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July 26, 1977.

Mr. John Brock,
Welcome North Mines,
1027 - 470 Granville Street,
Vancouver, B.C.

Dear Sir,

RE: Gataga Joint Venture

Please find enclosed copies of the following maps:

(1) Lead Geochemistry (Regional) - scale 1:50,000
(2) Zinc Geochemistry (Regional) - scale 1:50,000
(3) Copper Geochemistry (Regional) - scale 1:50,000
(4) Water Geochemistry (Regional) - scale 1:50,000
(5) Regional Geology - scale 1:50,000
(6) Lead Geochemistry - 1977 Grid 1 - scale 1:5,000
(7) Zinc Geochemistry - 1977 Grid 1 - scale 1:5,000
(8) Copper Geochemistry - 1977 Grid 1 - scale 1:5,000

The first five maps are almost complete enough to be included in the final report but are marked "Preliminary" because they will still require slight revision to locations of some property boundaries and baritic units. Please note the following information that has been added to the geochem maps:

- Property boundaries - on Regional Pb map
- 1977 Grids 1, 2 and 3 - on Regional Pb map
- Locations of % barite specimens analyzed for Ba,Sr, Pb, Zn,Fe and Mn - on Water Geochem map.

Note that grids 2 and 3 have not been sent as assays were quite low.

The assay results available to date on the barite specimens are shown on the attached table. The initial conclusions from this data are:

(a) this type of sampling does not indicate a regional trace element zoning in barite. If such a zoning exists, it will only be found with more detailed channel sampling across the barite zone. However, further analysis of this type may prove useful in outlining more local trends within those portions of the barite horizon that contain some lead and zinc. Since the analysis of one specimen for six elements costs about $14.00 (because Ba and Sr are so insoluble and require a difficult extraction), this type of work should be on a selective basis.

(b) water geochemistry is not particularly useful in the Gataga district because of the near-neutral pH levels and relatively weak degree of surface leaching. Gossan development and limonite development are not directly related to lead-zinc content.

(c) sphalerite is virtually impossible to recognize megascopically in baritic gangue in this district and all baritic rocks should be assayed for zinc, either directly or with an indirect soil assay. Zinc staining tests are only weakly positive at best.

(d) galena is often very fine grained and is then hard to recognize megascopically at concentrations of less than 3 or 4% Pb. In the few mineralized areas seen to date, lead and zinc are most common in well laminated barite.

(e) lead geochemistry is the most useful tool for guiding prospecting. Zinc backgrounds are very high and mineralization cannot be distinguished from rock background except in close spaced grid soil sampling. Copper response in the district is of little value and copper analysis should be discontinued except for trace element zoning studies.

The 1977 program has now shown conclusively that the Gataga district contains Macmillan Pass-type "volcanic-exhalative, barite-hosted" lead-zinc mineralization in a similar stratigraphic sequence. Lead geochemistry indicates the presence of two important targets and one less distinct zone within the Gataga district, as follows:

(a) Driftpile Creek Zone - extending from about Driftpile Creek at the southeast for a length of about 4.5 miles to the headwaters of a northwest-

flowing tributary of Braid Creek. About 2.5 miles of this target lies on the Canex claims while the northwest end lies on the Saint claims of GJV. Lead response in silt and soil is similar on both properties and hand trenching on a detailed soil anomaly on the Canex property disclosed a sulfide zone from which the best surface assay was 5.3% Pb, 4.3% Zn and 0.2oz/ton Ag (and 9.9% Ba) across 10 feet. Preliminary grid sampling across the two-mile-long portion on the GJV claims (Grid 1), consisting of soil samples at 100 m intervals on lines 500 m apart, shows that the lead anomaly extends off both ends of the grid. Anomalous threshold is about 75 ppm Pb and all soil values over 150 ppm are considered as moderately anomalous. Grid 1 contains numerous soil assays between 300 and 1000 ppm, and one value of > 4000 on the most northwesterly line. This compares closely with Canex assays. The GJV grid results are difficult to contour at this spacing but they form a northwest-trending anomaly with a branch that diverges to the east-southeast near the centre of the grid. The better part of the anomaly is in an area where the barite horizon was not recognized in regional mapping, although barite specimens were collected during grid sampling. More detailed sampling and prospecting should outline a distinct anomalous trend and, with some hand trenching, should define a showing comparable to the one on the Canex property and produce a drill target.

(b) Gataga Lakes Zone - this is a smaller target which is not yet well defined. It is at least one mile long on the Bear claim of GJV and could extend another 1.5 miles northwest, where it would cross either Chevron's Taga 3 and 4 claims, Cyprus Anvil's SO4 claim or GJV's Bob 6 claim The centre of the anomaly is three miles northwest of the GJV campsite on Gnip Gnop Lake and about 8 miles from the southeast end of the Driftpile Creek zone. A southwesterly dip will shift the zone away from the Cyprus Anvil ground and towards the Chevron property. Lead response ranges from 110 to >4000 ppm in silt and 340 to 2520 ppm in soil.

(c) Other Lead Anomalies - the other strong lead anomaly in the district lies on the Texasgulf Rough claims, staked in 1976. Silt response ranges from 82 to 470 ppm Pb in an area roughly the size of the Gataga Lakes Zone, but the anomalous values occur erratically around the property. The type of showing, if one exists, is not known. About one mile southeast, on GJV's

Ready 3 claim, a trace of galena was found in a piece of float that contains quartz-barite gangue in brecciated shale. Two isolated lead silt assays of 140 and 100 ppm occur further south on the Ready 5 and Snow 1 claims, respectively. Neither is related to known barite horizon although this area requires more prospecting and mapping. About two miles west of the galena showing, two other weak lead silt anomalies, 114 and 140 ppm, occur at the plotted position of United Minerals "J" and "N" claims, which overlap GJV's Ready claims but have not been found. These are all low priority targets, partially because of the erratic and low nature of the anomalous response but also because the baritic horizon appears to be thinning and pinching out in this direction.

A number of erratic anomalous lead assays were also obtained between the Driftpile Creek and Gataga Lakes zones, ranging from 146 to 310 ppm in silt and up to 1460 ppm in soil. These values are from the south end of the Canex property and from GJV's Bob 3 and 4 claims. Further prospecting and sampling is required here to determine whether the response is really erratic or whether the spotty reconnaissance results are due to overburden problems.

The only other anomalous lead response in the project area is two miles east of the northerly Garaga Lake, where weak soil and silt values were obtained from Road River Fm on the LORI claims optioned by Cominco.

A $25,000 program of grid sampling, mapping, prospecting and hand trenching should expose a mineralized zone and permit a drill program to be planned with more confidence. This program is better done in 1977 so that planning for a 1978 drill program can proceed more aggressively Top priority should be given to the northwest end of the Driftpile Creek Zone but some work may also be needed on the Gataga Lakes Zone to confirm the position of adjoining claims and obtain assessment credit on the Chevron claims, if they are included in the GJV program.

If a decision is made to conduct more field work in 1977, the work should start no later than August 25 to avoid disruptions by weather, and will take two to three weeks. A meeting should be held as soon as possible to discuss this program if the concensus is to proceed. In addition to the $25,000 for additional work, the revised field budget of $129,000 could be

overspent by about $15,000 at year end, when all data has been compiled in a final report. Thus the total additional expenditure could total $40,000, or $13,350 for each partner.

Yours truly,

ARCHER, CATHRO & ASSOCIATES LTD.

per R.J. Cathro

RJC:jm
Encls. 8

P.S. I will bring a herculene overlay with contours for the Vancouver meeting.

Gataga Joint Venture
Barite Specimens

Sample No.	Pb (ppm)	Zn (ppm)	Ba (%)	Sr (ppm)	Fe (%)	Mn (ppm)
851	220	> 4000	37.6	2150	0.85	1120
852	35	2040	45.3	950	.35	125
853	5	15	48.4	1550	.30	20
854	5	10	50.9	1650	.10	15
855	2	5	53.6	2900	.05	10
856	5	5	44.3	2500	.15	20
857	10	5	54.5	1200	.10	10
858	2	10	54.6	2850	.05	5
859	15	30	17.7	1900	.55	50
860	5	20	35.2	1900	.55	40
861	5	20	47.5	2150	.05	5
862	770	10	53.7	1450	.10	5
863	> 4000	45	52.5	1550	.02	5
864	50	110	0.5	500	1.50	445
865	30	> 4000	44.1	2250	.15	910
866	> 4000	> 4000	0.2	250	.80	20
867	> 4000	> 4000	49.1	1500	.60	20
868	> 4000	> 4000	31.6	700	2.10	120
869	> 4000	1680	50.8	1450	.65	15
870	> 4000	> 4000	35.1	1550	.45	105
871	> 4000	> 4000	51.5	2150	.95	50
872	1080	880	28.2	2150	.20	15
873	370	155	21.0	950	.75	25
874	375	200	36.2	1450	.75	115
875	390	125	51.5	5000	.05	5
876	> 4000	> 4000	49.5	1200	.10	55
877	3680	2640	0.7	500	>10.00	690
878	410	910	43.8	600	.20	180
879	360	400	50.2	1300	.15	10
880	250	195	39.4	110	.30	20
881	420	340	40.3	3350	.30	10
882	1160	120	44.3	1200	3.75	5
883	80	145	1.4	100	4.95	80
884	1960	1080	18.4	1100	4.30	260
885	65	30	3.7	600	.50	20

Sample No.	Pb (ppm)	Zn (ppm)	Ba (%)	Sr (ppm)	Fe (%)	Mn (ppm)
886	115	35	45.9	950	.50	5
887	170	65	4.1	600	.85	545
888	25	60	46.1	1550	.50	5
889	10	80	48.2	1550	.50	10
890						
891						
892						
893	4	42	52.5	1650		
894						
895	198	132	40.1	1200		
896	6	10	0.1	250		
897	6	46	42.1	2150		
898	2	160	46.0	4550		
899	24	285	26.0	2400		
900	4	88	43.8	3350		
901	1	14	1.1	500		
902	24	58	45.0	2400		
903	12	30	0.2	< 250		
904	2	56	43.7	2850		
905	6	60	9.2	500		
906	4	18	27.5	2150		
907	48	82	7.5	750		
908	2	24	47.0	2150		
909	36	86	6.3	450		
5526	1	2	53.4	4800		
5527	1	60	30.6	3400		
5528	1	12	45.3	4400		
5529	4.86%	800	53.8	1400		
5530	> 4000	740	30.7	1000		
5531	12.0%	0.65%	44.1	1200		
5532	10.8%	2.86%	40.9	2100		
5533	10.8%	1.70%	40.5	1900		