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MUTUAL RESOURCES LIMITED

BONANZA BASIN PROJECT

Bulldozer Trenching and
Sampling Programme

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INTRODUCTION

In July 1980, Mutual Resources Limited completed 4,550 metres of bulldozer trenching on the Bonanza Basin property in the Lillooet Mining Division. The trenching was carried out in order to determine the source of free gold which is readily panned from overburden in the south central part of the property, and its relationship to bedrock occurrences of low-grade gold mineralization which are reported in early reports on the property. The present report summarizes the geology in the immediate vicinity of the bulldozer trenching, and the sampling of the trenches that took place concurrently. No attempt is made here to describe the regional and local geological setting, nor the explorations carried out before Mutual Resources Limited acquired the property, since that is done very adequately in a report titled "Geological Evaluation and Exploration Proposed, Bonanza Project Area, Southwestern British Columbia" dated May 26, 1979 by Michael St. C. Fox, P. Geol. to which the reader is referred.

Mutual Resources Limited in 1979 completed an access road to the property and also performed 4,800 metres of bulldozer trenching and sampling. The 1979 trenching programme was carried out in the metasedimentary succession in the vicinity of the Robson showing, a known gold occurrence.

GEOLOGY

Figure 1 shows the geology of the area trenched in 1980, and its relationship to the 1979 trenches. The trenches for the current programme were located by the writer on the basis of local geology as seen in the field and gold occurrences as reported by Cooper Drabble around 1933.

Metasediments of the Hurley Group (Unit 1) are intruded by a biotite diorite (Unit 2) of probable Late Cretaceous or Early Tertiary age. The biotite diorite forms the prominent north-trending ridge in the centre of the claim block whereas the metasediments underlie a small cirque now occupied by Hughes Creek and Red Mountain to the northeast. The contact zone between the biotite diorite and the metasediments is the area which in the opinion of the writer has potential for low-grade gold mineralization. Unit 3 occurs in the northwestern part of the contact zone examined, and consists of a biotite quartz diorite which exhibits variable degrees of alteration. In some areas it is reasonably fresh with only feldspar being altered to kaolinite and sericite, whereas in other areas the rock consists of quartz in a light grey matrix of kaolinite, sericite, carbonate and limonite. A characteristic feature is the orange-brown limonite which line the fractures in the rock. Unit 3 forms much of the northwest trending ridge which forms the southern part of the Hughes Creek cirque.

Unit 4 is a leucocratic intrusive composed of quartz with white and grey feldspar which was given the field mapping name of leucogranite or alaskite. When fresh, the rock is light grey and hard and usually contains disseminated pyrite with occasional chalcopyrite, arsenopyrite and molybdenite. However one or more of the feldspars weather quite readily and large fragments of the rock show a fresh light grey core surrounded by two distinct stages of surface weathering which show as concentric bands around the core. It is likely that the third stage of weathering results in the physical disintegration of the rock to the red gravel which covers the west-facing slopes in the trenched area. Thus the rock which in its fresh state is massive and hard, weathers rapidly to become a recessive unit and is relatively rare in outcrop. Distinctive features of Unit 4 are the zones of sub-parallel chalcedony veins which commonly occur. The only place where these veins can be reliably measured is in the upper part of the Hughes Creek basin where they have a strike of 335 degrees and are vertical. This direction is parallel to a fault which is followed by the south fork of Hughes Creek. The veins are rarely over 1 cm. in width but over several metres can constitute as much as 50% of the rock total. Most of the veins are medium grey in colour and contain disseminated pyrite. In eddition, there are occasional milky quartz veins up to 5 cm. in thickness with rhomboid vugs after pyrite.

MINERALIZATION

Sulphide mineralization of three types occurs on the property:

a. Pyrite-quartz-arsenopyrite-stibnite veins in the vicinity of the Robson workings.

b. Complex quartz-chalcedony veins of a white to pale yellow colour found mostly within Unit 4 and best exposed on the ridge immediately southeast of Hughes Creek where several prospect pits have been dug. Sparse pyrite occurs in the veins examined, but auriferous arsenopyrite has been reported from them.

.../3

c. Disseminated pyrite and occasional disseminated chalcopyrite, arsenopyrite and molybdenite in the alaskite, and pyrite in the chalcedony veins.

The third type of mineralization is that to which Cooper Drabble was referring when he described:

> "... the mineralized and altered feldspar (porphyry) carries from a trace to 0.13 ounces in gold, the mineralization being in the form of sparse arsenopyrite grains throughout the porphyry."

Specifically, in the area of upper Hughes Creek underlain by Unit 4 Drabble described:

> "... an area of mineralization 300 feet wide which appears to be a contact replacement of the dyke by quartz and arsenical solution, with values running from a trace up to 0.16 ounces in gold across 5 and 10 foot widths of the zones of mineralized quartz, the top of which were exposed by the ground sluicing."

TRENCHING AND SAMPLING

A D6C Caterpillar bulldozer of Artomas Contracting Limited was used for the trenching which took place between July 19 - 24. Bedrock was easily reached in most of trench T1, but at lower elevations, in T2 and especially T4, bedrock was difficult to reach due to increasing depths of overburden.

Two hundred and twelve samples were collected during the programme. Approximately 200 of these were 3 Kg. samples taken over a sampling interval of ten metres. Occasional grab samples were taken where warranted, both of bedrock, and of the decomposed alaskite.

The results of the trenching sampling are shown in the tables below.

<u>SAMPLING RESULTS</u>

TRENCH 1

SAMPLE NUMBER	DISTANCE (METRES)	AU oz./ton	AG oz./ton
16241	220 - 230	.001	.01
16242	230 - 240	.001	.01
16243	240 - 250	.001	.01
16244	260 - 270	.001	.02
16245	270 - 280	.001	.01
16246	280 - 290	.001	.01
16247	350 - 360	.001	.01
16248	360 - 370	.001	.02
16249	370 - 380	.001	.01
16250	380 - 390	.001	.02
16251	390 - 400	.001	.01
16252	400 - 410	.001	.01
16253	410 - 420	.001	.01
16254	420 - 430	.001	.01
16255	430 - 440	.001	.01
16256	440 - 450	.001	.01
16257	450 - 460	.001	.01
16600	460 - 470	.001	.01
16599	470 - 480	.001	.01
16598	480 - 490	.001	.01
16597	490 - 500	.001	.01
16596	500 - 510	.001	.01
16595	510 - 520	.001	.01
16594	520 - 530	.001	.01
16593	530 - 540	.001	.01
16592	540 - 550	.001	.01
16591	550 - 560	.001	.01
16574	770 - 780	.001	.02
16573	780 - 790	.001	.01
16572	790 - 800	.001	.01
16571	800 - 810	.002	.01
16570	810 - 820	--	--
16569	820 - 830	.001	.01
16568	830 - 840	.001	.03
16567	840 - 850	.001	.01
16566	850 - 860	.001	.02
16565	860 - 870	.001	.01
16564	870 - 880	.001	.01
16563	880 - 890	.001	.01
16562	890 - 900	.001	.01
16561	900 - 910	.001	.01
16560	910 - 920	.001	.01
16558	920 - 930	.001	.01
16559	940 - 950	.001	.02
16557	960 - 970	.001	.01
16556	970 - 980	.001	.01
16555	980 - 990	.001	.01
16554	990 - 1000	.001	.01
16553	1000 - 1010	.001	.01

.../2

TRENCH 1, Cont.

SAMPLE NUMBER	DISTANCE (METRES)	AU oz./ton	AG oz./ton
16552	1010 - 1020	.001	.04
16551	1020 - 1030	.001	.01
16550	1030 - 1040	.001	.01
16549	1040 - 1050	.001	.01
16548	1050 - 1060	.001	.01
16547	1060 - 1070	.001	.01
16546	1070 - 1080	.001	.01
16545	1080 - 1090	.001	.01
16544	1090 - 1100	.001	.01
16543	1180 - 1190	.001	.01
16542	1190 - 1200	.001	.01
16541	1225 - 1230	.001	.01
16540	1230 - 1240	.001	.01
16539	1240 - 1250	.001	.04
16538	1250 - 1260	--	--
16537	1260 - 1270	.001	.02
16536	1270 - 1280	.001	.01
16535	1280 - 1290	.001	.02
16534	1290 - 1300	.001	.05
20386	1320 - 1330	.001	.01
20385	1330 - 1340	.001	.01
20384	1340 - 1350	.002	.01
20383	1350 - 1360	.002	.01
20382	1360 - 1370	.001	.01
20381	1370 - 1380	.001	.01
20380	1380 - 1390	.001	.01
20379	1390 - 1400	.003	.01
20378	1430 Grab	.001	.01
20377	1400 - 1410	.001	.01
20376	1410 - 1420	.001	.01
20375	1420 - 1430	.002	.05
20374	1430 - 1440	.001	.03
20373	1440 - 1450	.001	.01
20372	1450 - 1460	.001	.01
20371	1460 - 1470	.001	.02
20370	1470 - 1480	.001	.01
20369	1480 - 1490	.001	.02
20368	1500 - 1510	.001	.01
20367	1510 - 1520	.001	.01
20366	1520 - 1530	.001	.02
20365	1490 - 1500	.002	.01
20364	1530 - 1540	.002	.01
20363	1540 - 1550	.001	.02
20362	1550 - 1560	.002	.02
20361	1560 - 1570	.004	.02
20360	1570 - 1580	.003	.01
20359	1580 - 1590	.002	.01
20358	1590 - 1600	.009	.03
20357	1600 - 1610	.001	.01
20356	1610 - 1620	.001	.02

.../3

TRENCH 1, Cont.

SAMPLE NUMBER	DISTANCE (METRES)	AU oz./ton	AG oz./ton
16533	1665 - 1670	.001	.01
16532	1670 - 1680	.003	.01
16531	1680 - 1685	.001	.01
16530	1720 - 1730	.001	.01
16529	1730 - 1740	.001	.01
16528	1740 - 1745	.001	.01
16527	1750 - 1760	.001	.01
16526	1760 - 1770	.001	.01
16525	1875 - 1880	.001	.01
16524	1880 - 1890	.001	.01
16523	1960 - 1970	.008	.01
16522	1970 - 1980	.026	.01
20400	1980 - 1990	.006	.01
20399	1990 - 2000	.007	.03
20397	2100 - 2110	.001	.01
20396	2110 - 2120	.001	.01
20395	2120 - 2130	.001	.01
20394	2130 - 2140	.001	.01
20393	1580 - 1620	.001	.01
20392	1540 - 1580	.001	.01
20391	1500 - 1540	.001	.01
20390	1460 - 1500	.001	.01
20389	1420 - 1460	.001	.01
20388	1380 - 1420	.001	.01
20387	1340 - 1380	.008	.02

TRENCH 2

16575	0 - 10	.001	.03
16576	10 - 20	.001	.01
16577	20 - 30	.001	.01
16578	30 - 40	.001	.01
16579	40 - 50	.001	.01
16580	50 - 60	.001	.01
16581	60 - 70	.001	.01
16582	70 - 80	.001	.01
16583	80 - 90	.001	.01
16584	90 - 100	.001	.01
16585	100 - 110	.001	.01
16586	110 - 120	.001	.01
16587	120 - 130	.001	.01
16588	130 - 140	.001	.01
16589	160 - 170	.001	.01
16590	170 - 180	.001	.01
16201	190 - 200	.001	.01
16202	370 - 380	.001	.01
16203	430 - 440	.001	.01
16204	440 - 450	.001	.01
16205	450 - 460	.001	.01
16206	460 - 470	.001	.01
16207	470 - 480	.001	.01
16208	480 - 490	.001	.01
16209	490 - 500	.001	.01

.../4

TRENCH 2, Cont.

SAMPLE NUMBER	DISTANCE (METRES)	AU oz./ton	AG oz./ton
16210	500 - 510	.001	.01
16211	510 - 520	.001	.01
16212	520 - 530	.001	.01
16213	530 - 540	.001	.01
16214	540 - 550	.001	.01
16215	550 - 560	.001	.01
16216	560 - 570	.001	.01
16217	570 - 580	.001	.01
16218	580 - 590	.001	.01
16219	590 - 600	.001	.01
16220	600 - 610	.001	.01
16221	610 - 620	.001	.01
16222	620 - 630	.001	.01
16223	630 - 640	.001	.01
16224	640 - 650	.001	.01
16225	650 - 660	.001	.01
16226	660 - 670	.001	.01
16227	670 - 680	.001	.01
16228	680 - 690	.001	.01
16229	690 - 700	.001	.01
16230	720 - 730	.001	.01
16231	730 - 740	.001	.01
16232	740 - 750	.001	.01
16233	750 - 760	.001	.01
16234	760 - 770	.001	.01
16235	770 - 780	.001	.01
16236	780 - 790	.001	.01
16237	790 - 800	.001	.01
16238	800 - 810	.001	.01
16239	980 - 990	.001	.01
16240	1080 - 1090	.001	.01

TRENCH 3

SAMPLE NUMBER	DISTANCE (METRES)	AU oz./ton	AG oz./ton
16258	118 - 120	.001	.01
16259	290 - 300	.037	.01
16260	300 - 305	1.54	.01

TRENCH 4

SAMPLE NUMBER	DISTANCE (METRES)	AU oz./ton	AG oz./ton
16261	84 - 90	.001	.02
16262	90 - 100	.001	.01
16263	100 - 110	.001	.01
16264	110 - 120	.001	.01
16265	120 - 130	.001	.01
16266	130 - 140	.001	.02
16267	140 - 150	.001	.01
16268	225 - 230	.001	.02
16269	230 - 240	.001	.02
16270	240 - 250	.001	.02
16271	250 - 260	.009	.01
16272	304 - 310	.001	.09
16273	310 - 320	.023	.01
16274	320 - 330	.007	.02

.../5

TRENCH 4, Cont.

SAMPLE NUMBER	DISTANCE (METRES)	AU oz./ton	AG oz./ton
16275	340 - 350	.005	.01
16276	350 - 360	.008	.01
16277	360 - 370	.004	.01
16278	370 - 380	.003	.01
16279	380 - 390	.003	.01
16280	390 - 400	.003	.01