

Property File 093A 013

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November 2, 1988

File Number: 7678

TRIFCO MINERALS LTD. Suite 308 - 751 Clark Road Coquitlam, B.C. V3J 3Y3

Attention: Rene Trifaux, Sr.

Dear Rene,

Re: Production of Sulphide Concentrate from Talc Ore

On September 8, 1988, Bacon, Donaldson and Associates received seven samples of talc ore reportedly collected from your property in the Cariboo. The samples are identified as follows and the assays by Chemex Labs Ltd. are as indicated:

	<u>% Ni</u> HF Digest	<u>% Ni</u> AR Digest	S %	Fe %	Co ppm	Sample Weight g	
Sample #1	0.14	0.11	1.460	3.97	68	4134	
Sample #2 Sample #3	0.14 0.19	0.08 0.15	0.022	5.02	73	7041	
Sample #3 A	0.19	0.13	1.660 1.380	4.69 4.40	68 67	9469 6870	
Sample #4	0.15	0.09	0.224	3.95	71	11301	
Sample #5	0.12	0.08	0.425	3.55	77	10527	
Sample #6	<0.01	<0.01	0.468	1.36	6	1395	

The two different assays for % Ni represent analyses preceded by two different sample digestion procedures. The "HF Digest" represents a hydro fluoric acid digestion which should dissolve silicate materials as well as sulphides. The "AR Digest" represents an aqua regia digestion which does not dissolve silicates.



The purpose of the testwork was to produce a bulk sulphide flotation concentrate for evaluation by Sherritt Gordon Mines Ltd. A composite was prepared by combining samples #1 through #5.

Sample Treatment Procedure

As shown in Figure 1, the feed to flotation was ground to approximately 82% minus 200 mesh.

Each flotation was performed at approximately 20% solid (wt) in the slurry. In each test the only reagent used was MIBC at a dosage of 0.15-0.21 lb MIBC/ton of ore. The purpose of this flotation was to produce a talc flotation concentrate. The times for these flotations were exceptionally long, ranging between 63 and 93 minutes.

The flotation tails from each of these tests were combined together for feed to the flotation A size analysis of this material indicated a size sulphide stage. distribution of 89% minus 200 mesh. This material was floated at natural pH=8.3 for 52 minutes with 0.18 lb MIBC/ton of feed. This scavenger flotation was to further remove any talc remaining in the tails from the previous flotation. Following the talc scavenger flotation, the slurry was conditioned with Depramin C, PAX and AF208 then followed by a rougher sulphide flotation using DF250. The rougher flotation The final cleaner concentrate was further processed in two cleaner flotation stages. concentrate was sent to Sherritt Gordon.

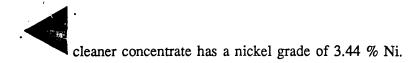
The talc rougher flotation concentrate was further treated by magnetic separation. The magnetic concentrate recovered was weighed and analyzed for % Ni.

Flotation Results

The results of the flotation procedure are shown in Table 7678-F4.

A detailed material balance of the Ni recovery at each stage of flotation is shown in Figure 2.

From Figure 2 and Table 7678-F4 it can be seen that 32.4% of the nickel in the original feed is recovered in the final sulphide cleaner flotation concentrate. The final



According to Figure 2, this means that if the ore sent to flotation contains 0.118% Ni, as it is this case, then of the 2.36 lb of nickel per ton of ore, there is 0.76 lb of this nickel recovered in the sulphide flotation concentrate.

Magnetic Separation Results

As indicated in Figure 2, up to 60% of the nickel in the ore remains in the talc concentrate (rougher, scavenger and sulphide flotation tails combined).

The use of magnetic separation was tested as a means of recovering a portion of this nickel from the talc rougher flotation concentrate. The talc rougher concentrate contains 0.99 lb of nickel from the original 2.36 lb of nickel in the ore feed.

The detailed material balance on the magnetic treatment of the talc rougher concentrate is shown in Table 7678-F4B.

As the results indicate the magnetic separation step only recovered 4.63% of the nickel contained in the talc rougher flotation concentrate. The grade of the magnetic concentrate is 2.40 %Ni. This means that the magnetic concentration step recovered only 0.041 lb of nickel in addition to the flotation treatment.



SUMMARY

For the ore composite tested (0.118 %Ni), the flotation cleaner concentrate recovers 0.76 lb/ton of the original 2.36 nickel lb/ton in the ore. This represent a Ni recovery of 32.4% for a nickel concentrate containing 3.44 % Ni.

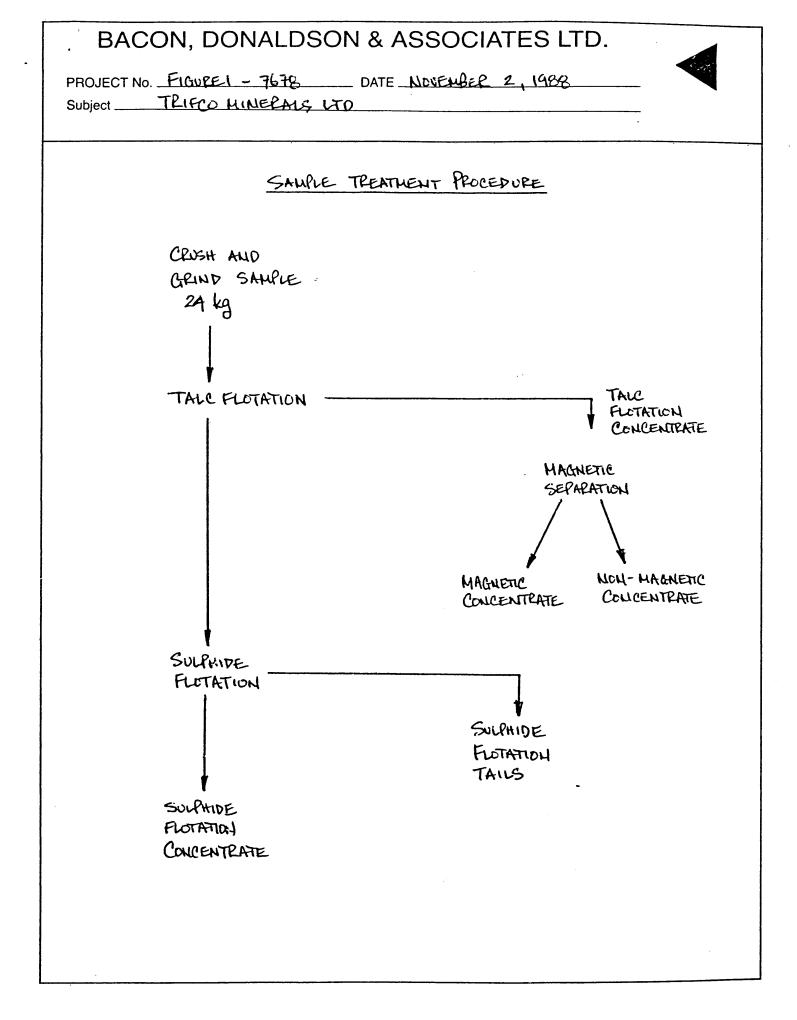
The magnetic separation treatment of the talc rougher concentrate indicates that an additional 0.041 lb/ton of the original 2.36 lb/ton of nickel can be recovered.

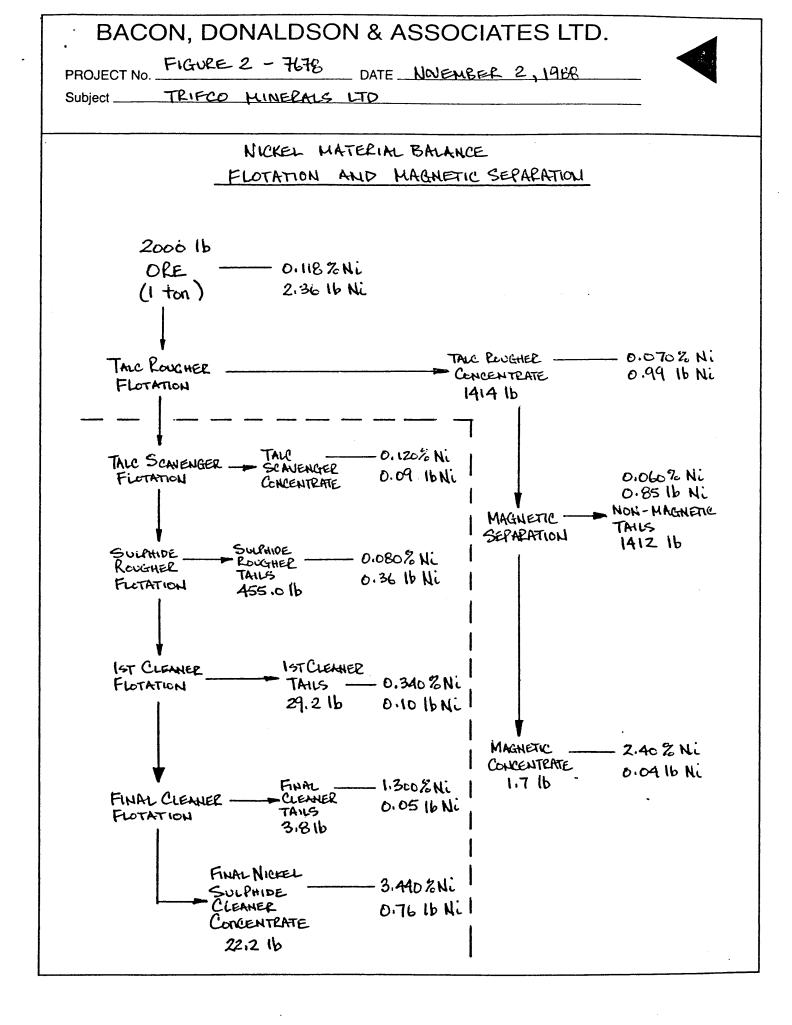
This increases the overall recovery of nickel to 33.2% for the combined flotation and magnetic separation stages.

Yours truly,

BACON, DONALDSON & ASSOCIATES LTD.

Kenneth B.DeGraaf, M.A.Sc., P.Eng. KBD/jlb





	WEIGHT	WEIGHT	.1		ASSAYS		1	% DIST				
PRODUCT	GMS	X	: XNI	% Co	%Fe	% S	1	Ni	Co	Fe	S	
Nagnetic Conc	0.7	0.12	2.400	0.090	34.000	17.600	 1 1	4.63	1.54	1.81	31.73	
Non-Magnetic Tails	568.0	99.88	0.050	0.007	2.240	0.046	1	95.37	98.46	98.19	68.27	
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CALC HEAD	568.7	100.0	0.063	0.007	2.279	0.057						

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	WEIGHT	WEIGHT		ASSAYS			1		\$ DIST			
PRODUCT	GMS	X {	\$Ni	\$ Co	\$Fe	XS.	4 1	Ni	Co	Fe	S	
Final Cleaner Conc	258.6	1.11	3.440	0.220	44.810	44.600		32.39	38.63	13.76	89.38	
Final Cl Tails	45.4	0.19 ;	1.300	0.056	13.400	6.780		2.15	1.73	0.72	2.39	
IST CL CONC	304.0	1.31 ¦	3.120	0.196	40.119	38.952	i	34.54	40.36	14.49	91.77	
Ist Sulphide Cl Tail	339.4	1.46	0.340	0.017	8.040	1.290	i	4.20	3.92	3.24	3.39	
SULPHIDE RO CONC	643.4	2.76 ;	1.654	0.101	23.197	19.085	i	38.74	44.27	17.73	95.16	
Sulphide Ro Tails	5299.0	22.15	0.080	0.005	5.090	0.065	i	15.43	17.99	32.04	2.67	
alc Scavenger	882.0	3.79 ;	0.120	0.007	4.630	0.299	i	3.85	4.19	4.85	2.04	
alc Rougher	16467.8	70.70	0.070	0.003	2.320	0.001		41,97	33.54	45.38	0.13	
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