4280 0098

CORRELATION COEFFICIENTS

	Seven Troughs, NV		Hishikari, Japan
	Au	Gold	Au
Ag	.992	Silver	.998
Cu	.984	Copper	.989
Pb	.897	Lead	.984
Tl	.975	Thallium	na
Zn	.975	Zinc	.987
Cd	.979	Cadmium	.990
Se	.944	Selenium	.947
Te	.951	Tellurium	.862
Hg	-.099	Mercury	-.246
As	-.232	Arsenic	-.164
Sb	.986	Antimony	-.104
Mo	-.073	Molybdenum	na
Bi	.140	Bismuth	-.119
Ga	-.317	Gallium	.364
Mn	na		.899
Ti	na		.316
Co	na		.406
Ni	na		-.140

Non-logarithmetic correlation coefficients for gold bearing rock samples from the Seven Troughs mining district are based on ten selected, unoxidized vein samples collected by B. Miller in May, 1991, and analysed by fire assay and ICP methods by GSI of Reno, Nevada (Job #: MIA-1S9331). Correlation coefficients were calculated by GSI.

Non-logarithmetic correlation coefficients for gold bearing rock samples from the Hishikari deposit are based on analyses of ten ore samples published by Izawa et al. (1990). Correlation coefficients were calculated by C. Clifton of Reno, Nevada

na=not available

	Au	Ag	Cu	Pb	Zn	Cd	Ni	Co	Mn	As	Sb	Se	Te	Bi	Ga	Ti	Hg
1 Au	1.000	—															
2 Ag	.998	1.000	—														
3 Cu	.989	.995	1.000	—													
4 Pb	.984	.997	.997	1.000	—												
5 Zn	.987	.994	.998	.995	1.000	—											
6 Cd	.990	.996	.999	.995	.998	1.000	—										
7 Ni	-.140	-.117	-.064	-.077	-.106	-.094	1.000	—									
8 Co	.406	.426	.471	.467	.457	.443	.697	1.000	—								
9 Mn	.889	.903	.891	.881	.884	.896	.032	.531	1.000	—							
10 As	-.164	-.178	-.163	-.179	-.189	-.171	.006	-.035	-.064	1.000	—						
11 Sb	-.104	-.153	-.210	-.145	-.197	-.208	-.457	-.399	-.303	.026	1.000	—					
12 Se	.947	.933	.900	.919	.897	.904	-.138	.393	.918	-.150	.059	1.000	—				
13 Te	.862	.845	.829	.848	.813	.822	-.175	.218	.661	.013	.002	.785	1.000	—			
14 Bi	-.119	-.097	-.031	-.029	-.043	-.069	.790	.790	-.090	-.043	-.246	-.175	-.165	1.000	—		
15 Ga	.364	.336	.271	.307	.316	.294	-.715	-.205	.304	-.164	.573	.495	.188	-.425	1.000	—	
16 Ti	.316	.290	.252	.278	.289	.264	-.655	-.054	.266	.243	.520	.403	.192	-.283	.833	1.000	—
17 Hg	-.246	-.254	-.221	-.236	-.241	-.233	-.056	-.131	-.283	.922	.081	-.317	-.012	.034	-.263	.176	1.000

Non-log.

Coefficients of Correlation

Hishikari Mine - Ore Samples

10 samples - published in Izawa et al. 1980

Calculations by C.G. Clifton

R. B. Hee 7-81

K+E 20 X 20 TO THE INCH 46 1240 KEUFFEL & ESSER CO.

TABLE 9

Chemical composition of ores from the Honko area of the Hishikari deposit

Vein:	RY-6	RY-1	RY-2	RY-2	HO-1	HO-2	HO-2	HO-3	ZU-1	ZU-1
Location:	100mL E28.4B	70mL E16.1B-W	70mL E29.5B2	70mL E27.3B-W	70mL W0.3B-W	70mL W4.0B-W	70mL W13B-E	70mL W14.8B-E	85mL W20.1B-W	85mL W10.5-E
Sample no.	HK-19	HK-17	HK-01	HK-03	HK-13	HK-15	Hk-05	HK-09	HK-07	HK-11
(wt.%)										
SiO_2	65.93	76.55	87.71	84.51	76.92	82.92	75.03	85.39	84.10	90.50
TiO_2	0.31	0.09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Al_2O_3	12.24	9.06	3.87	6.24	10.08	6.77	12.07	5.01	6.01	1.86
Fe_2O_3	1.02	0.38	0.17	0.43	0.20	0.20	0.17	0.33	0.22	0.16
FeO*	3.13	1.79	1.29	1.11	0.63	1.03	0.81	0.94	0.97	1.26
MgO	1.13	0.42	0.04	0.13	0.09	0.11	0.15	0.06	0.01	0.03
CaO	0.08	0.12	0.10	0.14	0.06	0.09	0.12	0.16	0.02	0.07
Na_2O	0.23	0.32	0.05	0.05	0.35	0.30	0.25	0.19	0.02	0.34
K_2O	10.05	7.79	3.06	4.88	9.43	5.28	10.82	2.80	5.46	1.00
P_2O_5	0.14	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
S	1.73	0.37	0.22	0.36	0.04	0.18	0.14	0.09	0.04	0.11
CO_2	<0.1	<0.1	0.35	<0.1	<0.1	<0.1	0.17	<0.1	0.17	<0.1
H_2O+	1.17	0.62	0.87	1.02	0.55	0.51	0.61	0.74	0.92	0.72
H_2O-	0.12	0.14	0.12	0.35	0.15	0.20	0.26	0.27	0.34	0.14
Total	97.38	97.76	97.87	99.35	98.62	97.71	100.62	96.10	98.30	96.31
(ppm)										
Au	3944.9	655.6	38.9	164.2	132.6	745.2	470.0	64.5	104.1	35.8
Ag	10559.4	1378.2	31.7	94.3	166.2	1332.5	824.3	41.1	80.4	17.0
Cu	9500	800	490	265	12	680	500	80	108	33
Pb	970	105	77	37	25	145	104	18	19	5
Zn	800	71	42	16	52	53	65	5	10	10
Cd	35.0	3.3	0.6	0.6	0.4	2.1	2.0	0.4	0.5	0.4
Ni	7	8	11	7	5	7	6	8	7	8
Co	7	5	10	2	1	1	1	1	1	1
Mn	710	420	90	75	51	78	60	81	73	91
As	17	100	32	270	9	30	36	23	15	38
Sb	13	57	14.8	81	70	200	280	26	33	10.6
Se	320	142	1.0	2.0	2.0	102	84	0.5	3.0	<0.5
Te	8.75	0.45	0.10	2.75	0.50	5.50	0.05	0.25	0.80	0.55
Bi	0.6	0.1	6.8	0.7	0.1	0.1	0.3	0.1	0.1	0.1
Ga	9	9	1	4	11	7	12	5	3	2
Ti	5.3	5.0	2.1	5.3	6.1	3.4	6.8	1.8	3.2	0.8
Hg	-	0.11	0.32	1.90	0.16	0.19	0.37	0.12	0.31	0.27

FeO* = FeO + Fe (sulfide)

1 ppm Sn and 5 ppm Ge were detected for all samples; In < 2 except for HK-19 (8 ppm), Ba < 100 ppm, Pt < 50 ppb, Pd < 10 ppb and Rh < 20 ppb.

RY = Ryosen; HO = Hosen; ZU = Zuisen.

HK-19 = ginguro-bearing veinlet; HK-17 = ginguro-bearing white quartz vein; HK-01 = white to gray banded quartz vein; HK-03 = irregularly banded quartz vein; HK-13 = white banded quartz-adularia vein; HK-15 = ginguro-bearing gray banded quartz vein; HK-05 = banded quartz-adularia vein; HK-09 = white quartz-clay vein; HK-07 = white compact quartz vein; HK-11 = white quartz vein with black bands.

GEOCHEMICAL SERVICES INC.

GEOCHEMICAL ANALYSIS REPORT

MR. BRUCE MILLER

UNIVARIATE STATISTICS N= 10

VARIABLE	MEAN	STD DEV	VARIANCE	MINIMUM	MAXIMUM
1 Ag	577.628000	1532.645675	.2349000+07	1.510000	4893.000000
2 As	363.929000	594.222842	.353101D+06	6.390000	1808.000000
3 Au	2.337400	5.973329	.356807D+02	-.014000	19.299999
4 Cu	218.480000	519.464703	.269844D+06	12.600000	1669.000000
5 Hg	3.800000	9.797861	.959981D+02	.104000	31.600000
6 Mo	19.050000	28.231371	.797010D+03	3.340000	98.800003
7 Pb	44.611000	79.666855	.634681D+04	3.980000	246.000000
8 Sb	128.108000	297.234729	.883485D+05	1.770000	963.000000
9 Tl	.717500	.688851	.474515D+00	.345000	2.640000
10 Zn	88.305000	158.162474	.250154D+05	6.850000	523.000000
11 Bi	.262600	.237768	.565338D-01	.103000	.906000
12 Cd	.766400	1.658384	.275024D+01	.029000	5.360000
13 Ga	1.177900	.469442	.220375D+00	.733000	2.150000
14 Se	28.754500	61.368011	.376603D+04	.088000	192.000000
15 Te	1.943700	4.489710	.201575D+02	-.021000	14.000000

Correlation Coefficients for 10 vein samples - unoxidized - from dumps ~~in the~~ the Seven Troughs District, NV collected by B. Miller 1991

CORRELATION COEFFICIENTS

	Ag	As	Au	Cu	Hg	Mo	Pb	Sb	Tl	Zn	Bi	Cd	Ga	Se	Te
Ag	1.0000														
As	-.2426	1.0000													
Au	.9916	-.2324	1.0000												
Cu	.9987	-.2420	.9843	1.0000											
Hg	-.0902	.8397	-.0993	-.0859	1.0000										
Mo	-.1122	-.1349	-.0730	-.1265	-.1094	1.0000									
Pb	.9448	-.2581	.8975	.9594	-.0861	-.1317	1.0000								
Sb	.9942	-.1448	.9859	.9930	.0153	-.1317	.9364	1.0000							
Tl	.9750	-.1647	.9755	.9700	.0048	-.1357	.8972	.9799	1.0000						
Zn	.9829	-.2874	.9739	.9842	-.1215	-.1682	.9364	.9728	.9537	1.0000					
Bi	.1075	-.1260	.1396	.0960	-.0617	.9676	.0946	.0936	.0920	.0831	1.0000				
Cd	.9948	-.2670	.9793	.9973	-.1062	-.1411	.9617	.9864	.9645	.9931	.0837	1.0000			
Ga	-.3083	.1355	-.3170	-.2982	-.3585	-.1813	-.2477	-.3340	-.3734	-.2949	-.2557	-.2924	1.0000		
Se	.9762	-.2885	.9445	.9852	-.1227	-.1321	.9889	.9648	.9274	.9758	.0917	.9893	-.2600	1.0000	
Te	.9817	-.2763	.9512	.9896	-.1176	-.1309	.9885	.9713	.9375	.9735	.0934	.9909	-.2593	.9988	1.0000

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GSI GEOCHEMICAL SERVICES INC.

GEOCHEMICAL ANALYSIS REPORT

JOB #: MIA-1S9331

Sample ID	#	Ag ppm ICP	As ppm ICP	Au ppm FA	Cu ppm ICP	Hg ppm ICP	Mo ppm ICP	Pb ppm ICP	Sb ppm ICP	Tl ppm ICP	Zn ppm ICP	Bi ppm ICP	Cd ppm ICP	Ga ppm ICP	Se ppm ICP	Te ppm ICP
TCD-1 } Tyler dump	1	4.97	315.	.295	17.9	1.03	16.9	14.3	9.14	<.908	29.3	.269	.194	1.25	<.908	<.454
TCD-2 } Tyler dump	2	15.4	1808.	<.005	35.4	31.6	11.1	17.2	108.	<.870	17.3	.222	.091	<.870	1.32	<.435
UET-1 upper Eagle Trench	3	53.2	80.5	1.01	18.8	.347	98.8	11.2	8.02	<.918	14.3	.906	<.092	<.918	4.67	<.459
UWD-1 Wihuja dump	4	66.3	32.1	.924	43.6	<.145	3.34	5.83	13.5	<1.45	113.	<.290	.498	<1.45	13.6	<.726
FFVD-1 } Fairview dump	5	>4.20K	6.39	19.3	1669.	1.83	10.7	246.	963.	2.64	523.	.335	5.36	<.839	>83.9	14.0
FFVD-2 } Fairview dump	6	727.	57.1	.898	340.	.374	11.1	125.	139.	<.856	119.	.230	1.26	1.45	71.3	4.80
FFVD-3 } Fairview dump	7	8.89	228.	.068	20.1	.161	11.2	5.49	8.55	<.856	19.5	<.171	<.086	1.70	1.16	<.428
DQD-1 } Dixie Queen dump	8	1.51	14.7	.017	12.6	.140	7.20	3.98	1.77	<.888	6.85	<.178	<.089	.889	<.888	<.444
DQD-2 } Dixie Queen dump	9	2.38	1033.	.677	14.0	.104	11.2	4.71	19.5	<.856	16.2	<.171	<.086	2.15	.859	<.428
DQD-3 } Dixie Queen dump	10	3.63	64.5	.199	13.4	2.23	8.96	12.4	10.6	<.839	24.6	<.168	<.084	<.839	1.97	<.420

Seven Troughs, NV
Unoxidized vein material from dumps collected by Miller

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GSI - ICP (Fire Au)

				Ag	As	Au	Cu	Hg	Mo	Pb	Sb	Tl	Zn	Bi	Cd	Ga	Se	Te	
WC	1		13	.914	28.4	.101	15.0	.094	14.8	1.46	1.37	<.856	9.55	<.171	<.086	<.856	<.856	<.428	Wildcat Mine
WC	2		14	1.37	48.7	.256	19.7	.442	16.5	1.99	5.44	<.874	13.0	<.175	<.087	<.874	<.874	<.437	Ferrel Dist.
WC	3		15	6.49	187.	2.22	21.3	3.73	21.8	7.90	32.7	<.888	32.4	<.178	<.089	<.888	1.29	<.444	
ST	1	Fairview dump	16	15.3	4.04	.462	24.7	<.085	18.4	2.65	1.44	<.852	14.5	<.170	<.085	<.852	3.48	.511	clear, coarse qtz-vein
ST	2	Fairview dump	17	12.2	4.12	.049	26.5	<.088	19.3	2.89	1.57	<.879	18.7	<.176	<.088	<.879	2.31	.468	coarse wht. vein calcite
ST	3	Fairview dump	18	53.3	115.	14.2	372.	.257	21.0	95.8	13.6	<.865	99.0	.287	.633	.890	8.25	9.63	banded porcelaneous qtz ex.
ST	4	Fairview dump	19	19.4	23.1	2.71	39.9	.324	14.7	4.24	3.83	<.893	15.5	<.179	.092	<.893	5.78	<.447	wht qtz - oxidized w. blk bands
ST	5	Outcrop	20	18.5	15.8	.304	10.0	3.51	3.12	1.56	.380	<.884	12.3	<.177	<.088	2.82	3.63	<.442	brown opal/chalcedony
ST	7	Signal Peak dump	21	>182.	16.1	<.005	24.1	4.24	11.1	8.11	23.5	1.44	21.4	.182	<.091	<.908	87.5	<.454	porcelaneous qtz w. Ag
ST	8	opal-chalcedony outcrop - above paleo-water table alt.	22	44.0	3.34	4.00	5.56	89.9	3.60	3.09	.429	<.884	5.26	<.177	<.088	1.01	5.84	<.442	partial oxidation

Hand Samples collected by Miller & Clifton