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GEOPHYSICAL AND GEOCHEMICAL REPORT

**REPORT ON MAGNETOMETER AND GEOCHEMICAL
SURVEY - COPPER COIN GROUP**

Grand Forks, 2 miles west of Greenwood, 49°11'8"SW

by H. H. Shear under supervision of
E. P. Chapman, Jr., P. Eng.

owner of claims & leases - H. H. Shear & J. M. McLean, Jr.

work done for - Silver Dome Mines Ltd.

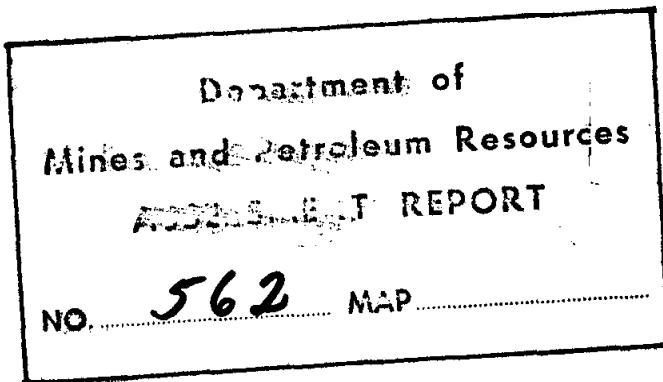
Date of work: August 24, 1963 - November 15, 1963

82E/2E

April 1, 1964

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INTRODUCTION

The purpose of this report is to describe a magnetometer survey and geochemical survey undertaken on a group of mineral claims and leases in the Greenwood Mining Division. In this report this group of claims and leases shall be referred to as the Copper Coin Group. This work was carried out intermittently from August 24, 1963 to November 19, 1963. The claims and leases involved are:

Copper Coin	I - 6	- May
Little Dallas	I - 7	- May
Canada Dry	I - 8	Aug 9
Houston Fraction :	M-127 and M-128	Aug.

PROPERTY DESCRIPTION

The Copper Coin Group is situated on the headwaters and drainage area of Buckhorn Creek and the extreme northeastern headwaters of Jolly Jack (Kortz) Creek. The center of the group lies 2 miles west of Greenwood, B. C., at the southwestern edge of the old Deadwood Camp.

Relief is moderate with the lowest elevation on the property near 3000 feet and the high near 4500 feet.

Timber on the property consists principally of second growth fir and tamarack and due to recent logging is too small for general use.

The climate is typical of Southern British Columbia with warm summers and cold winters. Snowfall at the property varies up to 4 to 5 feet.

PROPERTY HISTORY

The Deadwood Camp is one of the older mining camps in British Columbia.

It is principally a low grade copper-gold camp and is situated in the larger Boundary District. The Boundary District's production has also been mainly low grade copper-gold ore.

The first prospectors entered the area in the 1880's and there are claims still held that were staked prior to 1892.

The old crown grants comprising the mineral leases included in the Copper Coin Group were all originally staked near the turn of the century. These leases, M-127 and M-128, were acquired March 22, 1963. Claims held by location were recorded from May, 1963 through August, 1963.

GEOLOGIC SETTING

The rocks of the Copper Coin Property belong mainly to the Triassic Anarchist group. The western edge of the property is overlain by the early Tertiary Mid-way Volcanics. Jurassic granodiorite intrusions occur nearby to the north and east.

The principal rock types occurring on the property are: an altered limy green-stone commonly carrying minute amounts of disseminated chalcopyrite, a dark blackish-green gabbroic rock type, porphyritic dike rock, quartzite, various volcanics, and granitized rock.

PURPOSE AND NATURE OF WORK

The work on the Copper Coin Group covered in this report was done on the basis of a program recommended by Chapman, Wood & Cresswell Ltd. in a report dated June 7, 1963. This report recommended that a magnetometer survey and soil sample survey be conducted in order to attempt to delineate possible targets for bulldozer trenching and diamond drilling.

In accordance with the above recommendation, 37,700 feet of picket lines were cut, 194 soil samples taken and analysed, and 378 stations covered by the magnetometer.

A baseline was cut 5700 feet long, lying N72E. Stations were marked at 100 foot intervals. Station 0 lies at its center with stations cut to 29W to the west and 28E to the east. Crosslines, except for OS, lie on a bearing of N23W-S23E because of an error due to a local erratic magnetic deflection of 5° on the base line. Line OS lies at right angles to the base line or S18E. Crosslines were cut 600 feet apart with stations marked every 100 feet. All stations are marked with orange flagging and pickets, with the station numbers marked on the pickets. Four crosslines were run to the north 3500 feet long from baseline stations 0, 8W, 16W and 24W. Four crosslines were run to the south 4500 feet long from baseline stations 8W, 0, 8E, and 16E.

The picket lines were worked on from August 24, 1963 through October 7, 1963, and soil samples were taken concurrently. The magnetometer survey was run by H. H. Shear from October 17 through October 19, 1963. Magnetometer calculations were completed by October 27, 1963 by H. H. Shear. Soil sample analysis was done by V. Fast under the direction of Chapman, Wood & Griswold Ltd., and was completed by November 15, 1963.

MAGNETOMETER SURVEY

The instrument used was a McPhar Geophysics M-500 electronic, flux gate type magnetometer. This instrument permits very rapid readings with accuracies in the range of \pm 100 gammas without orientation and \pm 20 gammas when oriented. The magnetometer was used oriented.

Magnetometer base stations were established by traversing along the base line and looping or checking back within 30 minutes. Crosslines were traversed with check backs within 1 hour. An arbitrary value of 2000 gammes was added to all relative gamma values to eliminate negative readings. The data were recorded and calculated as follows:

Station	Roading	Time	D1 Corr.	Correct Reading	Difference	R. V. G. +2000
BL28E	-10	9:48	0	-10	-10	1990
BL27E	-115	:50	2	-118	-118	1882
BL26E	-325	:52	4	-330	-330	1670
BL25E	-245	:54	6	-253	-253	1747
BL24E	-295	:55	7	-304	-304	1695
BL23E	-280	:57	9	-292	-292	1703
BL22E	-310	:59	11	-328	-328	1675
BL21E	-350	10:01	13	-368	-368	1632
BL20E	+115	:02	14	-134	-134	1866
BL19E	0	:04	16	-22	-22	1978
BL18E	-255	:06	18	-279	-279	1721
BL17E	-300	:07	19	-323	-323	1675
BL16E	-255	:10	22	-315	-315	1685
BL28E	+30	:18	30	-10	-10	1990
<hr/>						
BL16E	-265	:31	0	-265	0	1685
BL15E	-275	:33	2	-275	-10	1675
BL14E	-295	:36	5	-296	+59	1746
BL13E	-155	:38	7	-156	+109	1794
BL12E	-295	:40	9	-298	-33	1652
BL11E	-415	:41	10	-417	-152	1533
BL10E	-390	:43	12	-392	-127	1588
BL 9E	-525	:46	15	-528	-263	1622
BL 8E	-420	:48	17	-423	-158	1527
BL16E	-260	:55	24	-265	0	1685
<hr/>						
BL 9E	-400	11:06	0	-400	0	1527
BL 7E	-470	:09	3	-467	-67	1460
BL 6E	-295	:10	4	-291	+109	1636
BL 5E	-25	:12	6	-20	+380	1907
BL 4E	+35	:13	7	+41	+441	1968
BL 3E	-20	:15	9	+7	+387	1914
BL 2E	-255	:16	10	+8	+153	1680
DL 1E	-790	:18	12	+9	-381	1146
BL 0	+3775	:21	15	+3788	+4188	5715
BL 1W	+1250	:22	16	+1264	+1664	3191
BL 2W	+110	:24	18	+16	+526	2033
BL 3W	-295	:26	20	+18	+123	1650
BL 8E	-425	:34	28	+25	-473	1527
<hr/>						
BL 3W	-295	11:46	0	-295	0	1650
BL 4W	-345	:48	2	-345	-50	1600
BL 5W	-165	:49	3	-166	+129	1779
BL 6W	+20	:51	5	+19	+314	1964
BL 7W	+295	:54	6	+296	+589	2239
BL 8W	+405	:55	9	+403	+698	2348
BL 9W	+225	:57	11	+223	+518	2168
BL10W	+190	:58	12	+188	+483	2133
BL11W	+330	:59	13	+328	+623	2273

Station	Reading	Time	Di Corr.	Correct Reading	Difference	R. V. G. +2060
BL12W	+405	12:00 16	-3	+402	+697	+347
BL13W	+320	:02 16	-3	+317	+612	+262
BL14W	+290	:04 18	-3	+287	+982	+232
BL 3W	-290	:13 27	-5	-295	0	-350
BL14W	+185	12:33 0	0	+185	0	+232
BL15W	+ 10	:36 3	-4	+ 6	-179	+ 53
BL16W	- 5	:39 6	-3	- 13	-198	+ 34
BL14W	+200	:44 11	-13	+186	0	+232
BL16W	- 35	1:01 0	0	- 35	0	+ 34
BL17W	- 95	:04 3	+2	- 93	- 56	- 24
BL18W	- 93	:06 0	+2	- 93	- 58	- 24
BL19W	-100	:06 7	+3	-147	-118	- 70
BL20W	-168	:09 8	+4	-161	-126	- 92
BL21W	-335	:10 9	+4	-331	-296	-262
BL22W	-330	:12 11	+6	-324	-289	-235
BL23W	-365	:13 12	+6	-359	-320	-290
BL20W	-445	:15 14	+7	-438	-403	-369
BL16W	- 85	:23 20	+10	- 35	0	+ 34
BL25W	-470	:31 26	-5	-475	-35	-400
BL26W	-555	:33 30	-5	-570	-123	-494
BL27W	-945	:35 20	-6	-951	-906	-873
BL28W	-690	:30 33	-7	-697	-252	-681
BL29W	-705	:42 27	-8	-713	-266	-697
BL26W	-435	:42 34	-10	-445	0	-369
24W-1N	-485	:51 2	-1	-486	+ 29	-349
26W-2N	-615	:54 3	-3	-618	+ 17	-338
26W-3N	-375	:56 7	-6	-379	+ 56	-313
26W-4N	-475	:58 8	-5	-680	- 65	-414
26W-5N	-990	:59 10	-5	-595	-160	-589
24W-6N	-620	2:00 11	-6	-626	-191	-560
24W-7N	-520	:02 13	-7	-527	- 92	-461
24W-8N	-645	:04 15	-8	-659	-218	-587
26W-0N	-700	:05 17	-9	-709	-270	-643
26W-10N	-925	:07 18	-10	-938	-100	-669
26W-11N	-820	:09 20	-11	-831	- 98	-665
24W-12N	-465	:11 22	-12	-477	- 42	-411
26W-13N	-460	:12 23	-12	-472	- 37	-406
26W-14N	-615	:14 25	-13	-628	- 7	-376
24W-15N	-765	:18 26	-14	-769	-334	-703
26W-16N	-865	:16 27	-15	-879	-446	-813
24W-17N	-1045	:18 29	-15	-1060	-628	-794
24W-18N	-585	:20 31	-16	-601	-166	-535
26W-19N	-20	:22 33	-17	-37	+398	+29
26W-20N	-90	:24 35	-16	-108	+387	-48
24W-21N	-75	:26 37	-19	-94	+361	-28
26W-22N	+30	:27 38	-19	+31	+446	+77
24W-23N	+370	:28 39	-20	+350	+785	+416
24W-24N	+330	:29 40	-21	+389	+744	+275
24W-25N	+630	:31 42	-22	+608	+1043	+674
BL14W	-405	2:45 56	-30	-635	0	-369

Station	Reading	Time	D1 Corr.	Correct Reading	Difference R. V. G.	R. V. G. +2000
BL16W	-35	2:39 0	0	-35	0	+34 2034
CL16W+IN	+235	3:01 2	0	+235	+270	+304 2304
2	+50	:03 4	-1	+49	+84	+118 2118
3	+45	:05 6	-1	+44	+79	+113 2113
4	+125	:06 7	-1	+124	+159	+193 2193
5	+20	:08 9	-2	+18	+53	+67 2067
6	-5	:10 11	-2	-7	+28	+62 2062
7	-120	:11 12	-2	-122	-97	-53 1947
8	0	:12 13	-2	-2	+33	+67 2067
9	+35	:13 14	-3	+12	+67	+101 2101
10	+35	:14 15	-3	+32	+67	+101 2101
11	-120	:15 16	-3	-123	-86	-94 1946
12	-210	:16 17	-3	-213	-176	-146 1856
13	-200	:17 18	-3	-203	-168	-134 1846
14	-220	:18 19	-6	-224	-189	-158 1845
15	-290	:20 21	-4	-254	-219	-185 1815
16	-265	:21 22	-4	-269	-234	-200 1800
17	-295	:22 23	-4	-299	-264	-230 1770
18	-365	:23 24	-4	-369	-334	-300 1700
19	-335	:24 25	-5	-340	-305	-371 1739
20	-315	:25 26	-5	-320	-285	-251 1749
21	-370	:26 27	-5	-375	-340	-306 1694
22	-405	:28 29	-5	-400	-375	-361 1659
23	-345	:29 30	-6	-351	-316	-282 1710
24	-453	:31 32	-6	-461	-426	-392 1608
25	-440	:33 34	-6	-446	-411	-377 1623
26	-440	:34 35	-6	-446	-411	-377 1623
27	-505	:36 37	-7	-512	-477	-443 1597
CL16W28N	-490	:37 38	-7	-497	-462	-428 1572
BL16W	-25	:38 34	-10	-35	0	+34 2004
CL16W28N	-445	4:18 0	0	-445	0	-428 1572
29N	-540	:20 2	+2	-538	-93	-521 1679
30	-475	:21 3	+3	-472	-27	-455 1646
31	-395	:23 5	+5	-390	+55	+373 1637
32	-560	:25 7	+7	-553	+108	+536 1664
33	-710	:27 9	+9	-701	-296	-684 1316
34	+115	:29 11	+10	+126	+320	+108 1092
35	+130	:31 13	+13	+143	+589	+160 8160
16W-28N	-465	4:40 22	+20	-445	0	-428 1572
24W-25N	+705	5:01 0	0	+705	0	+674 2674
26N	-740	:04 3	+7	-733	-1438	-764 1236
27	-1020	:06 5	+11	-1009	-1714	-1040 960
28	+1035	:08 7	+15	+1050	+345	+1019 3019
29	-1140	:10 9	+20	+1130	-1835	-1161 839
30	+295	:12 11	+25	+320	-385	+289 2289
31	-680	:14 13	+29	-691	-1356	-682 1310
32	+120	:16 15	+33	+153	-552	+122 2122
33	+935	:17 16	+35	+970	+269	+939 2939
34	+495	:19 18	+40	+535	-170	+504 2304
35	-305	:21 20	+45	-260	-965	-291 1709
24W-25N	+615	5:41 40	+90	+705	0	+674 2674

Station	Reading	Time	Dl	Correct Reading	Difference	R. V. G.	R. V. G. +2000
BLSW	+385	1:01 0		+385	0	+348	2348
CISW-1N	+155	:04 3	+1	+156	-229	-619	2119
2N	-59	:06 5	+1	-49	-436	-86	1914
3	-155	:08 7	+2	-153	-538	-190	1810
4	-260	:10 8	+2	-258	-643	-295	1705
5	-185	:11 10	+2	-183	-868	-220	1760
6	-245	:12 11	+2	-243	-628	-280	1720
7	-40	:14 13	+3	-42	-342	6	2006
8	-35	:15 14	+3	-32	-517	-169	1831
9	-225	:17 16	+3	-222	-607	-259	1761
10	-305	:19 18	+4	-301	-686	-338	1662
11	-325	:21 20	+4	-321	-705	-358	1642
12	-285	:22 21	+4	-281	-766	-618	1582
13	-210	:23 22	+5	-205	-590	-242	1798
14	-170	:24 23	+5	-165	-556	-202	1798
15	-330	:26 25	+5	-325	-710	-362	1636
16	-590	:28 27	+5	-585	-970	-622	1376
17	-265	:30 29	+6	-269	-644	-296	1704
18	-515	:31 30	+6	-509	-894	-346	1656
19	-385	:33 22	+6	-379	-704	-416	1584
20	-230	:35 34	+7	-225	-608	-360	1740
BLSW	+375	:51 50	+10	+385	0	+348	2348
		0/	0/	/375	/0		
CISW-1S	+250	:55 4	+1	+256	-119	+229	2229
25	+215	:57 6	+1	+216	-159	+189	2189
3	+105	1:58 7	+1	+105	-269	+79	2079
4	+15	2:00 9	+2	+17	-358	-10	1990
5	-70	:02 11	+2	-68	-643	-95	1905
6	-85	:03 12	+3	-82	-457	-109	1691
7	-95	:05 14	+3	-92	-467	-119	1691
8	-50	:07 16	+4	-46	-431	-73	1927
9	-165	:09 18	+4	-161	-536	-188	1613
10	-70	:11 20	+5	-65	-440	-92	1906
11	-190	:13 22	+5	-185	-560	-212	1788
12	-220	:15 24	+5	-215	-590	-262	1758
13	-235	:17 26	+6	-239	-604	-396	1744
14	-280	:19 28	+6	-274	-669	-301	1699
15	-335	:21 30	+7	-328	-703	-396	1645
16	-200	:22 31	+7	-195	-568	-220	1700
17	-10	:24 33	+8	-8	-377	-29	1971
18	+70	:25 34	+8	+78	-297	+51	2091
19	-215	:26 35	+8	-207	-582	-354	1766
20	-195	:28 37	+8	-187	-562	-214	1786
21	-115	:29 38	+9	-106	-481	-133	1667
22	-200	:31 40	+9	-191	-566	-216	1792
23	-160	:33 42	+9	-151	-526	-178	1633
24	-205	:34 43	+10	-193	-570	-323	1770
25	-75	:36 45	+10	-63	-440	-93	1903
BLSW	+360	2:57 66	+15	+375	0	+348	2348

Station	Reading	Time	Di Corr.	Correct Reading	Difference	R. V. G.	R. V. G. +2000
BL 3W	+305	3:05		0	-350	1650	
CLO-IN	+335	3:09		+70	-280	1720	
3	+295	:11		+10	-340	1660	
3	+140	:12		+165	-185	1815	
4	+40	:14		+365	-5	1995	
5	+140	:15		+165	-185	1815	
6	+195	:17		+110	-240	1760	
7	+335	:19		-130	-480	1520	
8	+525	:20	-10	-230	-580	1420	
9	+490	:22		+185	-535	1465	
10	+345	:24		-40	-390	1610	
11	+335	:26		+30	-380	1620	
12	+375	:27		-70	-420	1580	
13	+365	:28		-50	-510	1590	
14	+445	:30		-140	-490	1510	
15	+415	:31		-110	-460	1540	
16	+385	:33		-80	-430	1570	
17	+605	:34		-100	-450	1550	
18	+145	:35		+450	+100	2160	
19	0	:36		+305	-45	1955	
20	+80	:38		+225	-125	1875	
BL 3W	+305	4:01		0	-350	1650	
BL 3W	+305	4:01		0	-350	1650	
CLO + 1S	+490	:07		+795	+445	2445	
28	+100	:09		+405	+55	2055	
3S	-188	:10		+150	-200	1800	
4S	+285	:12		+590	+240	2240	
BL 3W	+305	4:17		0			
CL8W20N	-280	4:57	0	0	-280	0	-260
21N	+255	4:59	2	0	+255	+25	-235
22	-160	5:00	3	+2	-188	+122	-138
23	+255	:02	5	+2	+253	+27	-233
24	+140	:03	6	+2	+137	+145	-117
25	+190	:04	7	+3	+187	+93	-167
26	-240	:05	8	+4	-236	+44	-216
27	-265	:07	10	+5	-260	+20	-240
28	-210	:08	11	+5	-205	+75	-185
29	-105	:09	12	+5	-100	+180	-80
30	-270	:11	14	+6	-264	+16	-244
31	-350	:12	15	+6	-344	-64	-384
32	+345	:14	17	+7	+338	-58	-318
33	-365	:15	18	+8	-357	-77	-337
34	-405	:16	19	+8	-397	-117	-377
35	-345	:18	21	+9	+336	-86	-316
CL8W-20N	-295	1:32	35	+15	-280	0	-260

Station	Reading	Time	Dl Corr.	Correct Reading	Difference	R. V. G.	B. V. G. 2800	
CLSW-258	-95	No check back		0	-90	1910		
26	-315			-220	-310	1690		
27	-316			-220	-310	1690		
28	-210			-115	-205	1790		
29	-395			-300	-390	1610		
30	-396			-300	-390	1610		
31	-365			-270	-360	1660		
32	-350			-255	-345	1680		
33	-260			-165	-255	1700		
34	-495			-400	-490	1610		
35	-263			-150	-240	1700		
36	-300			-203	-295	1700		
37	-290			-195	-285	1710		
38	-295			-200	-290	1710		
39	-303			-210	-300	1700		
40	-265			-190	-250	1720		
41	-910				-900	1650		
42	-160				-150	1660		
43	-165				-150	1660		
44	-120				-110	1600		
45	-169				-155	1640		
GLO-258	+135	12:54	0	0	+135	0	+210	2210
26	+3600	15:09	5	-10	+3590	+3460	+3615	3610
27	+303	1:01	7	-15	+350	+289	+465	2890
28	-470	:03	9	-20	-490	-625	-610	1500
29	+240	:09	11	-20	+315	+180	+350	2390
GLO-258	+175	:11	17	-60	+135	0	+210	2210
GLO-295	+395	No check back			-600	-600	+390	2390
30	-345				-360	-360	1760	
31	-265				-160	-160	1620	
32	-325				-240	-240	1760	
33	-320				-240	-240	1760	
34	-340				-265	-265	1760	
35	-250				-165	-165	1630	
36	-340				-155	-155	1630	
37	-305				-220	-220	1760	
38	-315				-170	-170	1630	
39	-340				-235	-235	1760	
40	-215				-180	-180	1670	
41	-280				-190	-190	1600	
42	-280				-195	-195	1600	
43	-269				-180	-180	1820	
44	-215				-130	-130	1670	
GZ-250	-170	2:09	0	0	-170	actually 4530's	-265	1730
26	-65	:10	1	0	-65	+315	+160	1640
28	-305	:11	2	0	-305	+75	+400	1600
22	-175	:13	4	0	-175	+205	+270	1750
21	-200	:14	5	0	-200	+180	+295	1700
20	-230	:15	6	0	-230	+150	+325	1670
19	-320	:16	7	0	-325	+55	+420	1680
18	-275	:18	9	+5	-270	+110	+365	1630
17	-195	:20	11	+5	-190	+160	+285	1710

Station	Reading	Time	D4 Corr.	Correct Reading	Difference	R. V. G. R. V. G. +2000
16	-160	:21 12	+5	-145	+235	-240 1760
15	-135	:22 13	+5	-130	+250	-225 1775
14	-195	:23 14	+5	-190	+190	-205 1715
13	-225	:25 16	+5	-220	+160	-315 1685
12	-345	:26 17	+5	-340	+40	-435 1665
11	-150	:28 19	+5	-145	+235	-260 1760
10	-15	:29 20	+5	-10	+370	+105 1895
9	+595	:30 21	+5	+600	+980	+505 2505
8	+325	:32 23	+10	+335	+715	+240 2240
7	-60	:34 25	+10	-50	+330	-145 1855
6	-280	:35 26	+10	-270	+110	-365 1635
5	-225	:37 28	+10	-215	+165	-310 1690
4	-250	:38 29	+10	-240	+140	-335 1665
3	-270	:40 31	+10	-260	+120	-365 1645
2	-375	:41 32	+10	-365	+15	-460 1940
1	-330	:43 34	+10	-320	+60	-415 1885
SE	-390	:44 35	+10	-380	0	-475 1525
SE-255	-190	9:09 60	+20	-170	+210	-265 1795
SE-255	-185	No check back		0	0	-265 1735
26	-170				+15	-250 1750
27	-175				+5	-260 1740
28	-130				+55	-210 1790
29	-195				-10	-275 1725
30	-235				+50	-315 1685
31	-270				-85	-350 1650
32	-205				-20	-285 1715
33	-160				+35	-230 1770
34	-200				-15	-280 1720
35	-125				+60	-205 1795
36	-185				0	-265 1735
37	-185				0	-265 1735
38	-145				+40	-225 1775
39	-165				+20	-245 1755
40	-165				+20	-245 1755
41	-175				+10	-255 1745
42	-215				-40	-305 1695
43	-205				-20	-285 1715
44	-85				+100	-165 1835
45	-450				-265	-530 1470
CL16E-255	-240	4:10 0	0	-240	0	-315 1685
245	-230	:11 1	0	-230	+10	-305 1695
23	-220	:12 2	0	-220	+20	-295 1705
22	-255	:13 3	0	-255	-15	-330 1670
21	-215	:13 5	0	-215	+25	-290 1710
20	-310	:16 6	+5	-305	+65	-380 1620
19	-340	:18 8	+5	-335	-95	-410 1590
18	-195	:19 9	+5	-190	+50	-265 1735
17	-265	:20 10	+5	-260	-20	-335 1665
16	-190	:22 12	+5	-185	+65	-250 1750
					One station left out - 15-18	
14	-205	:23 13	+5	-200	+40	-275 1725
13	-210	:24 14	+5	-205	+35	-280 1720
12	-255	:26 16	+10	-245	-5	-320 1680
11	-230	:27 17	+10	-220	+20	-295 1705
10	-235	:28 18	+10	-225	+15	-300 1700

Station	Reading	Time	Di Corr.	Correct Reading	Difference	R. V. G.	R. V. G. +2000
CL16E-10S	-235	:28	+10	-225	+15	-300	1700
9	-230	:29	+10	-220	+20	-295	1705
8	-270	:30	+10	-260	-20	-335	1665
7	-190	:32	+10	-180	+60	-255	1745
6	-250	:33	+10	-240	0	-315	1605
5	-190	:34	+10	-180	+60	-285	1705
4	-80	:35	+10	-70	+170	-145	1855
3	-120	:37	+15	-105	+135	-180	1820
2	-95	:38	+15	-80	+160	-155	1845
1	-115	:39	+15	-100	+90	-225	1775
BL16E	-255	:40	+15	-240	0	-315	1605
16E-25S	-270	8:10	+30	-250	-20	-315	1605
CL16E-25S	-270			0	-315	1605	
26	-345			-75	-390	1610	
27	-375			-105	-420	1580	
28	-195			+75	-240	1760	
29	-235	no		+35	-280	1720	
30	-275			-5	-320	1600	
31	-265	need		+5	-310	1690	
32	-265			+5	-310	1690	
33	-235	to		+35	-280	1720	
34	-195			+75	-240	1760	
35	-205	complete		+65	-250	1750	
36	-220			+50	-265	1735	
37	-105	di		+165	-150	1850	
38	-145			+125	-190	1810	
39	-265	corr.		+5	-310	1690	
40	-285			-15	-330	1670	
41	-200			+70	-245	1755	
42	-210			+60	-255	1745	
43	-100			+170	-145	1855	
44	-185			+85	-230	1770	
45	-190			+80	-235	1765	
CL16E-25S	-270			0	-315	1605	

SOIL SAMPLE ANALYSIS

A cold extraction method for total heavy metals, copper, lead and zinc in the soil samples was used. Results were recorded in parts per million of total heavy metals in the samples.

Sample Preparation - Soil samples are dried on a hot plate and a portion lightly crushed to break down the soil structure. The crushed soil is then screened to -80 mesh and the oversize discarded. The -80 mesh material is stored in a sample envelope until required.

Reagent Preparation - A dithizone solution is prepared as follows: Weigh out 0.05 gms. of dithizone and transfer it quantitatively into a graduated cylinder. Moltion the dark green solid with 3-4 drops of acetone and dissolve the mixture in 500 mls. of toluene. This stock solution (0.01%) should be stored away from heat and light. To prepare the working solution (0.001%) dilute 10 mls. of the stock to 100 mls. with toluene.

A buffer solution is prepared as follows: Dissolve 25 gms. of ammonium citrate dibasic and 5 gms. of hydroxylamine hydrochloride in 300 mls. of de-ionized water. Add concentrated ammonium hydroxide until the pH of the solution is 9.5. The solution is then extracted with successive 5 ml. portions of dithizone stock solution until the dithizone remains green. The excess dithizone is removed by extraction with carbon tetrachloride. The volume, then, is made up to 500 mls. with de-ionized water.

A standard solution is prepared as follows: Fifty mgs. of zinc metal is dissolved in 5-7 mls. of concentrated hydrochloric acid. Dilute the solution to 500 mls. in a graduated cylinder using de-ionized water. Five mls. of this solution is then diluted to 100 mls. to give a solution containing 5 micrograms of zinc per ml.

Method - A 0.3 gms portion of the -80 mesh soil sample is weighed into a pyrex test tube. Add 5.0 mls. of buffer solution followed by 2.0 mls. of 0.001% dithizone working solution. Close the tube and shake for 30 seconds. The resulting color in the organic phase is then compared with a series of standards prepared as follows:

Aliquots of the standard zinc solution are taken to give 0, .0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0 and 4.5 micrograms of zinc respectively (To prepare a standard containing 4.5 micrograms of zinc per ml. take 1 ml. of the standard solution and add 1 ml. of de-ionized water to it.) These are then treated as for the soil samples except that 5.0 mls. of the 0.001% dithizone working solution is used. A range of color in the organic phase is obtained from green through blue to red. The color of the soil sample may be beyond the range covered by the standards. In this case add more dithizone and shake the sample for 5 seconds. This procedure is repeated until the sample color can be compared with the standards. If more than 10 mls. of dithizone is required (i.e., sample contains more than 50 ppm THM) alter the procedure by preparing standards ten times as concentrated and use dithizone 0.01% stock solution. Follow the same procedure otherwise.

Then ppm heavy metal (expressed as zinc) = volume of dithizone used x micrograms of zinc in matching standard.

Results - Soil samples were taken every 200 feet along the base line and cross lines. Results of the analysis are as follows:

ANALYSIS OF DATA

The magnetometer and soil sample work indicate three general areas of interest.

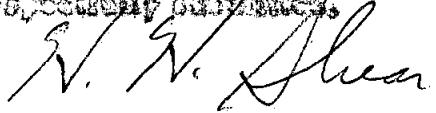
The line from 193 to 292 on line 207 and is magnetically anomalous only. This area is overlain by Tertiary volcanics, which are much younger than the structural history of the district. Therefore, as expected, no anomalous soil samples were ever obtained. No more soil sample work is warranted in this area. More magnetometer work is, however, justified and is necessary in order to evaluate and delineate this anomaly.

A second magnetic anomaly occurs on line 0 from 263 to 363. Also, two areas with anomalous soil sample results occur on line 8K from 193 to 333 and from 313 to 373. These soil sample anomalies are especially interesting since they lie down-dip from the magnetic anomaly on line 0. Therefore, more work, both soil sampling and magnetometer, is warranted on this area.

The third and largest anomalous area coincides roughly with the original area of interest which was sampled and reported on by Chapman, Wood & Griswold Ltd. This anomaly is only very roughly delineated but appears to be extensive. It is of a low order, about 600 gammas, but could be over 2000 feet long and as much as 600 feet wide. Within this anomaly one station, 0 on the base line, had over 3000 gammas above background. Anomalous soil samples were also obtained in this area. Complicating the picture is the fact that interesting showings appear to lie outside the mag anomaly. This area also warrants more work.

A map showing the location of all work done accompanies this report. It also shows the claims involved and will be found in the folder on the back cover. Also at the end of this report, a claims diagram will be found.

Respectfully submitted,



H. G. Shear

COSTS STATEMENT

Labor on Line Cutting

Ron Meyer - Aug. 24-25, 1963 @ \$16/day	\$32.00
Ron Lamp - Aug. 27-30, 1963 @ \$16/day	64.00
Bob Sowden - Aug. 27-30, 1963 @ \$16/day	64.00
P. Guthro (on contract) Sept-Oct 7, 1963	415.00

Foreman + Line Cutting and taking soil samples

John MacLean - Aug. 23-Oct. 7, 1963 @ \$300/mo. 1 1/2 mo.	750.00
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Engineer in Charge

H. H. Shear - Aug-Nov. 15, 1963 @ \$700/mo - 3/4 mo.	525.00
Report - 1 week - March, 1964	175.00

Consultants

Chapman, Wood & Griswold Ltd.	200.00
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Supplies

Chain saw rental - Aug. 23-30, 1963	49.00
Magnetometer rental - Oct. 16-20, 1963	50.00
Misc. (Bagging, brenton compass, measuring chain, etc)	130.00

Soil Sample Analysis

63.33
\$2,918.13

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this
2nd day of April, 1964 A.D.

H. H. Shear

Jill Turner
Sub-mining Recorder

STATEMENT OF COMPETENCY

I, H. H. Shear, of 2767 Crescentview Drive, North Vancouver, B. C., do state that I supervised directly all work described in this report. I personally ran the magnetometer and calculated the results.

I received the two following degrees from the University of Arizona at Tucson, Arizona: B.S. Geological Engineering, May 1959 and B.S. Mining Engineering, January 1960.

I am a junior member of the Association of Professional Engineers of British Columbia.

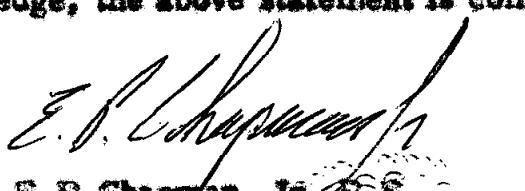
I have been engaged in mining exploration for the past four years including experience in magnetometer and soil sample surveys and have received training under Chapman, Wood & Griswold Ltd. in both.

Respectfully submitted

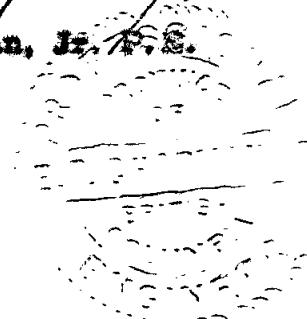


H. H. Shear

I attest that, from my own personal knowledge, the above statement is complete and factual.



E. P. Chapman, Jr., P. E.



CHAPMAN, WOOD AND GRISWOLD LTD.

MINING ENGINEERS AND GEOLOGISTS

133 EAST 14TH STREET

NORTH VANCOUVER, BRITISH COLUMBIA

E. P. CHAPMAN, JR.
JOHN A. WOOD
G. R. GRISWOLD

TELEPHONE: 987-9371
CABLE ADDRESS: CHAPWOLD

TO WHOM IT MAY CONCERN:

This is to state that Victor Fast, Karamcoos, B.C., was employed by our firm on a temporary basis during the period September 1 to November 25, 1963 in the capacity of soil sampler and geochemical analyst-technician.

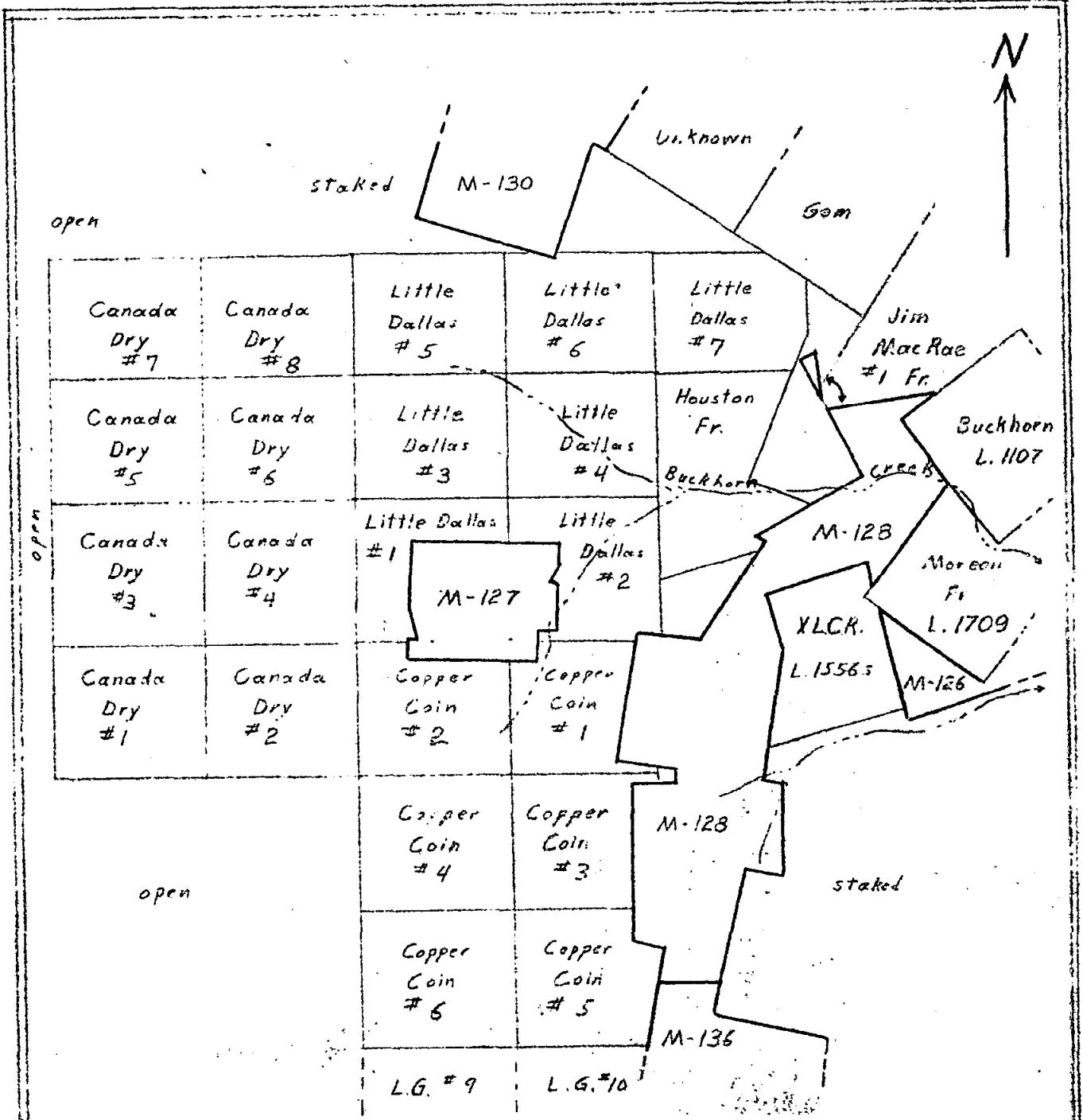
Mr. Fast was trained by us in procedures for Gold and composite analysis of soil and silt samples for cold extractable copper, lead and zinc using toluene extractant and dithizone indicator.

It is our belief that all of the sample determinations reported by Mr. Fast were conducted in accordance with procedures accepted in the mineral exploration industry, and with a high standard of accuracy.

Respectfully submitted,

CHAPMAN, WOOD & GRISWOLD LTD.

John A. Wood
John A. Wood
Vice-President



Lease and Claims Diagram

Copper Coin Group and Adjacent Area

SCALE 1"=1500'

H.H. Shear

April 1, 1964

