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EUREKA RESOURCES INC.

FRASERGOLD PROPERTY

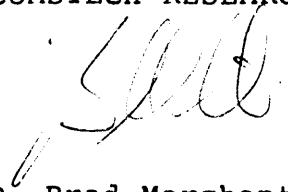
INTERIM SUMMARY

PREPARED FOR

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## 1.0 TERMS OF REFERENCE

A bulk sample of Frasergold material was supplied to Coastech by J. R. Kerr which approximated 0.7 tonne as received. It was the objective of Eureka Resources to determine:

- (i) the gold content of the bulk sample and the associated sampling statistics,
- (ii) a reasonable extraction method for preliminary metallurgical evaluation,

The results presented herein are limited to a summary of the assay results from three independent assay laboratories in Vancouver. The results are presented from a pilot plant test where gravity methods, jigging and tabling, were employed to preconcentrate free gold and gold bearing host rock from approximately 0.5 tonnes of sample. The resultant concentrate was cyanide leached in a stirred reactor and the gold content determined.

## 2.0 METHODS

### 2.1 Bulk Sample Preparation and Assaying

The entire bulk sample (approximately 0.7 tonne) was jaw crushed to -1.3 cm. The crusher product was coned and quartered by standard sampling methods. One quarter of the bulk was coned and quartered. Opposite quarters were combined and rolls crushed to -6 mm. Each rolls crusher product, representing 1/8 of the bulk sample was coned and quartered. Opposite quarters were combined to make four composite samples. Each composite was sequentially riffle sampled to produce 4 x 1 kg samples and a reject (approximately 35 kg reject). The composites were designated A<sub>2</sub>, A<sub>3</sub>, A<sub>4</sub>, and A<sub>5</sub>. One of the samples from each composite was split to provide 2 subsamples of each:

A <sub>2</sub> - 1A 1B	A <sub>3</sub> - 1A 1B	A <sub>4</sub> - 1A 1B	A <sub>5</sub> - 1A 1B
A <sub>2</sub> - 2	A <sub>3</sub> - 2	A <sub>4</sub> - 2	A <sub>5</sub> - 2
A <sub>2</sub> - 3	A <sub>3</sub> - 3	A <sub>4</sub> - 3	A <sub>5</sub> - 3
A <sub>2</sub> - 4	A <sub>3</sub> - 4	A <sub>4</sub> - 4	A <sub>5</sub> - 4

Samples sent to Min-En Laboratories were: A<sub>2</sub> - 1A, A<sub>3</sub> - 1A, A<sub>4</sub> - 1A, A<sub>5</sub> - 1A. Samples sent to Acme Analytical were designated A<sub>2</sub> - 1B, A<sub>3</sub> - 1B, A<sub>4</sub> - 1B, A<sub>5</sub> - 1B. Duplicate gold analyses by fire assay were requested as well as gold fire assay by "metallics" preparation at Min-En.

The samples forwarded to Acme were later returned, and re-assayed by quadruple fire assay at Chemex Laboratories.

The remainder of the composite subsamples were forwarded to Min-En for analysis by fire assay technique without "metallics" preparation.

## 2.2 Pilot Plant

Approximately 500 kilograms of the bulk sample was pilot tested at Chapco Industries Ltd., Port Moody, under the supervision of P. B. Marchant of Coastech Research and J. R. Kerr of Eureka Resources. The pilot equipment consisted of a conventional gravity milling circuit which employed an automatic dry feeder, rod mill (3' x 4') in closed circuit with a hydrocyclone, a jig, and a shaking table.

All of the sample was piloted. The jig concentrate was tabled periodically and all of the table concentrate was saved. The pilot plant tailing was grab sampled every 15 minutes during piloting and composited. The mill, jig, and table apparatus were stripped and cleaned following piloting and the resultant "cleanup" was tabled and the concentrate saved with the bulk concentrate.

The pilot tailing was dried and assayed for gold with "metallics" fire techniques. The concentrate was dried @ 105°C, weighed, and leached in the presence of sodium cyanide and lime for 48 hours. The resultant pregnant solution was measured and assayed, by evaporation of a portion in a lead boat and fire assayed. The remaining pregnant solution was stripped using activated charcoal, the charcoal was ashed and fired to recover the residual precious metals. The cyanidation residue was washed and assayed by "metallics" and fire assay techniques.

### 3.0 RESULTS

#### 3.1 Assays

The certified assay sheets from both Min-En and Acme are appendicized. The assays shown are all estimates of the same sample.

Statistics of the Min-En analyses can be summarized:

A. All assays (n=32):

$$\bar{x} = 2.33 \text{ g Au/t}$$

$$S = 1.95$$

confidence interval @ 99% level	=	2.33 g Au/t	$\pm$	0.85
		95%	$\pm$	0.59
		90%	$\pm$	0.45

B. First assays (n=16)

$$\bar{x} = 2.11 \text{ g Au/t}$$

$$S = 1.44$$

confidence interval @ 99% level	=	2.11 g Au/t	$\pm$	0.94
		95%	$\pm$	0.63
		90%	$\pm$	0.48

C. Duplicate assays (n=16)

$$\bar{x} = 2.59 \text{ g Au/t}$$

$$S = 2.40$$

confidence interval @ 99% level	=	2.59 g Au/t	$\pm$	1.57
		95%	$\pm$	1.06
		90%	$\pm$	0.81

Statistics from the Acme assays are:

A. All assays (n=8)

$$\bar{x} = 1.72 \text{ g Au/t}$$

$$S = 0.55$$

confidence interval @ 99% level	=	1.72 g Au/t	$\pm$	0.61
		95%	$\pm$	0.38
		90%	$\pm$	0.28

### 3.2 Comparative Assays

#### A. Composite Sample Comparison (Min-En)

Sample	n	g Au/t	
		$\bar{x}$	s
A <sub>2</sub>	8	3.18	2.80
A <sub>3</sub>	8	1.58	0.59
A <sub>4</sub>	8	1.48	0.75
A <sub>5</sub>	8	3.07	2.28
A <sub>2</sub> /A <sub>3</sub>	16	2.38	2.13
A <sub>4</sub> /A <sub>5</sub>	16	2.27	1.83

#### B. Interlaboratory Comparison

Sample	g Au/t		
	Min-En	Acme	Chemex
A <sub>2</sub>	3.18	1.30	1.44
A <sub>3</sub>	1.58	2.26	7.59
A <sub>4</sub>	1.48	2.19	3.81
A <sub>5</sub>	3.07	1.20	1.66
Combined mean	2.33	1.72	3.63
Standard deviation	1.95	0.55	5.52
Variance	3.80	0.30	30.47
n	32	8	16

#### C. Metallics Assay (Min-En)

Sample	g Au/t	
	Fire	Metallics/Fire
A <sub>2</sub>	3.18	8.31
A <sub>3</sub>	1.58	2.09
A <sub>4</sub>	1.48	1.48
A <sub>5</sub>	3.07	5.77
Combined mean	2.33	4.41

### 3.3 Pilot Plant

The critical pilot plant measurements are summarized below and the metallurgical balance indicated in Figure 1:

Feed Weight = 510 kilograms  
Concentrate Weight = 8.479 kg.  
80% passing 195  $\mu\text{m}$  (86% -65 mesh)  
Cyanidation = 48 hours  
2 kg NaCN/t solids  
pH 11.0 ( $\text{Ca}(\text{OH})_2$ )  
Assays: Pilot Plant tailing = 1.23 g Au/t  
Cyanide Residue = 1.51 g Au/t  
Pregnant Solution = 85.2 g Au/t  
Final Pregnant Solution Volume = 20.740 litres  
Final Cyanide Residue (Washed) Moisture = 13.2%

### 4.0 DISCUSSION AND CONCLUSION

The nugget effect of coarse free gold was pronounced in all assaying of the bulk sample. Therefore, future assaying should be conducted by "metallics" preparation and fire assay techniques.

Comparison of the assays by "metallics" preparation methods and the total gold extracted by piloting indicated that assay by metallics methods might provide significant estimation of bulk gold content and avoid the requirement for bulk sample concentration by piloting followed by hydrometallurgical extraction for accurate assaying of a bulk sample.

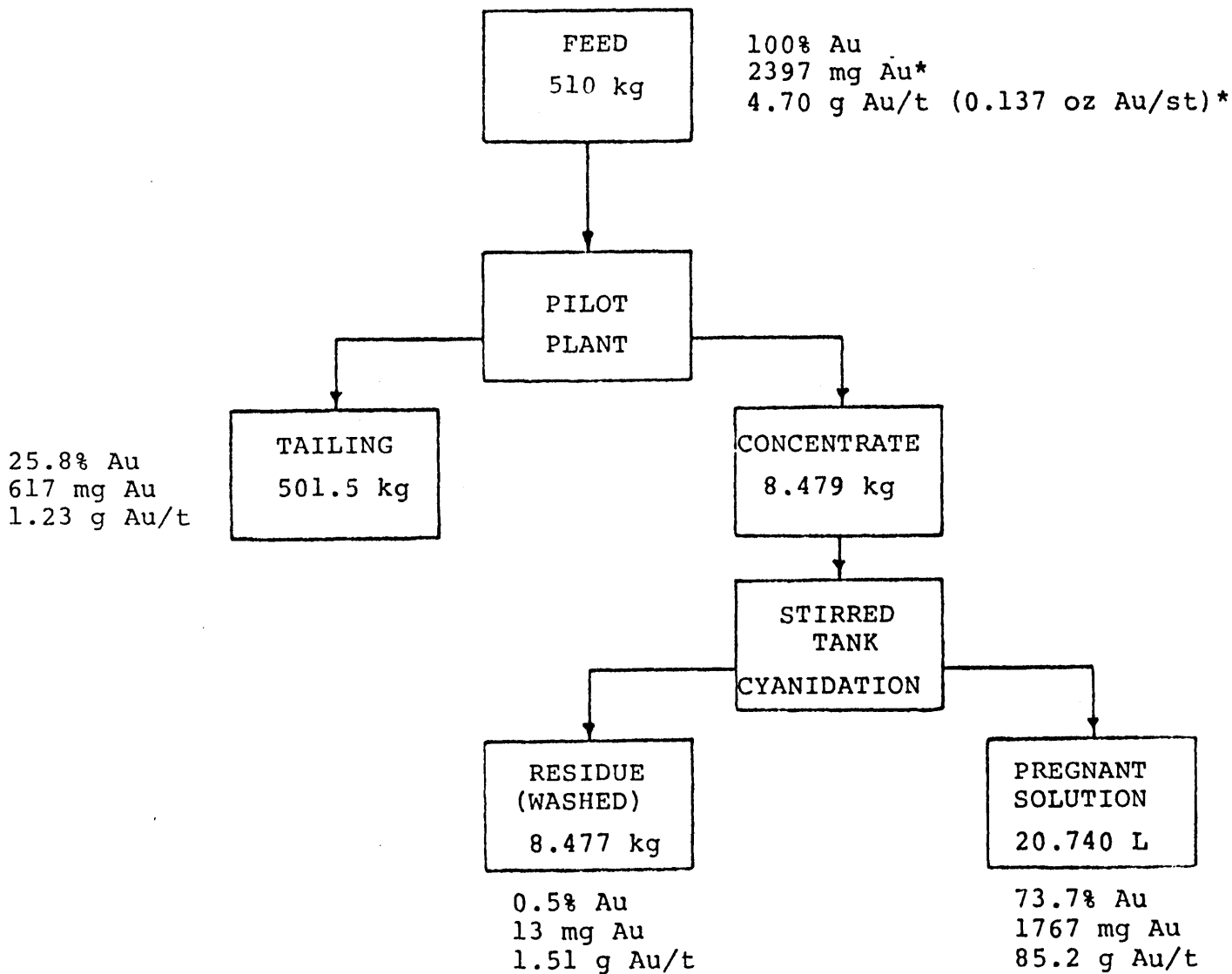
The pilot results are the most significant assay of the gold content of the bulk sample as received.

Over 99% extraction from the pilot concentrate was achieved by cyanidation. This might indicate future metallurgical response however, drying the sample may have biased the extraction results as previous metallurgical testing of similar material indicated a preg robbing characteristic of the ore.

The results presented herein indicated that the gold content of the bulk sample as received is 4.70 g Au/t (0.137 oz Au/st).

The metallurgical flowsheet and recovery/extraction has not been optimized to date.

FIGURE I  
 EUREKA RESOURCES INC.  
 BULK SAMPLE I  
 PILOT PLANT METALLURGICAL BALANCE



\* Back-calculated assays