



CONFIDENTIAL

**EXTENDED GRAVITY RECOVERABLE GOLD (EGRG)
TESTWORK ON AN ORE SAMPLE SUBMITTED
BY KOMET RESOURCES LIMITED**

**REPORT NUMBER: A41/118/14
OCTOBER 2014**

NOTES

1. This report refers specifically to the sample material received.
2. Tap water was used in all tests as required, except where indicated otherwise.
3. Abbreviations:

g/t Grams per tonne

AV Assay value

HAF Head accounted for: the portion of the head grade accounted for by that fraction, obtained by multiplying the mass fraction by the assay. The total of the HAF column should equal the head assay of the original sample.

Units The actual mass of gold, usually in milligrams, reporting to a test product, obtained by multiplying the product mass by the product assay.

Dist The distribution of gold to the test products, in percent.

EXECUTIVE SUMMARY

A sample of gold ore was submitted by Komet Resources for Extended Gravity Recoverable Gold and leach testing.

The average assayed head grade of the sample was 7.32 g/t Au and the calculated head grade was 5.10 g/t Au. Built up head grades are derived from large samples from which free gold is removed and assayed to extinction, thus minimizing nugget effect, and are better indicators of true sample head.

The grindability and bond work index of the ore sample was 0.980 g/rev and 15.20kWh/st respectively.

The sample had a very high GRG value of 74.0 % at a final grind of nominal 80% passing 75 microns. Some 42.9% of total GRG was liberated at coarse grind of nominal 80% passing 850 μ m, and a further 16.8% at nominal 80% passing 212 μ m. GRG thus liberates early in the grinding circuit.

Liberated GRG has an F80 particle size of +/-370 μ m, which is considered very coarse. Additionally, less than 10% of total GRG is less than 38 μ m in size, where it is considered a difficult target for gravity recovery.

Komet ore is thus a near-perfect gravity recovery candidate.

Cyanide leaching of gravity tails realised 89.6% recovery from the leach feed (EGRG test tails), equivalent to 23.3% of the ore head.

Overall GRG/leach recovery from this ore sample was therefore 97.3% of the test head.

1. TEST PROCEDURES

1.1 FEED PREPARATION

The entire sample submitted was thoroughly mixed, homogenised and testwork was carried out as outlined below.

1.2 BOND WORK INDEX DETERMINATION

The standard Bond Ball Mill Work Index test procedure is firstly to stage crush the feed to minus 3.35mm, and size a representative sample. The test then involves a series of batch grinds in a standard Bond mill. A Bond mill is 0.305m by 0.305m, with rounded corners, a smooth lining, and runs at 70rpm. The charge consists of 285 balls, weighing a total of 20.125kg.

Initially, a 700ml sub-sample of feed is prepared for use in the first batch grind. It is ground in the mill for 100 revolutions. After each batch grind, the contents of the mill are sieved on the selected 'closing' screen to remove the undersize. This is replaced by an equal weight of fresh feed to bring the weight back to that of the original charge. This sample is then returned to the mill and ground for a predetermined number of revolutions calculated to produce a 250% circulating load. This procedure is repeated at least 7 times until the weight of undersize produced per mill revolution reaches equilibrium.

The average of net mass per revolution from the last three cycles is taken as the ball mill grindability (Gbp) in g/revolution. A representative sample of product is sized to determine the P80. Finally, the BMWI is calculated using the Bond equation.

1.3 EXTENDED GRAVITY RECOVERABLE GOLD (EGRG) TESTING

Background

The GRG Test was first developed by Dr. Andre Laplante of McGill University Canada. GRG is an acronym for "Gravity Recoverable Gold", and the GRG value of an ore sample provides an indication of the amenability of the ore to gravity concentration.

The GRG testing scheme is based on the fact that progressive size reduction allows for the determination of precious metal recovery via Knelson Concentrator as liberated, without over-grinding and smearing of coarse precious metal particles. The GRG test provides valuable information on liberation data and potential for gravity recovery, as well as a way of comparing any ore against many others with similar GRG characteristics.

Actual plant gravity recovery is dependent upon various factors such size distribution of the GRG, its liberation characteristics and plant recovery effort. The GRG value as

determined by the test method used here is used as a basis for estimating actual plant recovery via mathematical modelling. For this purpose Knelson Gravity Solutions has developed and verified a mathematical model for recovery prediction.

Procedure

Feed Preparation

1. A bulk sample of ROM ore provided by the mine was crushed to 100% passing 6mm and thoroughly mixed via riffle splitter.
2. Two 20kg testwork aliquots were withdrawn from the bulk.
3. One of the test aliquots was used to develop a batch grind/time curve for the ore in a purpose-designed GRG rod mill. The second aliquot was then processed as follows:

First Pass (coarse grind)

4. The sample was ground in the GRG rod mill to provide a product grading nominally 80% passing 850 microns. The mill product was passed through a Knelson MD-3 laboratory Concentrator at a cone rotational speed suitable to provide 60g centrifugal force, as is used by 90+% of operating Knelson Concentrators, and at fixed fluidising water flowrate of +/-2.5 litres/minute.
5. The primary concentrate was removed from the MD-3 cone and panned to provide a final concentrate for microscope image capture.
6. Panning and pan tails were then recombined and wet-screened through test sieves with apertures of 300, 212, 150, 75, 53, 45, 38 and 25µm.
7. Each concentrate size fraction was dried, weighed and assayed to extinction via total fusion in order to eliminate sampling error and assay nugget effect.

Second Pass (intermediate grind)

8. The entire MD-3 tails from the first pass was filtered, re-pulped to required slurry density and further ground in the GRG rod mill to a P80 of approximately 212 microns.
9. The entire rod mill product was fed through the MD-3 as above.
10. Concentrate products were treated as above.

Third Pass (final grind)

11. The entire MD-3 tails from the second pass was filtered, re-pulped to required density and further ground in the GRG rod mill to a P80 of approximately 75 microns.
 12. The entire rod mill product was fed through the MD-3 as above.
 13. Concentrate products were treated as above.
 14. Final test tails were dried, weighed and sampled by riffle splitter.
 15. A representative cut of final tailings was duplicate fire assayed.
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1.4 CYANIDE LEACH TEST

A 1 kg representative aliquot of the gravity tails sample was split from the sample and pulped to 40% solids with water. Lime and sodium cyanide were added to achieve pulp pH of 10.5 – 11.0 and 0.10 % KCN solution strength. Mechanical agitation was carried out for 24 hours, with regular withdrawal of solution samples to monitor dissolution rate and reagent strength, the latter being replenished to target as required. At the conclusion of the test the pulp was filtered and water washed, and the solids residue was dried, split and assayed.

2. ASSAYS

Assayed and calculated head grades of the sample are shown below.

2.1 ORE SAMPLE

Assayed head grades (g/t Au)	7.70
	7.76
	6.49
Average (g/t Au)	7.32
Calculated head grade (g/t Au)	5.10

All assays were conducted by Performance Laboratory (Pty) Ltd, of Harare, Zimbabwe, which is a SANAS certified laboratory*.

* The South African National Accreditation System is recognised by the South African Government as the single National Accreditation Body that gives formal recognition that Laboratories, Certification Bodies, Inspection Bodies, Proficiency Testing Scheme Providers and Good Laboratory Practice (GLP) test facilities are competent to carry out specific tasks.

Nugget effect can play a major role when determining head grade of inhomogeneous placer ores. Built up head grades are derived from large samples from which free gold is removed and assayed to extinction, thus minimizing nugget effect. Built-up grades are thus a better indicator of true sample head.

3. RESULTS

The test results are presented in two formats: an overall recovery value and recovery by size. Detailed results are contained in the appendix.

3.1 Bond Work Index

Table 1: Grindability & Bond Work Index Results

Sample	Grindability (g/rev)	Work Index (kWh/st)
Ore	0.98	15.2

3.2 EGRG Recovery Results

Table 1: Overall EGRG summary

Grind Size P80 (µm)	Product	Mass		Assay Au (g/t)	Units Au	Dist'n (%)	Cum Dist'n
		(g)	(%)				
850	Stage 1 Conc.	147.06	0.74	297.09	43.69	42.9	42.9
212	Stage 2 Conc.	80.54	0.40	212.41	17.11	16.8	59.6
75	Stage 3 Conc.	73.15	0.37	199.76	14.61	14.3	74.0
	Final Tails	19699.25	98.50	1.35	26.53	26.0	
	Totals (head)	20000.00	100.00	5.10	101.94	100.0	
	Knelson Conc.	300.75	1.50	250.74	75.41	74.0	

Overall GRG value was 74.0% at a final grind of 77% passing 75 µm. Built-up head value was 5.10 g/t Au, and average assayed head grade was 7.32 g/t Au.

Figure 1: Cumulative recovery as a function of grind

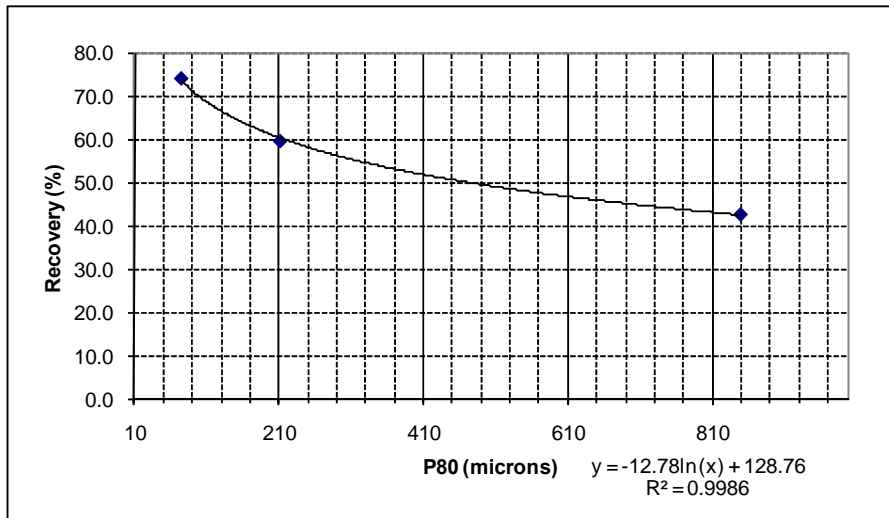


Figure 1 shows that GRG is related to grind size as a logarithmic function. The curve is slightly concave, indicating disproportionate liberation of GRG at finer grinds.

Table 2: Overall metallurgical balance

Product (μm)	Au recovery/fraction (%)			GRG %	Cumulative recovery (GRG)			Tails (%)
	Stage1	Stage2	Stage3		Stage1	Stage2	Stage3	
850	3.5	0.0	0.0	3.5	3.5	3.5	3.5	0.0
600	1.5	0.0	0.0	1.5	5.0	5.0	5.0	0.0
425	6.8	0.1	0.0	6.9	11.8	11.9	11.9	0.0
300	4.7	2.8	0.0	7.5	16.5	19.4	19.4	0.0
212	1.6	0.1	0.0	1.7	18.1	21.2	21.2	0.0
150	4.3	1.8	0.0	6.1	22.4	27.3	27.3	0.0
106	5.6	2.0	0.0	7.6	28.0	34.9	34.9	0.0
75	6.3	4.3	7.0	17.6	34.3	45.5	52.5	4.9
53	3.4	4.1	1.5	9.0	37.7	53.0	61.5	3.7
38	2.5	1.4	1.6	5.5	40.2	56.9	67.0	3.7
25	2.3	0.0	2.8	5.1	42.5	59.2	72.1	3.0
-25	0.4	0.1	1.4	1.9	42.9	59.6	74.0	10.7
Total	42.9	16.8	14.3	74.0				26.0

Table 2 above presents the overall test results, showing a GRG value of 74.0% at final grind of 77% passing 75 μm . 42.9 % of the head gold was recovered as GRG in stage 1, appreciable GRG thus liberates very early in the grind process. Some 6.3% of the stage 1 GRG (2.7% of head gold) is finer than 38 microns.

GRG recovery at stage 2 was 16.8%, with a lower recovery of 14.3% at stage 3. The proportion of -38 micron in stage 2 was 0.6% of stage GRG (0.1% of head gold) and in stage 3 it was 29.2% of stage GRG (4.2% of head gold).

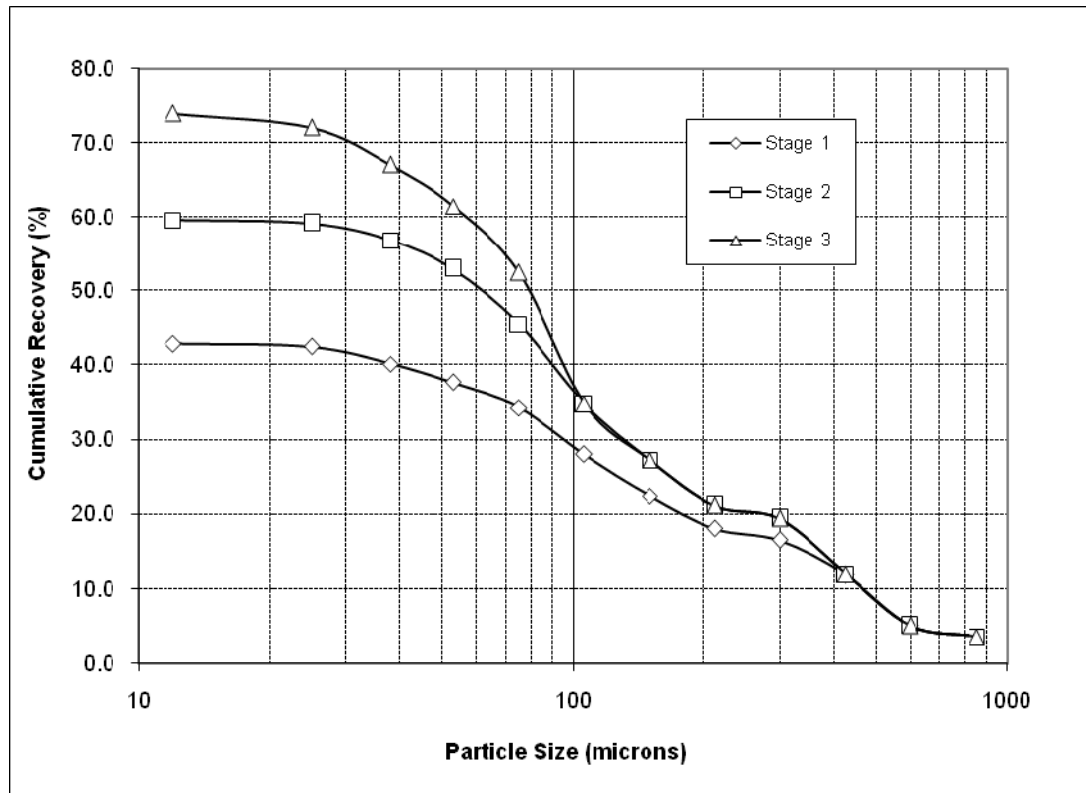
Table 3 below shows the fractional grades of the various products throughout the test. Concentrate grades show an increase at finer particle sizes per grind stage, and a decrease in overall concentrate grade as grind becomes finer. GRG is thus early-liberating.

The grades of the tails fractions are reasonably constant in all fractions.

Table 3: Fractional product grades

Product (μm)	Au grade/fraction (g/tAu)			Tails g/tAu	Cumulative grade (g/tAu)			Tails g/tAu
	Stage1	Stage2	Stage3		Stage1	Stage2	Stage3	
850	58.84	0.00	0.00	0.00	58.8	0.0	0.0	0.00
600	484.60	0.00	0.00	0.00	79.4	0.0	0.0	0.00
425	866.40	20.62	0.00	0.00	167.4	0.0	0.0	0.00
300	205.10	410.80	0.00	0.00	176.6	257.9	0.0	0.00
212	69.85	15.07	0.00	0.00	155.5	146.9	0.0	0.00
150	418.90	71.42	0.00	0.00	177.1	105.9	0.0	0.00
106	517.80	125.00	0.00	0.00	203.8	110.9	0.0	0.00
75	2040.00	550.80	220.60	1.09	244.2	160.5	220.6	1.09
53	1947.00	730.20	123.00	1.21	265.0	203.4	193.3	1.14
38	2006.00	620.40	129.00	1.63	280.2	215.1	179.0	1.25
25	4853.00	101.80	244.80	1.97	295.1	214.7	190.0	1.35
-25	1145.00	55.98	379.60	1.33	297.1	212.4	199.8	1.34
Total	297.09	212.41	199.76	1.34				

Figure 2: Cumulative GRG content – 100% total gold in ore

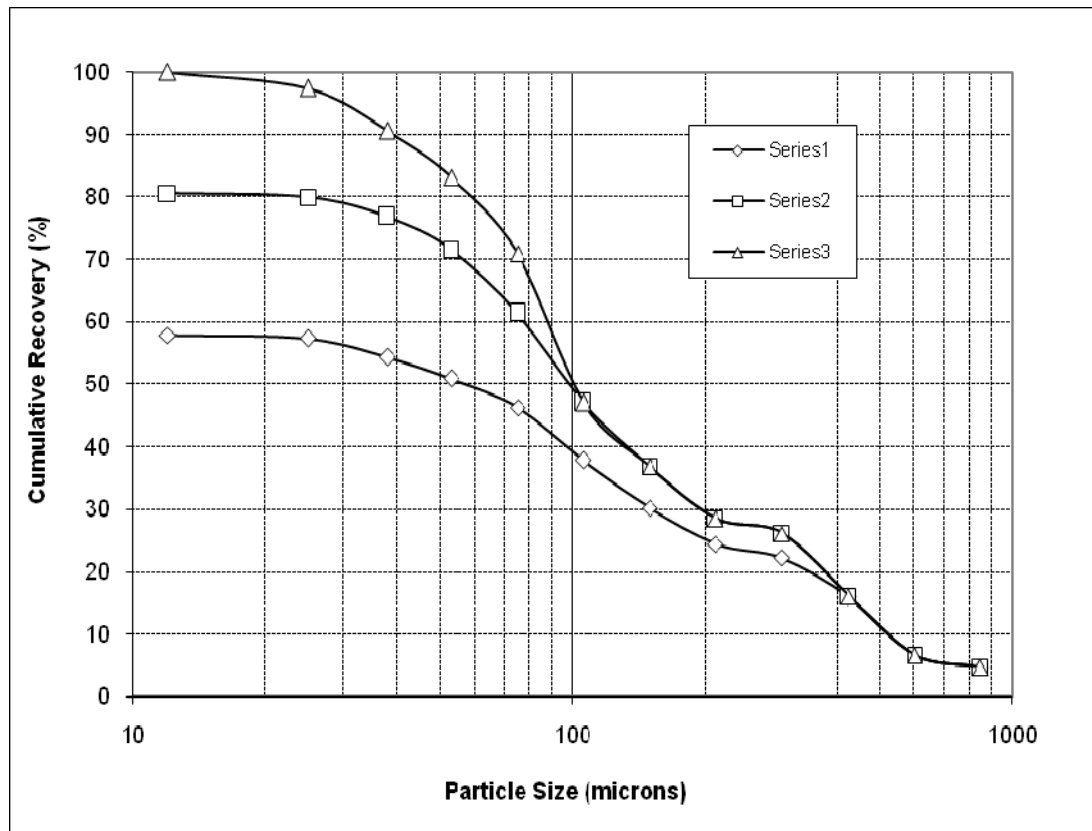


Overall results are easier understood if presented graphically. Figure 2 above cumulates gold recovery in two ways. First, gold is cumulated as percent retained from the coarsest (+850 μ m) to the finest size. The gold in the finest class (-25 μ m) is assumed to average 12 μ m in size, but only for the purposes of allowing calculation and graphing.

Second, gold is cumulated from stage 1 to stage 3. Thus the third curve for stage 3 cumulates the total GRG content, 74.0%.

To better observe the size distribution of the GRG, the data from figure 2 are plotted below using 100% of GRG in the ore rather than 100% of total gold:

Figure 3: Cumulative GRG content – 100% total GRG in ore



The outstanding feature of these curves is the very high contribution of stage 1 (850 μ m grind), which accounts for nearly 60% of total GRG. A further +/-20% is contributed by stages 2 and 3.

The F80 particle size of the GRG is assumed to be equal to the 20% intercept of the cumulative GRG content (figure 3 above); in this case about 370 microns, which is considered very coarse.

Only about 9% of total GRG (stage 3 curve above) is finer than 38 μ m, where it is considered a difficult target for gravity recovery.

Figure 4: Komet ore GRG coarseness on the AMIRA scale

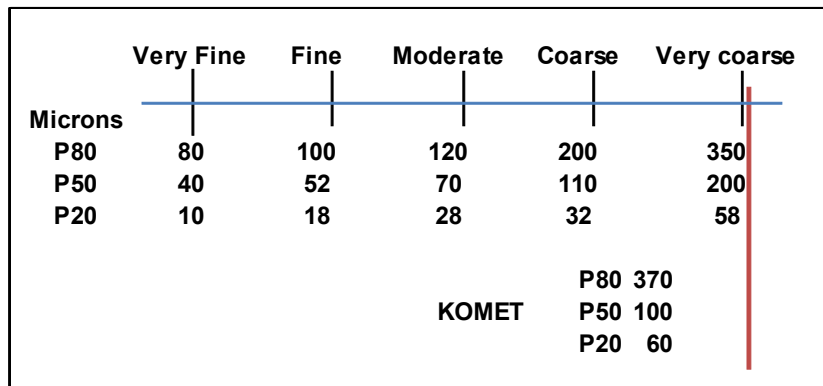


Figure 4 compares the Komet ore with a database of several hundred other ores on the AMIRA coarseness scale. As can be seen, Komet ore GRG ranks as very coarse.

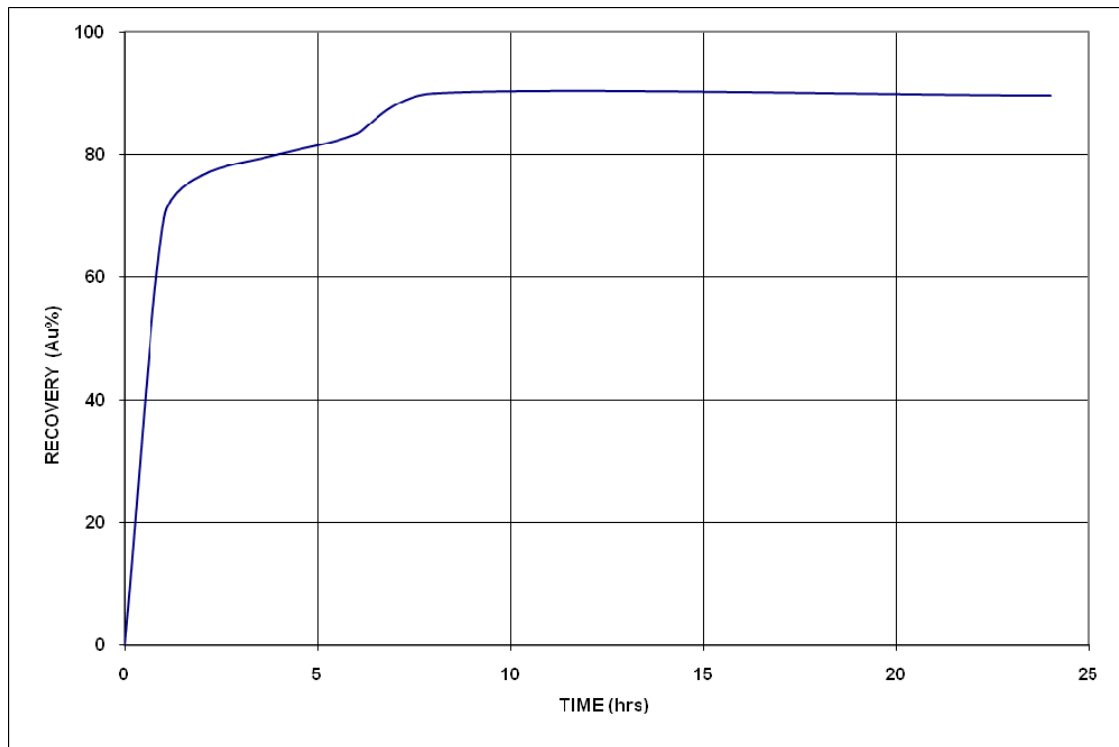
This behaviour presents an excellent opportunity for gravity recovery of gold. GRG value is very high, GRG liberates early and is uncommonly coarse, and only a small proportion of GRG reports to fine size fractions that are considered difficult for gravity recovery.

3.3 CYANIDE LEACHING OF FINAL EGRG TAILINGS

Built-up head grade	(g/t Au)	1.64
Leach residue value	(g/t Au)	0.17
Extraction	(g/t Au)	1.47
Extraction	(%)	89.6

Lime Required	(kg/t)	6.8
NaCN Consumed	(kg/t)	0.23

Figure 5: Dissolution Rate Curves



- Gold recovery after 24 hours was 89.6% of the test head.
- Dissolution rate was rapid achieving gold recovery of more than 80% in 5 hours.

3.4 OVERALL GOLD RECOVERY

Overall gold recovery via Knelson Centrifugal Concentration and cyanide leaching of Knelson tailings was as follows:

Knelson Concentration Recovery (% of test head)	=	74.0 %
Cyanide leaching of Knelson tailings (89.6% of 26.0%)	=	23.3 %
Overall gold recovery	=	97.3 %

APPENDIX A

TESTWORK – DETAILED RESULTS

BOND WORK INDEX

Background

One rock sample was received from Konet Resources for Bond Work Index.

Bond Ball Mill Index (BMWi) test is an industry standard for determining the Bond Work Index of an ore sample under ball milling conditions. The Bond Work Index is used to determine the energy requirements of a ball milling process for:

- ✚ Design of new equipment and grinding circuits;
- ✚ Optimization of existing ball mill circuits to maximize throughput and/or minimize power usage;
- ✚ Characterization of an ore body.

Procedure

The standard Bond Ball Mill Work Index test procedure is firstly to stage crush the feed to minus 3.35mm, and size a representative sample, see Table 1. The test then involves a series of batch grinds in a Standard Ball Mill. A Bond Mill is 0.305m by 0.305m, with rounded corners, a smooth lining and turns at 70rpm. The charge consists of 285 balls, weighing a total 20 125kg. Initially, a 700cm³ sub-sample of feed is prepared for use in the first batch grind. It is milled for 100 revolutions and after each batch grind the contents of the mill are sieved on a selected "closing" screen to remove the undersize. This is replaced by an equal weight of fresh feed to bring the weight back to that of the original charge. This sample is then returned to the mill and ground for a pre-determined number of revolutions calculated to produce a 250% circulating load. This procedure is repeated at least 7 times until the weight of undersize produced per mill revolution reaches equilibrium. The average of net mass per revolution from the last three cycles is taken as the ball mill grindability (Gbp) in g/revolution. A representative sample of product is sieved to determine P₂ at 80% cumulative passing, Table 2. Finally, the BMWi is calculated using the Bond equation.

$$Wi = \frac{44.5}{(Pi)^{0.23} \times (Gbp)^{0.82} \times \frac{10 - 10}{\sqrt{P_2} \sqrt{F_2}}}$$

Table 1: B 196

Screen	Wt (g)	% Wt	% Cumulative
3350	0.00		100.00
2800	126.30	14.82	85.18
2360	68.31	8.02	77.16
1680	75.78	8.89	68.26
1200	54.42	6.39	61.88
1000	106.11	12.45	49.43
600	141.98	16.66	32.77
300	83.19	9.76	23.01
150	66.43	7.80	15.21
75	39.49	4.63	10.58
-75	90.00	10.58	0.00

Table 2:

A	B	MILL FEED		E	MILL DISCHARGE		
Cycle	New Feed	-75 μ m	75 mm Oversize	Rev/M	-75 μ m	Total Under Produced	Undersize Produced g/rev
1	1138	77.4	247.7	100	158	80.6	0.806
2	158	10.7	314.4	200	176	165.3	0.827
3	176	12.0	313.1	300	288	276.0	0.920
4	288	19.6	305.5	305	318	298.4	0.978
5	318	21.6	303.5	310	328	306.4	0.988
6	328	22.3	302.8	310	325	302.7	0.976
7	325	22.1	303.0	310	325	302.9	0.977
8	325	22.1	303.0				
9							
10							

Key

A	-	No. Of Grinding Cycles
B	-	Initial Weight of Ore to Mill
C	-	B x % Fraction (Used Mesh Size)
D	-	Mesh Oversize (Based on $700\text{cm}^3 \div 3.5$) – C
E	-	Revolutions per minute
F	-	Minus Mesh Fraction (Mill Discharge)
G	-	Total Undersize Produced
H	-	Undersize Produced Per REV

Table 3:

Screen	Wt (g)	% Wt	% Cumulative
75	0.00	0.00	100.00
63	25.00	25.0	75.0
45	14.00	14.0	61.0
-45	61.00	61.0	0.00
Total	100.00	100.00	

Results:

1. A plot of the cumulative percentage weight passing versus the Screen mesh in microns at 80% passing intercept gives value P_2 . See Table 2.
2. F_2 is also found via screen analysis and graphic plots at the intercept 80% cumulative passing Table 1.
3. P_1 is the 200-mesh sieve size opening = 75 μ m.
4. G_{bp} is the average of the net weight undersize produced per revolution during the last three grinding cycles -(Grindability).

P_1 75
 P_2 52.0
 F_2 2375.0
 G_{bp} 0.980

Table 4:

Grindability 0.980 g/rev

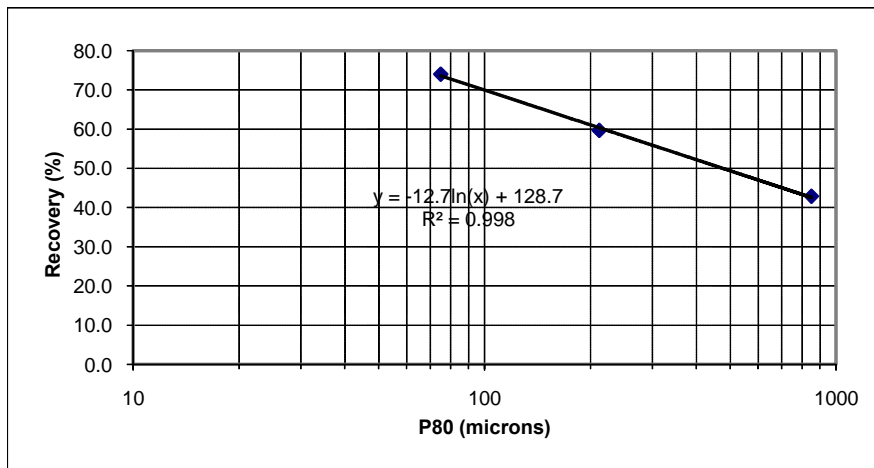
Bond Work Index (W_i) 15.20

SAMPLE: Ore

Summary - Metallurgical Balance

Grind Size P80 (µm)	Product	Mass		Assay Au (g/t)	Units Au	Dist'n (%)	Cum Dist'n
		(g)	(%)				
850	Stage 1 Conc.	147.06	0.74	297.09	43.69	42.9	42.9
212	Stage 2 Conc.	80.54	0.40	212.41	17.11	16.8	59.6
75	Stage 3 Conc.	73.15	0.37	199.76	14.61	14.3	74.0
	Final Tails	19699.25	98.50	1.35	26.53	26.0	
	Totals (head)	20000.00	100.00	5.10	101.94	100.0	
	Knelson Conc.	300.75	1.50	250.74	75.41	74.0	

GRG Value = 74.0



Stage 1 - Metallurgical Balance

Product (μm)	Concentrate				
	Mass		Assay	Units	Dist'n
	(g)	(%)	Au (g/t)	Au	(%)
850	60.9	41.38	58.84	3.58	8.20
600	3.1	2.10	484.60	1.50	3.43
425	8.0	5.47	866.40	6.97	15.96
300	23.2	15.76	205.10	4.75	10.88
212	23.3	15.86	69.85	1.63	3.73
150	10.6	7.19	418.90	4.43	10.14
106	11.0	7.45	517.80	5.68	12.99
75	3.1	2.14	2040.00	6.42	14.70
53	1.8	1.20	1947.00	3.45	7.89
38	1.3	0.87	2006.00	2.57	5.89
25	0.5	0.32	4853.00	2.31	5.29
-25	0.4	0.24	1145.00	0.40	0.92
Total	147.1	100.00	297.09	43.69	100.00

Product (μm)	Concentrate				
	Mass		Assay	Units	Dist'n
	(g)	(%)	Au (g/t)	Au	(%)
Concentrate	147.06	0.74	297.09	43.69	42.86
Tails	19852.94	99.26	2.93	58.25	57.14
Total	20000.00	100.00	5.10	101.94	100.00

Total units of gold in stage 1 feed	101.94
Feed grade (g/tAu)	5.10

Stage 2 - Metallurgical Balance

Product (μm)	Concentrate				
	Mass		Assay	Units	Dist'n
	(g)	(%)	Au (g/t)	Au	(%)
850	0.0	0.0	0	0.00	0.00
600	0.0	0.0	0	0.00	0.00
425	4.5	5.6	20.62	0.09	0.55
300	7.0	8.75	410.80	2.89	16.92
212	9.7	12.10	15.07	0.15	0.86
150	25.4	31.49	71.42	1.81	10.59
106	16.3	20.30	125.00	2.04	11.94
75	8.0	9.96	550.80	4.42	25.82
53	5.8	7.18	730.20	4.22	24.67
38	2.2	2.77	620.40	1.38	8.09
25	0.3	0.39	101.80	0.03	0.19
-25	1.2	1.44	55.98	0.06	0.38
Total	80.5	100.00	212.41	17.11	100.00

Product (μm)	Concentrate				
	Mass		Assay	Units	Dist'n
	(g)	(%)	Au (g/t)	Au	(%)
Concentrate	80.54	0.41	212.41	17.11	29.37
Tails	19772.40	99.59	2.08	41.14	70.63
Total	19852.94	100.00	2.93	58.25	100.00

Total units of gold in stage 2 feed	58.25
Feed grade (g/tAu)	2.93

Stage 3 - Metallurgical Balance

Product (μm)	Concentrate					Tails				
	Mass		Assay	Units	Dist'n	Mass		Assay	Units	Dist'n
	(g)	(%)	Au (g/t)	Au	(%)	(g)	(%)	Au (g/t)	Au	(%)
850	0.0	0.00	0	0.00	0.00	0.0	0.00		0.00	0.00
600	0.0	0.00	0	0.00	0.00	0.0	0.00		0.00	0.00
425	0.0	0.00	0	0.00	0.00	0.0	0.00		0.00	0.00
300	0.0	0.00	0	0.00	0.00	0.0	0.00		0.00	0.00
212	0.0	0.00	0	0.00	0.00	0.0	0.00		0.00	0.00
150	0.0	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
106	0.0	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
75	32.4	44.31	220.60	7.15	48.93	4575.1	23.14	1.09	4.99	18.80
53	12.6	17.18	123.00	1.55	10.58	3083.4	15.59	1.21	3.73	14.06
38	12.8	17.56	129.00	1.66	11.34	2341.5	11.84	1.63	3.82	14.39
25	11.6	15.80	244.80	2.83	19.36	1557.7	7.88	1.97	3.07	11.57
-25	3.8	5.15	379.60	1.43	9.79	8214.7	41.55	1.33	10.93	41.18
Total	73.2	100.00	199.76	14.61	100.00	19772.4	100.00	1.34	26.53	100.00

Product (μm)	Mass		Assay	Units	Dist'n
	(g)	(%)	Au (g/t)	Au	(%)
Concentrate	73.15	0.37	199.76	14.61	35.52
Tails	19699.25	99.63	1.35	26.53	64.48
Total	19772.40	100.00	2.08	41.14	100.00

Total units of gold in stage :	41.14
Feed grade (g/tAu)	2.08

Overall Metallurgical Balance

Product (μm)	Units of Au			
	Conc 1	Conc 2	Conc 3	Tail
850	3.58	0.00	0.00	0.00
600	1.50	0.00	0.00	0.00
425	6.97	0.09	0.00	0.00
300	4.75	2.89	0.00	0.00
212	1.63	0.15	0.00	0.00
150	4.43	1.81	0.00	0.00
106	5.68	2.04	0.00	0.00
75	6.42	4.42	7.15	4.99
53	3.45	4.22	1.55	3.73
38	2.57	1.38	1.66	3.82
25	2.31	0.03	2.83	3.07
-25	0.40	0.06	1.43	10.93
Total	43.69	17.11	14.61	26.53

Product (μm)	Overall Recoveries			Inc. Rec/ Fraction	Cum. Rec (%)
	Stage1	Stage2	Stage3		
850	3.51	0.00	0.00	3.5	3.5
600	1.47	0.00	0.00	1.5	5.0
425	6.84	0.09	0.00	6.9	11.9
300	4.66	2.84	0.00	7.5	19.4
212	1.60	0.14	0.00	1.7	21.2
150	4.35	1.78	0.00	6.1	27.3
106	5.57	2.00	0.00	7.6	34.9
75	6.30	4.33	7.01	17.6	52.5
53	3.38	4.14	1.52	9.0	61.5
38	2.52	1.36	1.63	5.5	67.0
25	2.27	0.03	2.78	5.1	72.1
-25	0.39	0.06	1.40	1.9	74.0
Total	42.86	16.78	14.34	73.98	

Total units of gold in GRG f	101.94
Feed grade (g/tAu)	5.10

Product (µm)	Au grade/fraction (g/tAu)			Tails g/tAu	Cumulative grade (g/tAu)			Tails g/tAu
	Stage1	Stage2	Stage3		Stage1	Stage2	Stage3	
850	58.84	0.00	0.00	0.00	58.8	0.0	0.0	0.00
600	484.60	0.00	0.00	0.00	79.4	0.0	0.0	0.00
425	866.40	20.62	0.00	0.00	167.4	0.0	0.0	0.00
300	205.10	410.80	0.00	0.00	176.6	257.9	0.0	0.00
212	69.85	15.07	0.00	0.00	155.5	146.9	0.0	0.00
150	418.90	71.42	0.00	0.00	177.1	105.9	0.0	0.00
106	517.80	125.00	0.00	0.00	203.8	110.9	0.0	0.00
75	2040.00	550.80	220.60	1.09	244.2	160.5	220.6	1.09
53	1947.00	730.20	123.00	1.21	265.0	203.4	193.3	1.14
38	2006.00	620.40	129.00	1.63	280.2	215.1	179.0	1.25
25	4853.00	101.80	244.80	1.97	295.1	214.7	190.0	1.35
-25	1145.00	55.98	379.60	1.33	297.1	212.4	199.8	1.34
Total	297.09	212.41	199.76	1.34				

Product (µm)	Au recovery/fraction (%)			GRG %	Cumulative recovery (GRG)			Tails (%)
	Stage1	Stage2	Stage3		Stage1	Stage2	Stage3	
850	3.5	0.0	0.0	3.5	3.5	3.5	3.5	0.0
600	1.5	0.0	0.0	1.5	5.0	5.0	5.0	0.0
425	6.8	0.1	0.0	6.9	11.8	11.9	11.9	0.0
300	4.7	2.8	0.0	7.5	16.5	19.4	19.4	0.0
212	1.6	0.1	0.0	1.7	18.1	21.2	21.2	0.0
150	4.3	1.8	0.0	6.1	22.4	27.3	27.3	0.0
106	5.6	2.0	0.0	7.6	28.0	34.9	34.9	0.0
75	6.3	4.3	7.0	17.6	34.3	45.5	52.5	4.9
53	3.4	4.1	1.5	9.0	37.7	53.0	61.5	3.7
38	2.5	1.4	1.6	5.5	40.2	56.9	67.0	3.7
25	2.3	0.0	2.8	5.1	42.5	59.2	72.1	3.0
-25	0.4	0.1	1.4	1.9	42.9	59.6	74.0	10.7
Total	42.9	16.8	14.3	74.0				26.0

TEST 1.2 CYANIDE AGITATION OF FINAL GRAVITY TAILS**METHOD**

The sample was pulped to a 1.5/1 liquid/solid ratio with tap water. Lime was added to achieve pulp pH of 10.5-11, followed by sodium cyanide as indicated below. Mechanical agitation was carried out for 24 hours, with regular withdrawal of solution samples to monitor dissolution rate. At the conclusion of the leach period the pulp was filtered and water washed, and solid residue dried, split and fire assayed.

LEACH CONDITIONS:

Solids mass (g)	1000.0
Solution volume (ml)	1500.0
Liquid/Solid ratio	1.5
KCN addition (%)	0.10
Lime addition (kg/t)	6.77

RESULTS

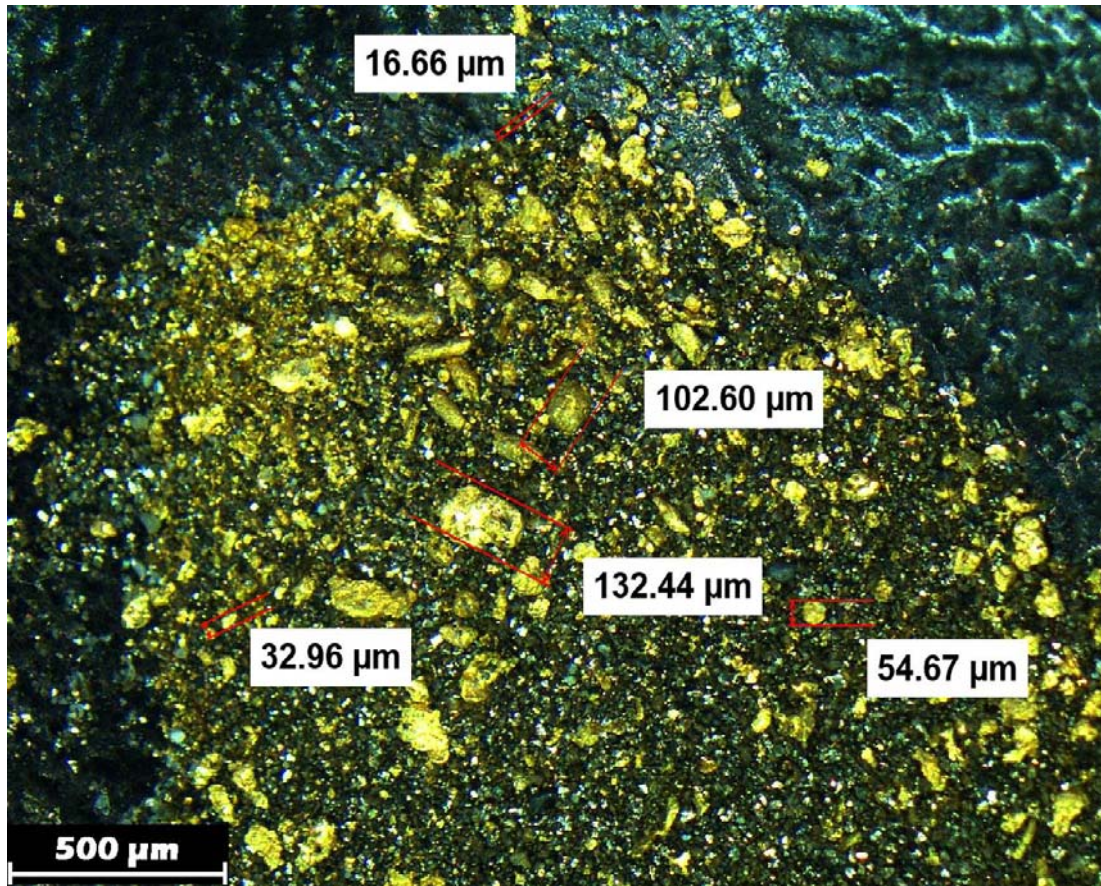
Time (hrs)	Solution (g/tAu)	Extraction		Lime (kg/t)	pH	NaCN (g)	Solution KCN %	DO2 mg/l
		(g/tAu)	(%)					
0	0.00	0.00	0.0	6.77	11.05	1.16	0.10	8.20
1	0.76	1.14	69.6		11.66		0.10	9.50
2	0.85	1.26	76.6		11.98		0.10	9.00
4	0.90	1.31	80.1		11.30	0.12	0.09	8.50
6	0.95	1.37	83.3		10.97		0.10	8.10
8	1.04	1.48	90.0		10.76		0.05	8.00
24	1.05	1.47	89.6		9.63		0.07	10.00

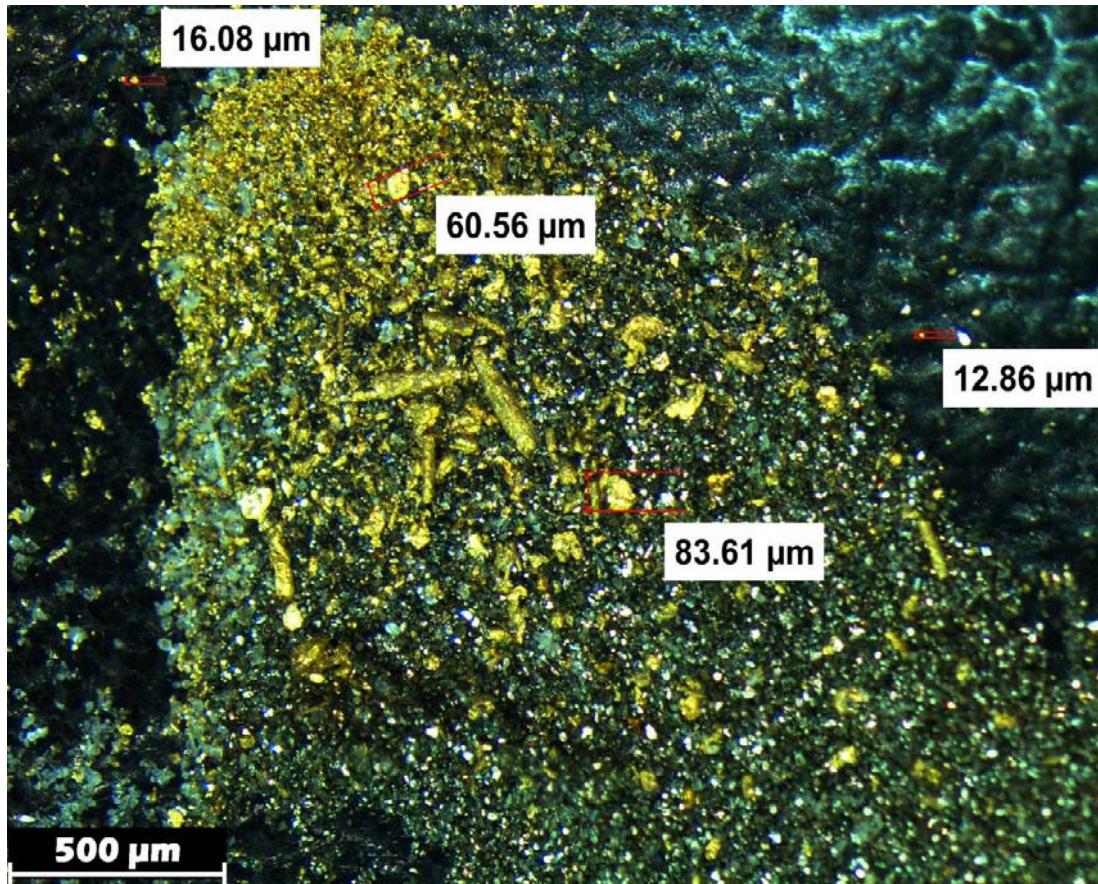
	g/tAu	%
Built-up Head	1.64	
Extraction	1.47	89.6
Residue	0.17	10.4

NaCN consumed (kg/t)	0.23
Lime required (kg/t)	6.8

APPENDIX B

CONCENTRATE PHOTOGRAPHS

Stage 1 Pan Concentrate (80% - 850um)

Stage 2 Pan Concentrate (80% - 212 μ m)

Stage 3 Pan Concentrate (80% - 106 μ m).

Note: the large >400 μ m flake is suspected to be flattened GRG resulting from overgrinding.

