM	U PPM	W PPM	Yb PPM	Zn PPM	Zr PPM
R2 ART1-89	[Archie mine]	2	<20	15.0	5.8	55	<5	<200	<500
R2 ART2-89		3	<20	18.0	8.8	61	<5	300	<500
R2 BP3-89		<1	<20	<0.5	<0.5	<2	<5	<200	<500
R2 BP4-89		<1	<20	0.8	1.3	<2	<5	430	<500
R2 BP10-89		<1	<20	<0.5	<0.5	<2	<5	<200	<500
R2 BP13-89	<1	<20	<0.5	<0.5	<2	<5	<200	<500	
R2 BP14-89	<1	<20	<0.5	<0.5	<2	<5	210	<500	
R2 BP15-89	<1	<20	0.5	<0.5	<2	<5	<200	<500	
R2 BP22-89	<1	<20	<0.5	<0.5	<2	<5	<200	<500	
R2 BP23-89	<1	<20	<0.5	<0.5	<2	<5	<200	<500	
R2 BP24-89	<1	<20	<0.5	<0.5	<2	<5	<200	<500	
R2 BP25-89	<1	<20	<0.5	<0.5	<2	<5	<200	<500	
R2 BP26-89	<1	<20	<0.5	<0.5	<2	<5	<200	<500	
R2 BP27-89	<1	<20	0.7	<0.5	<2	<5	230	<500	
R2 BP28-89	<1	<20	<0.5	<0.5	<2	<5	<200	<500	
R2 BSE1-89	[Birdseye]	<1	<20	0.5	0.7	<2	<5	<200	<500
R2 BSE2-89		<1	<20	0.5	0.7	<2	<5	<200	<500
R2 CH3-89		<1	<20	0.5	0.7	<2	<5	<200	<500
R2 SP2-89		<1	<20	0.5	0.7	<2	<5	<200	<500
R2 SP3-89		<1	<20	0.5	0.7	<2	<5	<200	<500
R2 SP4-89	<1	<20	0.5	0.7	<2	<5	<200	<500	
R2 SP5-89	<1	<20	0.5	0.7	<2	<5	<200	<500	
R2 TW1-89	[Treadwell]	3	<20	25.0	9.0	33	<5	300	<500
R2 TW2-89		1	<20	25.0	4.0	33	<5	<200	<500
R2 TW4-89		<1	<100	17.0	8.9	100	<5	740	<1300
R2 TW6-89	[Treadwell]	<1	<20	22.0	6.7	247	7	540	<500
R2 TW8-89		2	<20	21.0	12.0	140	<5	<200	<500
R2 TW9-89		3	<20	51.9	14.0	223	7	850	<500
R2 TW10-89		<1	<75	19.0	7.7	150	10	530	<1100
P4 DH1-89	[Dutchess mine]	<1	<20	0.5	0.7	<2	<5	<200	<500
P4 DH2-89		<1	<20	0.5	0.7	<2	<5	<200	<500
P4 FL1-89	[Florence mine]	<1	<20	0.5	0.7	<2	<5	<200	<500
P4 FL2-89		<1	<20	0.5	0.7	<2	<5	<200	<500

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LABORATORY REPORT

Client Sample No.: as listed GSW Lab No.: 890801

Client: Dan Hausel Sample Description:
misc. ores

Analyses Requested: Au, Ag, Cu, Zn

Methods & Results:

Digest in aqua regia, extract Au into MIBK, AAS:

	<u>Au, ppm</u>	<u>Ag, ppm</u>	<u>Cu, %</u>	<u>Zn, ppm</u>	
MP 1-88	nd	nd	8.6	11.	- Cupriferos gossan from Charter Oak, McCann Pass
MP 2-88	nd	nd	1.4	50.	- Limonitic gossan - McCann Pass Charter Oak
BP 2-89	1.2	3.6			- Select sample of cupriferos limonitic gtz from upper Penn mine dump.
BP 3-89	6.8	4.2			Fold closure limonitic gtz vein.

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

Analyst: Jay Roberts

Date: September 26, 1989

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

GSW Lab No.: 890801