

**HEAP LEACHING OF
OXIDE AND TRANSITION SAMPLES
FROM THE KAY TANDA PROSPECT
PHILIPPINES**

FOR

**MRL GOLD PHILIPPINES INC.
(Consultants – Peter J Lewis & Associates)**

REPORT M1374

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*It is important to recognise that the results reported relate only to material
represented by the sample submitted*

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SUMMARY

Two composite samples, made up from half drill core and representing the oxide and transition mineralization in the Kay Tanda deposit have been subjected to:

- Agitation leaching at a grind size of 80% passing 75 μ m.
- Heap leaching at a crush size of minus 12.7mm
- Heap leaching at a crush size of minus 50mm

Both samples assayed around 1 g/t Au and consisted of competent but highly fractured hard rock. It is this fracturing and the suspected location of the gold along the fractures that makes both samples almost ideal heap leach feedstock with:

- Unhindered percolation properties
- Minimal slump
- Reasonable cyanide consumptions
- Rapid gold dissolution
- High gold recoveries
- Low solution hold up

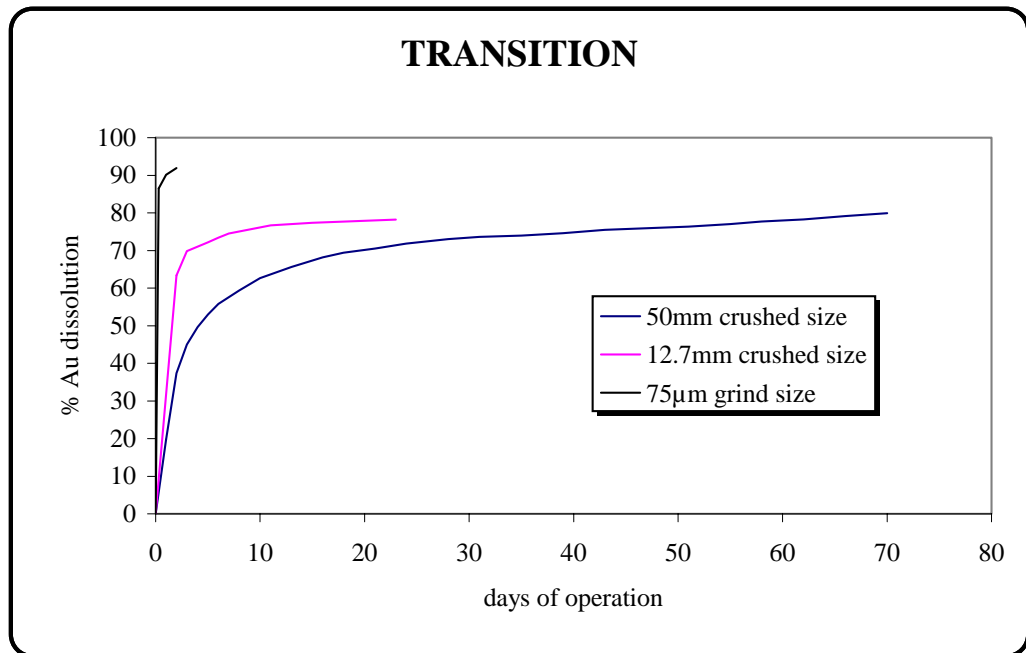
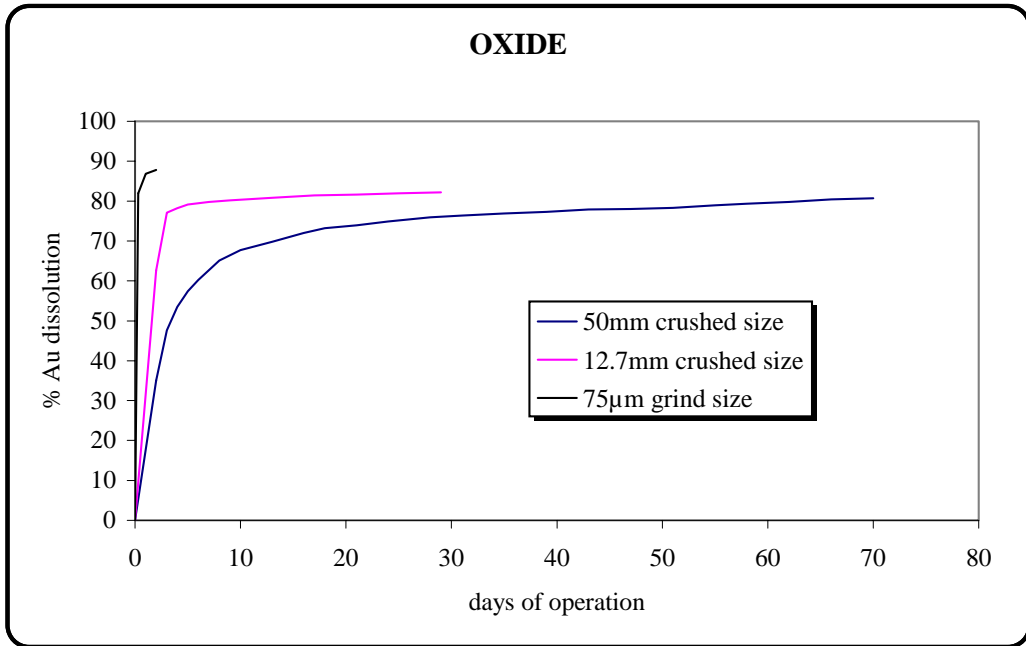
The % gold dissolutions obtained from these samples are tabulated below. The rate of gold dissolution was a function of size reduction, as shown in the graphs presented overleaf.

Percent Gold Dissolution

	OXIDE	TRANSITION
By agitation leaching at P80 75 μ m grind size	93.4	88.6
By heap leaching at 12.7mm crushed size	82.4	80.7
By heap leaching at 50mm crushed size	78.3	80.1

The only unusual aspect of the tests was the pink colour of the discharge solution from both the heap leach columns treating the transition sample. This had not been observed in any previous heap leaching testwork at Metcon. It contrasted to the more conventional straw coloured solution from the oxide sample. The source of the pink colouration was investigated, but the results were inconclusive. However, the most likely cause is the formation of cyanide complexes with one or more of the metal ions in solution, which were derived from the other metallic elements that were present in the transition sample.

GOLD DISSOLUTION RATES



1. INTRODUCTION

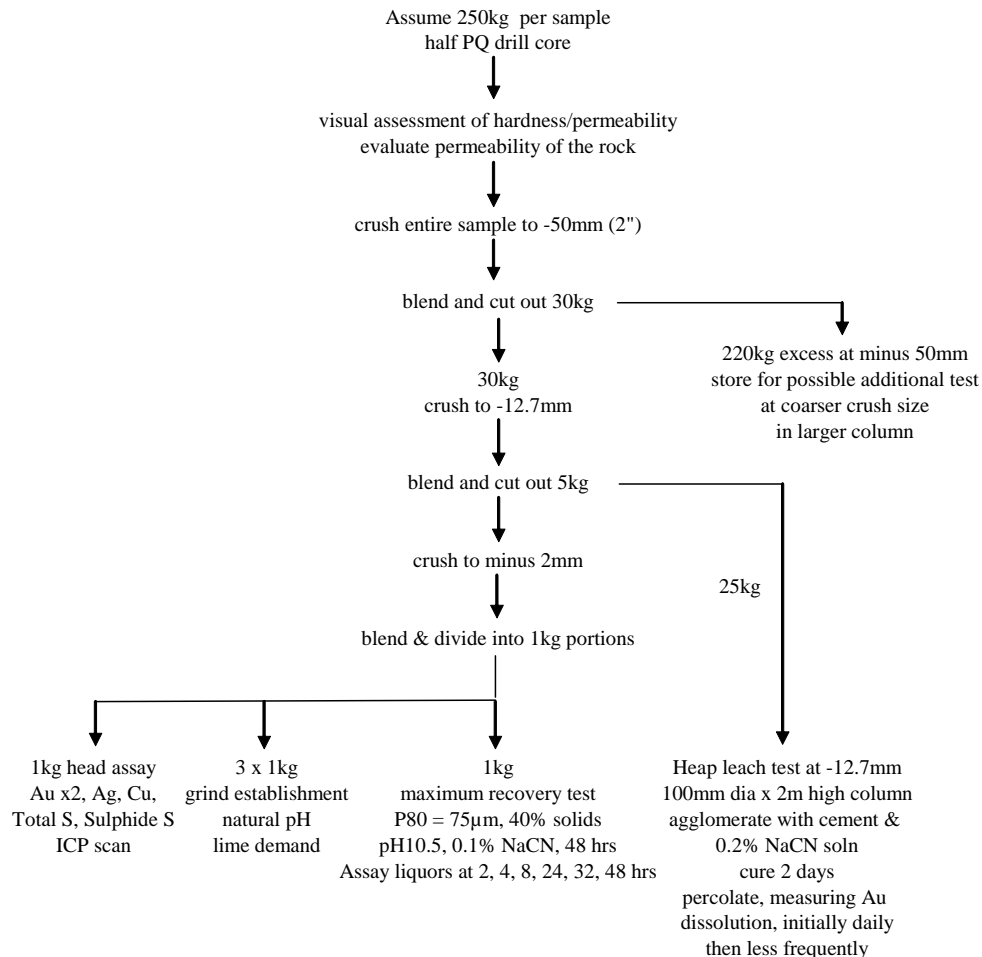
In earlier testwork (Metcon Report M0977, October 2005) a sample of earthy, oxide mineralization derived from surface trench sampling was subjected to agitation leaching and heap leach testwork. This sample assayed 3.5 g/t Au and 51g/t Ag. It responded well to leaching with 94% gold dissolution by grinding and agitation leaching, 88% gold dissolution by heap leaching at 12.7mm crushed size and 82% gold dissolution at 50mm crushed size. However, although the results were very encouraging, its physical nature was not considered to be typical of the majority of the Kay Tanda oxide mineralization and its gold and silver grades were much higher than the average grades expected. Consequently, new samples made up from half drill core and representing both oxide and transition mineralization were supplied for the current testwork programme. Both samples assayed around 1g/t Au and consisted of competent, but highly fractured, hard rock.

The proposed programme of testwork on these samples is shown in Figure 1. This was completed, including the heap leaching tests at minus 50mm crush size following the positive results obtained at minus 12.7mm crush size.

Figure 1 Testwork schematic for oxide and transition ore samples

Metcon Laboratories
4th August, 2006

**MINDORO RESOURCES LTD
KAY TANDA PROJECT - PHILIPPINES**



2. COMPOSITE PREPARATION AND HEAD ASSAYS

2.1 Composite samples.

A number of individual intercept samples consisting of half core were received in late December 2006. Most of the material consisted of competent, but highly fractured, hard rock. The samples were combined into oxide and transition composites as shown in Table 1. The estimated gold grades of the composites in Table 1 are based on the intercept assays supplied by MRL.

Table 1 Composite samples

OXIDE ZONE COMPOSITE						
Sample	Hole	From	To	Metres	Received	Assay
Number	Number	(m)	(m)		weight (kg)	(g/t Au)
1 0 - A	KTDH 01	6.0	23.4	17.4	69.6	1.73
1 0 - 1 to 4	KTDH 02	6.0	32.0	26.0	112.0	0.45
2 0 -1	KTDH 02	33.0	38.0	5.0	14.4	0.51
Total				48.4	196.0	0.91

TRANSITION ZONE COMPOSITE						
Sample	Hole	From	To	Metres	Received	Assay
Number	Number	(m)	(m)		weight (kg)	(g/t Au)
2T - A to D	KTDH 01	23.4	43.7	20.3	97.2	1.14
2T - 1	KTDH 01	43.7	44.7	1.0	5.5	0.27
2T - 2A & 2B	KTDH 01	44.7	51.7	7.0	45.8	0.67
2T - 3A & 3B	KTDH 01	51.7	63.0	11.3	57.4	0.88
2T - 4A & 4B	KTDH 01	63.0	70.0	7.0	40.2	0.19
2T -5	KTDH 01	70.0	72.0	2.0	11.6	2.10
Total				48.6	257.7	0.88

2.2 Physical Appearance

The appearance of the oxide sample received was in stark contrast to that previously tested, in that it comprised competent quartz-rich drill core that showed no signs of the friable, earthy nature of the previous trench sample. As shown in Table 1 it was taken from between 6 and 38m depth compared to the trench sample, which it is assumed was from a depth of <2m. Thus, there is a clear distinction between this oxide sample and the oxide sample reported on in Metcon Laboratories report M0977.

Pieces of core were selected at random from the oxide and transition samples and photographed to highlight the nature of the rock. The photographs are shown in Figures 2 and 3 overleaf. Both were similar in that they appeared as highly fractured but competent rock. Extending out from the fractures was a zone of discoloration indicating that some oxidation had occurred, possibly from penetration of ground waters. For the oxide sample this discoloration was reddish and for the transition sample it was a lighter, earthy colour. Sometimes the fractures themselves were wider and appeared to be a zone of leaching where the rock structure has been weakened. .

Figure 2 **Oxide ore**



Figure 3 **Transition ore**



2.3 Composite Preparation

Each of the two composites was crushed to -50mm (2") in a jaw crusher, blended and a working sample of approximately 40kg was cut out. The remaining -50mm material was set aside, and later approximately 150kg of this was used for a heap leach test.

The 40kg working portion was crushed finer to minus 12.7mm, as shown in Figure 1. From this 5kg was riffled out for further size reduction and the remainder set aside for heap leaching. The 5kg sample was crushed to minus 2mm, blended and then subdivided on rotary riffles. A portion was taken for head assays and the rest was stored as 1kg test portions.

2.4 Head assays

The 150 gram head assay portions were pulverized by Metcon and sent to two commercial laboratories (ALS Brisbane & SGS Townsville in Australia) for detailed analysis. The results are shown in Table 2 overleaf.

The highly siliceous nature of the composites is reflected in their high SiO₂ assays. Both contained significant amounts of sulphide sulphur, indicating the presence of some residual sulphide minerals, although as would be expected the transition composite contained more sulphide sulphur. They contained similar amounts of the rock forming elements, namely aluminium, calcium, silica, iron, titanium, potassium, phosphorous and manganese, with the exception of magnesium which was significantly higher in the transition composite. The addition of the common oxide forms of these elements accounted for over 92% of the composites.. Of the metals, the transition composite contained higher levels of Cd, Co, Cu, Ni, Pb and Zn, but lesser amounts of Ag, As, Cr, Mo, Sr, V and Zr.

The assayed gold head grades of the two composites are shown below, where they are compared with the expected grades based on the exploration assays and the calculated head grades from the three tests carried out. There is good agreement between the assayed and calculated head grades, which indicates that the gold grain size is very fine and no coarse gold is present.

Gold assays (in g/t)

	Oxide	Transition
Expected grades from exploration assays	0.91	0.88
Assayed head grades	1.16	1.05
Calculated from leach test at P80 75µm	1.14	1.05
Calculated from -12.7mm heap leach test	1.14	1.06
Calculated from -50mm heap leach test	1.09	0.95

Table 2 Head assays of oxide and transition composites

Determination	Laboratory	Method	oxide	transition
g/t Au	SGS	fire assay	1.16	1.05
ppm Ag	SGS	AAS	4	2.3
% total S	ALS	S-IR08	0.98	1.13
% sulphate S	ALS	S-ICP16	0.24	0.13
% sulphide S	ALS	difference	0.74	1.00
% Al ₂ O ₃	ALS	ICP81x	12.4	14.6
% CaO	ALS	ICP81x	0.06	0.08
% MgO	ALS	ICP81x	0.33	3.69
% SiO ₂	ALS	ICP81x	71.9	66.6
% Fe ₂ O ₃	ALS	ICP81x	5.21	4.78
% TiO ₂	ALS	ICP81x	0.54	0.43
% K ₂ O	ALS	ICP81x	1.49	3.25
% P ₂ O ₅	ALS	ICP81x	0.18	0.11
% MnO	ALS	ICP81x	<0.006	0.095
ppm Ag	ALS	ICP61s	4	1.4
ppm As	ALS	ICP61s	137	39
ppm Ba	ALS	ICP61s	420	200
ppm Bi	ALS	ICP61s	<2	<2
ppm Cd	ALS	ICP61s	<0.5	2.1
ppm Co	ALS	ICP61s	<1	10
ppm Cr	ALS	ICP61s	86	69
ppm Cu	ALS	ICP61s	40	326
ppm Mo	ALS	ICP61s	13	2
% Na	ALS	ICP61s	0.08	0.05
ppm Ni	ALS	ICP61s	1	16
ppm Pb	ALS	ICP61s	462	1040
% S	ALS	ICP61s	0.72	0.99
ppm Sb	ALS	ICP61s	5	<5
ppm Sr	ALS	ICP61s	480	35
ppm V	ALS	ICP61s	143	113
ppm Zn	ALS	ICP61s	30	718
ppm Zr	ALS	ICP61s	58	26

Note: ICP results are semi-quantitative

Values expressed as the common oxide were determined on an element basis but expressed as the oxide to allow for composition estimation of the ore

3. MAXIMUM GOLD RECOVERY TESTS

3.1 Grind Establishment

Carbon-in-leach tests at a grind size of P80 75µm were included in the test programme to provide an indication of the maximum amount of gold that might be recovered if the ore were finely ground and treated in a conventional carbon-in-leach plant. This was done to provide a basis for comparing the gold recoveries obtained by heap leaching.

In order to determine the grind time necessary to achieve the grind size of P80 75µm, three trial grinds over different times were carried out on 1kg test portions of each composite that had been crushed to -2mm. .

The trial grinds were carried out in a laboratory stainless steel rod mill, measuring 300mm long by 200mm diameter, with a 12kg rod charge. A rod mill was used to give a size distribution similar to that expected from a closed circuit ball mill grind. The grinds were completed at 50% solids w/w for times that were selected to span the desired size range. Each ground product was then sized and its size analysis plotted on a graph and the P80 size was determined. The latter were then plotted against the grind times, from which the grind time required to achieve P80 75µm was determined. The results of the trial grinds are presented in Appendix 1, from which the following grind times were selected:

Composite	Minutes
Oxide	18.25
Transition	14.25

3.2 Agitation Leach Tests at P80 75µm Grind Size

Agitation leach tests were carried out according to the details shown in Figure 1. A 1kg portion of each composite was ground to P80 75µm and then leached for 48 hours at 40% solids w/w, at pH 10 with hydrated lime, and with 0.1% initial cyanide concentration.. The cyanide concentration was maintained at >0.05% NaCN for the first 32 hours. The tests were carried out under CIL conditions. Activated carbon was added at the start, but then replaced with fresh carbon after 8 and 24 hours so that the rate of gold extraction could be determined. Each of the test products (liquor, carbons and residue) were assayed for gold and silver, with duplicate gold assays on the residue.

The test data sheets for each composite are presented in Appendix 2, and the results are summarized in Table 3 overleaf

Low leach residue grades were obtained from both composites. Gold extraction from the oxide composite at 93% was virtually the same as that obtained from the previous near surface oxide sample, and gold extraction from the transition composite was also high at 89%. Silver dissolutions were also high at 84 and 87%, although the low silver head grades suggest that there is not much economic benefit to be obtained from the silver.

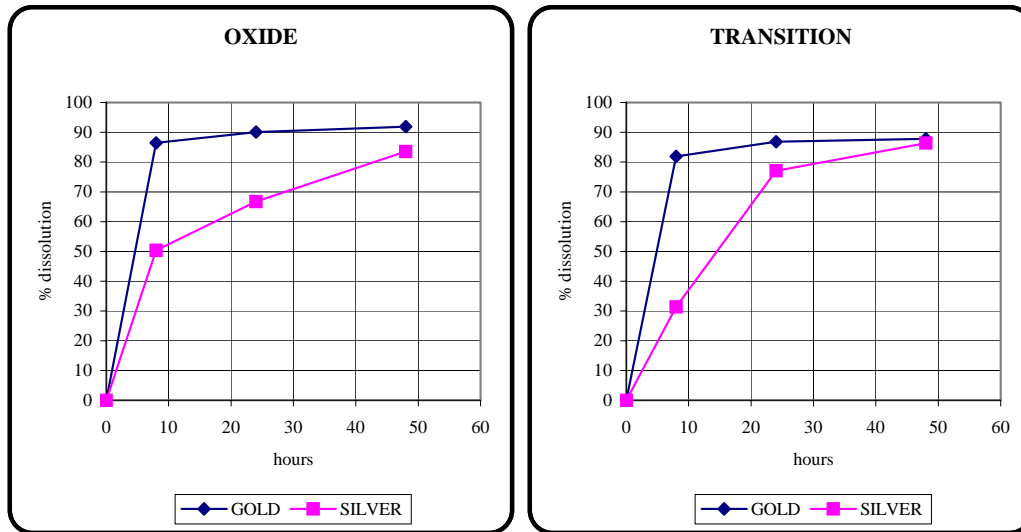
Table 3 Summary of CIL tests at P80 75µm

Composite		Oxide	Transition
Test number		K2	K1
Calculated head grades	g/t Au	1.14	1.05
	g/t Ag	4	2.3
Initial pulp pH		5.1	5.3
Hydrated lime consumption.	kg/t	1.90	3.09
NaCN consumption	kg/t	1.13	1.59
Residue grades	g/t Au	0.075	0.12
	g/t Ag	0.7	0.3
% gold extraction		93.4	88.6
% silver extraction		83.7	87.0

The rates of gold and silver dissolution are shown in Figure 4. The initial rate of gold dissolution from the oxide composite was high, with 86% of the gold extracted in 8 hours. It then progressed at a slower rate to 93.4% after 48 hours. The gold dissolution rate from transition composite was a little slower reaching 82% in 8 hours and then slowly increasing to 88.6% after 48 hours.

Silver dissolution was typically slower than that for gold, and was still apparently ongoing after 48 hours.

Figure 4 Gold and silver dissolution rates



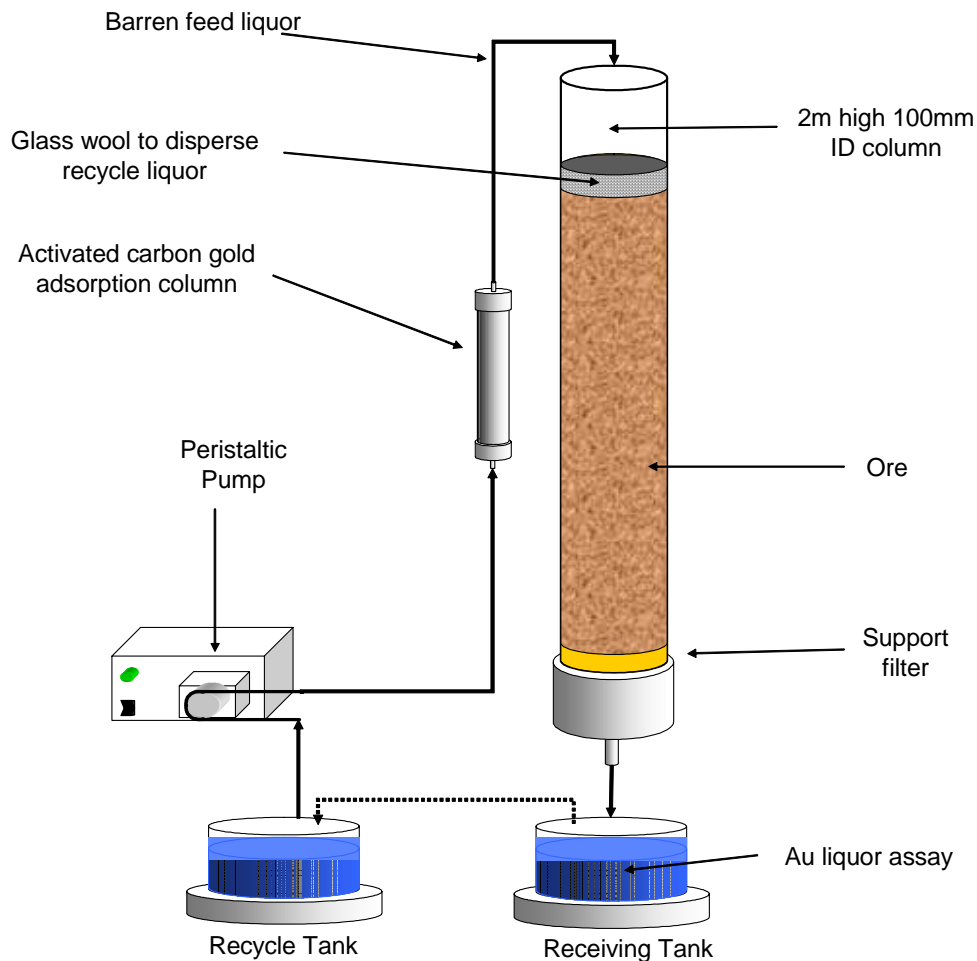
4. HEAP LEACHING TESTS

4.1 Procedure

A minus 12.7mm crush size was chosen for the first simulated heap leach tests as it represented the finest crush size at which heap leaching could be envisaged. As high gold extractions were obtained at this crush size, a further heap leach test was completed on both composites at a coarser crush size of minus 50mm.

The minus 12.7mm tests were carried out in a 100mm diameter column using just less than 20kg of ore, and the subsequent minus 50mm tests were carried out in a 300mm diameter column on 150kg of ore. In both cases the column height was 2m. Figure 5 shows the circuit arrangement for the heap leach tests.

Figure 5 Heap leach circuit



The test procedure applied at both crush sizes was essentially the same. The crushed ore was first agglomerated with cement, which acted as a binder and pH modifier, and cyanide solution representing part of the expected cyanide requirement.. Agglomeration was carried out in a stainless steel cement mixer, with the cyanide solution added until visually the fines were sufficiently bound to the coarser particles so that good percolation of the leach solution would occur in the column.

The agglomerated material was then loaded into the column and allowed to cure for two days, before applying the initial 0.1% NaCN leach solution at a rate of 10L/m²/hr. The volume, pH and NaCN concentration of the pregnant discharge liquor that had collected in the receiving tank were measured. The liquor was then sampled and assayed for gold and silver. Initially this was done on a daily basis, with less frequent sampling as the rate of gold dissolution decreased. After each sampling step the pregnant liquor was transferred to the recycle tank, from where it was pumped to the head of the column via an activated carbon column. NaCN was added as required to maintain a suitable feed liquor concentration, and NaOH was added to maintain pH.

Each column test was terminated once the gold assay of the column discharge was near or less than the analytical detection limit for gold. The solution remaining in the column was allowed to drain and was collected. Wash water was then added to flush out any remaining solubilised gold and this was also collected. The column was then emptied and the residue was crushed and sampled. The final discharge solution, the wash solution, the carbon and the residue were assayed for gold and silver, with duplicate gold assays on the residue. A full mass balance for both gold and silver was then completed.

4.2 Tests at Minus 12.7mm Crush Size

4.2.1 Initial Coloured Discharge Liquors

The initial discharge from the column treating the transition composite was pink, in contrast to the straw coloured solution from the oxide composite. The solutions are shown in Figure 6.

Figure 6 Column discharge liquors



Whereas the colour of the discharge from the oxide composite was considered to be normal for oxide ore, the pink colour from the transition composite had not been observed in any of the many previous heap leach tests completed by Metcon. The

first reaction was to suspect that the pink colour was due to some contamination within the laboratory resulting from not properly cleaning the apparatus. The other unusual factor was that it was difficult to maintain the solution pH in the transition column, which continued to decrease despite adding large amounts of sodium hydroxide to the recycled liquor. Consequently, all equipment was thoroughly cleaned and a new sample of heap leach feed was prepared from the transition composite, using an increased amount of cement in the agglomeration stage. The increased cement addition resulted in improved stabilized the solution pH, but the discharge from the column was again pink, which indicated that colour was derived from the ore.

Investigations were undertaken to try to identify the source of the colour.

- Multi-element analyses were completed on the two discharge liquors to determine if any significant differences existed. The results are shown in Table 4 overleaf. Of the metal ions, the amounts of Cd, Co, Cu, Mo, Ni and Zn were all higher in the transition liquor, which, with the exception of Mo, they were in the feed sample. It is possible that one or more of these elements in solution has formed a cyanate that has led to the pink colouration.
- Advice was received that iron thiocyanate (FeSCN_2) can form a deep red colour, so both liquors were assayed for thiocyanate. Interference prevented a quantitative result being obtained on the oxide liquor, but the transition liquor assayed only 0.3mg/l thiocyanate, suggesting that iron thiocyanate was not the source of the pink colouration.
- A test was completed in which a 100g pulverized sample of the transition composite was agitated with 100ml of water. There was no discernible discolouration in the filtered solution, which indicated that the pink colour was not derived from any soluble salts in the ore.
- The solution from the agitation leach test at P80 75 μm on the transition composite was colourless. Therefore, as hydrated lime had been used as the pH modifier in this test, it was thought that the cement used in the heap leach tests might be causing the pink colouration. Therefore, two agitation leach tests without carbon were completed over 6 hours at a grind size of P80 75 μm , in one case using lime as the pH modifier and the other cement. In both cases the filtered leach solution was colourless, which indicated that cement was not the cause.

(The last two investigations are not totally conclusive. This is because they were completed with a much higher ratio of solution to ore than was the case in heap leach column. Therefore, it is possible that, because of the much higher dilution of the pink colouration with water, none could be observed with the naked eye.)

None of investigations identified the exact cause of the pink colour, but the most likely reason would appear to be the formation of a pink-coloured cyanide complex. Nevertheless, since high gold extractions (similar to those obtained on the oxide composite) were obtained in both heap leach tests on the transition composite, the pink colouration clearly had no impact on gold dissolution. Therefore, it remains simply an unresolved curiosity.

Table 4 Analysis of initial column discharge liquors

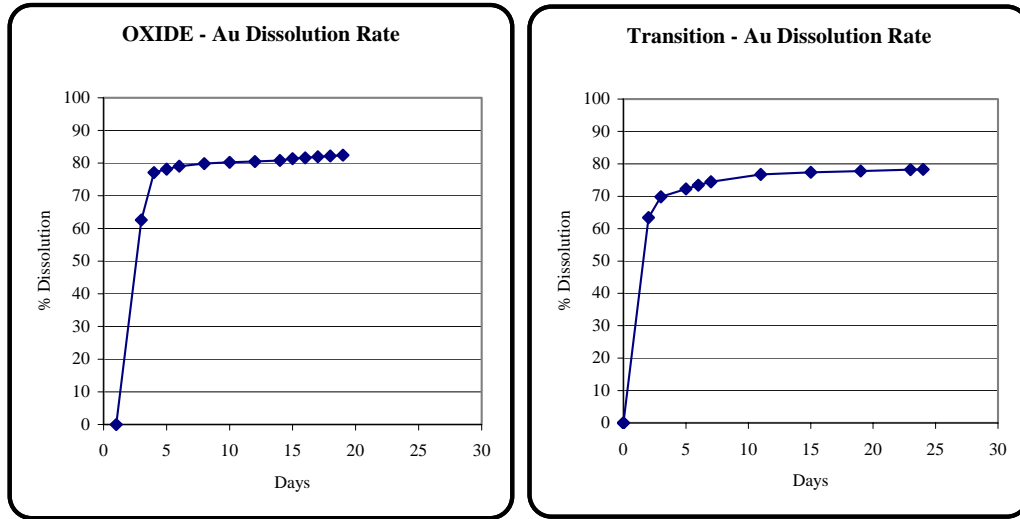
Determination	Laboratory	Method	oxide	transition
ppm Au	ALS	Au-AA16	11.25	7.20
ppm Ag	ALS	ME-MS02	10.6	4.6
ppm Al	ALS	ME-ICP02	0.3	<0.1
ppm Ca	ALS	ME-ICP02	759	790
ppm Mg	ALS	ME-ICP02	5	59
ppm Si	ALS	ME-ICP02	16	6
ppm Fe	ALS	ME-ICP02	64.0	39.1
ppm Ti	ALS	ME-ICP02	<0.1	<0.1
ppm K	ALS	ME-ICP02	40	53
ppm P	ALS	ME-ICP02	<5	<5
ppm Mn	ALS	ME-ICP02	9.8	2.1
ppm As	ALS	ME-ICP02	0.2	<0.1
ppm Bi	ALS	ME-MS02	<0.001	<0.001
ppm Cd	ALS	ME-MS02	0.252	2.27
ppm Co	ALS	ME-MS02	0.868	2.53
ppm Cr	ALS	ME-ICP02	0.3	0.1
ppm Cu	ALS	ME-ICP02	37.5	1195
ppm Mo	ALS	ME-MS02	0.216	0.782
ppm Na	ALS	ME-ICP02	2150	2370
ppm Ni	ALS	ME-MS02	1.615	2.27
ppm Pb	ALS	ME-MS02	<0.001	<0.001
ppm S	ALS	ME-ICP02	1180	1330
ppm Sr	ALS	ME-ICP02	1.4	0.7
ppm Te	ALS	ME-MS02	0.002	<0.001
ppm V	ALS	ME-ICP02	<0.1	<0.1
ppm Zn	ALS	ME-ICP02	47.2	319
ppm Zr	ALS	ME-ICP02	<1	<1

4.2.2 Results

The columns were operated for 29 days on the oxide composite and 23 days on the transition composite, at which point the discharge liquors were close to the limit of detection for gold and so it was assumed that leaching was near completion.

The gold dissolution rate curves in Figure 7 overleaf indicate that leaching from the oxide composite was slightly faster than that from the transition composite. In both cases the majority of the gold was extracted over the first 5 days. Thereafter, the rate of leaching was more gradual, and was probably controlled by the rate of movement of the leach liquor into and out of the hard rock surrounding the fractures.

Figure 7 Minus 12.7mm heap leach test rate curves



A data sheet for each of the column tests is presented in Appendix 3. The results are summarised in Table 5, and show that 82.4% of the gold was extracted from the oxide composite and 78.3% from the transition composite. These gold extractions are only approximately 10% lower than the “maximum” extractions achieved in the agitation leach tests, which indicates that both ore types are highly amenable to heap leaching. Other positive factors arising from both tests were the:

- Unhindered percolation properties
- Low solution hold up
- Minimal slump
- Reasonable cyanide consumptions
- Rapid initial gold dissolutions

Table 5 Summary of minus 12.7mm heap leach tests

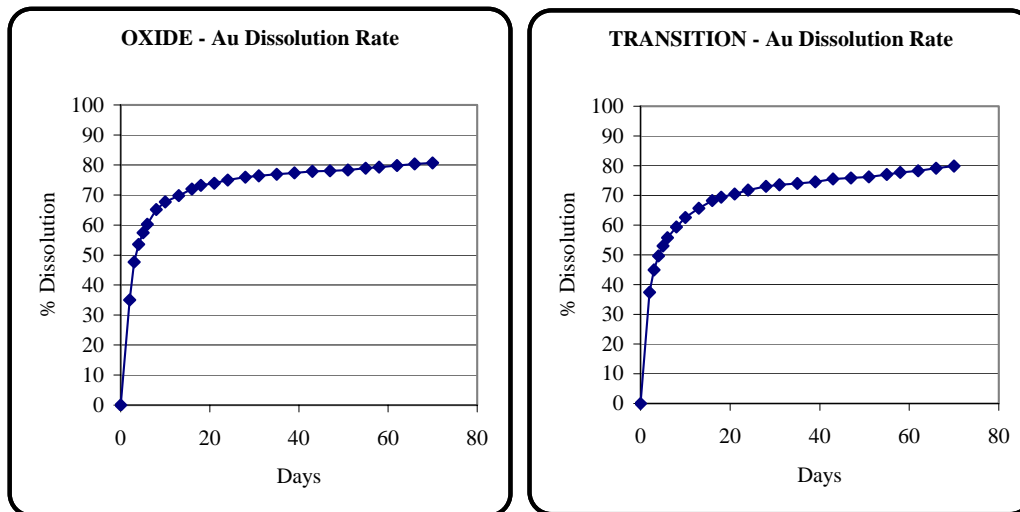
FINAL MASS BALANCES TEST K-4 (OXIDE @ 12.7mm)							
product	g/kg/mL	GOLD		SILVER		GOLD	SILVER
		assay	mg	assay	mg		
carbon	101.02	168	16.97	170	17.17	EXTRACTION %	82.4 32
residue	18.55	0.20	3.710	2	37.100	CALCULATED FEED g/t	1.14 3
final discharge	5.948	0.01	0.059	0.04	0.238	ASSAY HEAD g/t	1.16 4
wash	2.198	0.02	0.044	0.04	0.088	REAGENT ADDITIONS kg/T	
liquor sub-samples			0.350		--	cement	2
feed liquor	0					NaCN	1.43
total		1.14	21.13	3	54.6	NaOH	0.46
FINAL MASS BALANCES TEST K-5 (TRANSITION @ 12.7mm)							
product	g/kg/mL	GOLD		SILVER		GOLD	SILVER
		assay	mg	assay	mg		
carbon	100.92	152	15.34	130	13.12	EXTRACTION %	78.3 42
residue	18.83	0.23	4.331	1	18.830	CALCULATED FEED g/t	1.06 2
final discharge	7.12	0.01	0.071	0.03	0.214	ASSAY HEAD g/t	0.86 2
wash	2.627	0.01	0.026	0.02	0.053	REAGENT ADDITIONS kg/T	
liquor sub-samples			0.214		--	cement	3
feed liquor	0					NaCN	1.47
total		1.06	19.98	2	32.2	NaOH	2.69

4.3 Tests at minus 50mm Crushed Size

As high gold extractions were obtained at minus 12.7mm crush size, tests were completed on both composites at the coarser crush size of minus 50mm. The cement added to the agglomeration stage for the transition composite was increased from 3 to 6kg/t in an attempt to better control the pH. This proved successful, and it also reduced the amount of NaOH required to maintain the pH during the test from 2.7kg/t to 0.6 kg/t. The addition of cement to the oxide composite was unchanged at 2kg/t.

As with those at minus 12.7mm, these tests operated without any problems. They were both continued for 70 days before it was decided to halt them on the basis of low gold tenors in the discharge liquors. The gold dissolution rate curves are presented in Figure 8. They are both similar in shape to the rate curves for the minus 12.7mm test in Figure 7. However, as would be expected with the much coarser crush size, they are spread over a longer total time period, and the initial rapid leach phase is spread over 15 to 20 days rather than 5 days. The colours of the discharge liquors were the same as for the tests at minus 12.7mm.

Figure 8 Minus 50mm heap leach test rate curves



A data sheet for each test is presented in Appendix 4, and the results are summarized in Table 6 overleaf. The gold extractions were very close to those achieved at the finer crush size, although the rate curves in Figure 8 do suggest that with time more gold could be recovered, particularly from the transition composite.

Thus, very similar gold extractions have been obtained for both ore types, and at both crush sizes. The only difference is that a longer leach time is required at the coarser crush size.

The results suggest that equivalent, or similar, high gold extractions might be possible at an even coarser crush size, and this should be investigated.

Table 6 Summary of 50mm heap leach tests

FINAL MASS BALANCES TEST K-6 (OXIDE @ 50mm)						
product	g/kg/mL	GOLD		SILVER		
		assay	mg	assay	mg	
						EXTRACTION % 80.7 29
carbon	342.5	368	126.04	340	116.45	
residue	144.69	0.21	30.385	2	289.380	CALCULATED FEED g/t 1.09 3
final discharge	22.7	0.02	0.454	0.14	3.178	ASSAY HEAD g/t 1.16 4
wash	9.7	0.01	0.097	0.07	0.679	REAGENT ADDITIONS kg/T
liquor sub-samples			0.355		--	
feed liquor	0					NaCN 1.42
total		1.09	157.33	3	409.7	NaOH 0.35
FINAL MASS BALANCES TEST K-7 (TRANSITION @ 50mm)						
product	g/kg/mL	GOLD		SILVER		
		assay	mg	assay	mg	
						EXTRACTION % 80.1 56
carbon	348.9	348	121.42	288	100.48	
residue	161.54	0.19	30.693	0.5	80.770	CALCULATED FEED g/t 0.95 1
final discharge	27.22	0.04	1.089	0.08	2.178	ASSAY HEAD g/t 0.86 2
wash	9.23	0.03	0.277	0.06	0.554	REAGENT ADDITIONS kg/T
liquor sub-samples			0.462		--	
feed liquor	0					NaCN 1.57
total		0.95	153.94	1	184.0	NaOH 0.62

NB actual residue Ag <1g/t

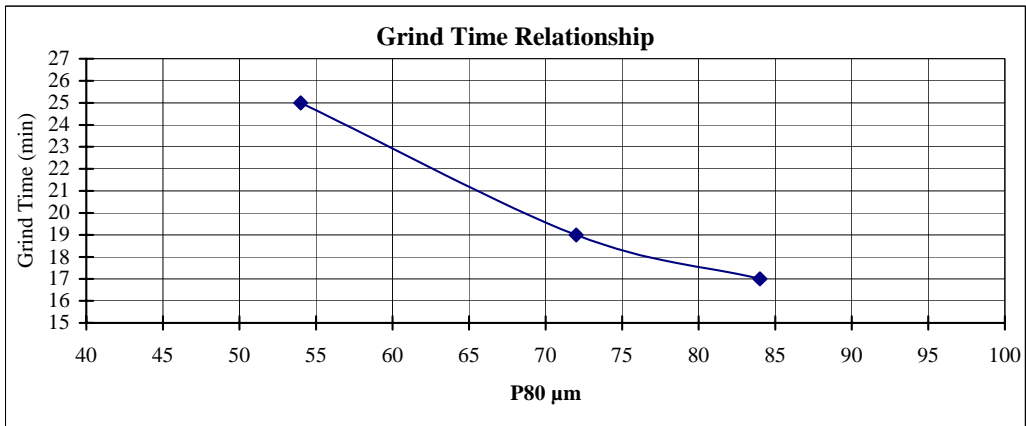
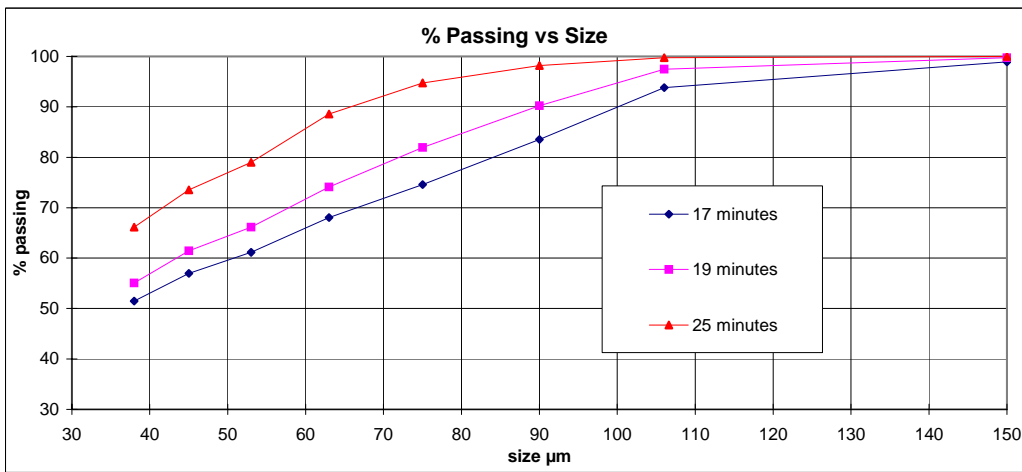
APPENDIX 1

Trial Grinds

Trial Grinds - Oxide

1kg solids @ 50% pulp density
SS rod mill (silver)

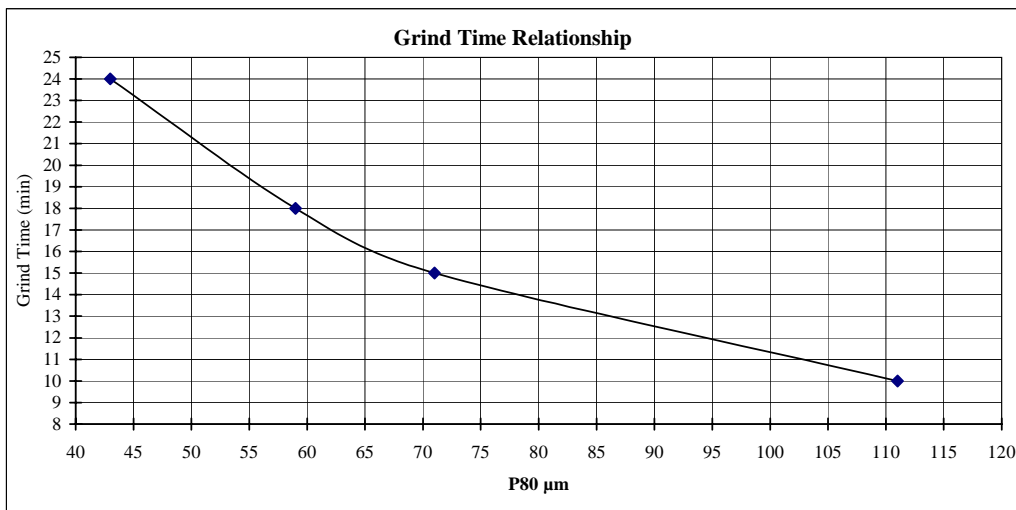
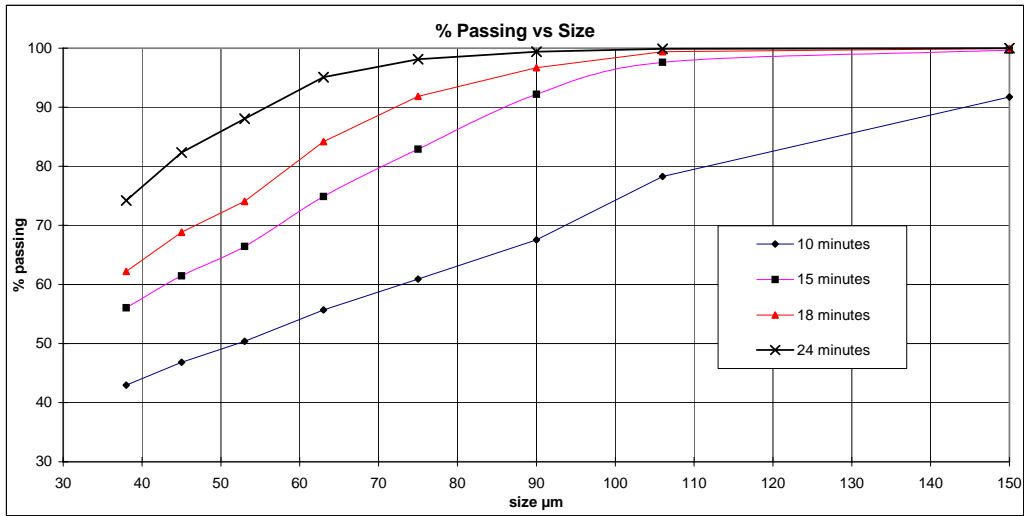
Trial grind 1 17 minutes		Trial grind 2 19 minutes		Trial grind 3 25 minutes	
Size (µm)	% Passing	Size (µm)	% Passing	Size (µm)	% Passing
150	98.9	150	99.7	150	100.0
106	93.8	106	97.5	106	99.7
90	83.5	90	90.2	90	98.2
75	74.6	75	81.9	75	94.7
63	68.0	63	74.1	63	88.6
53	61.1	53	66.2	53	79.0
45	57.0	45	61.4	45	73.5
38	51.5	38	55.1	38	66.1



Trial Grinds - Transition

1kg solids @ 50% pulp density
SS rod mill (silver)

Trial grind 1 10 minutes		Trial grind 2 15 minutes		Trial grind 3 18 minutes		Trial grind 4 24 minutes	
Size (µm)	% Passing	Size (µm)	% Passing	Size (µm)	% Passing	Size (µm)	% Passing
150	91.7	150	99.7	150	99.9	150	100.0
106	78.3	106	97.6	106	99.4	106	99.9
90	67.5	90	92.2	90	96.7	90	99.4
75	60.9	75	82.9	75	91.9	75	98.1
63	55.7	63	74.9	63	84.2	63	95.1
53	50.4	53	66.4	53	74.1	53	88.1
45	46.8	45	61.5	45	68.8	45	82.3
38	43.0	38	56.0	38	62.2	38	74.2

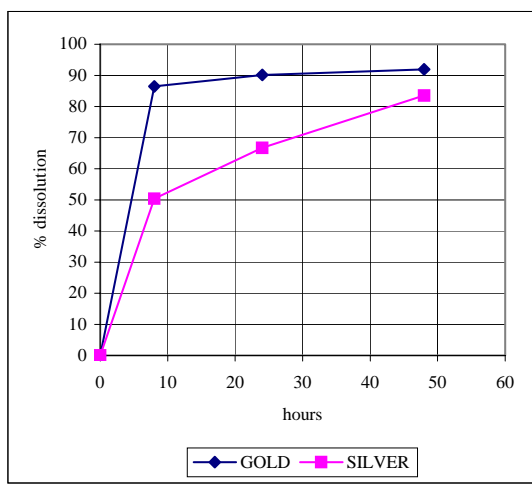


APPENDIX 2

P80 75 μ m Agitation Leach Tests

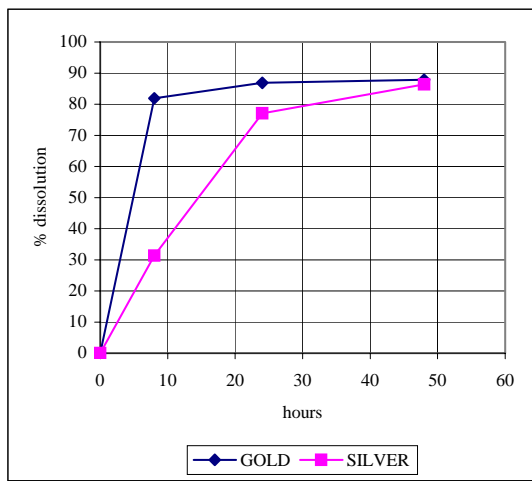
MINDORO RESOURCES CYANIDATION TEST DATA SHEET

IDENTIFICATION		ROD MILL GRIND (silver)					LEACH				
Project	M1374	grams	1000	grams	1000						
Sample	Oxide	mls water	1000	mls water	1500						
leach detail	48hr CIL test @ 75µm with multiple carbon contacts	water type	tap	% solids	50						
test number	K2	minutes	18.25	target P80 (µm)	75						
		actual P80 (µm)									
Time	carbon	NaCN	hyd.lime	diss. O2	%	sample	liquor	carbon assays	extr'n	extr'n	
hours	grams	grams	grams	pH	mg/l	NaCN	mls	Au g/t	% Au	% Ag	
0	15	1.50	1.50	5.1	10.5	0.100				0.00	0.0
2			0.20	10.2	7.2	0.070					
4				10.4	7.1	0.066					
8	10	0.20	0.15	10.2	6.8	0.064			86.5	50.4	
24	10	0.20		10.2	7.8	0.040			90.1	66.7	
32			0.05	10.2	7.3	0.040					
48				10.1	7.6	0.044					
							1749		93.4	83.7	
final liquor assays for Ag <0.01mg/L											
ASSAYS					NOTES						
residue		g/t Au	0.08	0.07							
		g/t Ag	0.7								
GOLD METALLURGICAL BALANCE											
material	amount	assay	mg Au	dist. %							
		g/t Au									
carbon 8hr	15.16	65	0.985	86.5							
carbon 24hr	10.31	4	0.041	3.6							
carbon 48hr	10.19	2	0.020	1.8							
liquor	1749	0.010	0.017	1.5							
residue	1000	0.075	0.075	6.6							
total		1.14	1.14	100.0							
SILVER METALLURGICAL BALANCE											
amount	material	assay	mg Ag	dist. %							
		g/t Ag									
carbon 8hr	15.16	143	2.168	50.4							
carbon 24hr	10.31	68	0.701	16.3							
carbon 48hr	10.19	71	0.723	16.8							
liquor	1749	0.005	0.009	0.2							
residue	1000	0.7	0.700	16.3							
total		4.3	4.30	49.6							
EXTRACTION % SUMMARY											
		Au	Ag								
calculated		93.4	83.7								
head & tails calculation		93.5	82.5								
REAGENT CONSUMPTION											
kg/t NaCN		1.13									
kg/t hyd. lime		1.90									
HEAD ASSAY											
		g/t Au	g/t Ag								
actual		1.16	4								
calculated		1.14	4								



MINDORO RESOURCES CYANIDATION TEST DATA SHEET

IDENTIFICATION		ROD MILL GRIND (silver)					LEACH				
Project	M1374	grams	1001				grams	1001			
Sample	Transition	mls water	1001				mls water	1502			
leach detail	48hr CIL test @ 75µm with multiple carbon contacts	water type	tap				% solids	40			
test number	K1	% solids	50								
		minutes	14.25								
		target P80 (µm)	75								
		actual P80 (µm)									
Time	carbon	NaCN	hyd.lime	diss. O2	%	sample	liquor	carbon assays	extr'n	extr'n	
hours	grams	grams	grams	pH	mg/l	NaCN	mls	Au g/t	% Au	% Ag	
0	15	1.50	2.54	5.3	6.8	0.100			0.00	0.0	
2			0.30	10.1	5.2	0.060					
4		0.20		10.4	6.2	0.046					
8	10	0.20	0.20	10.2	6.1	0.046			81.9	31.4	
24	10	0.20		10.2	7.4	0.044			86.8	77.1	
32		0.15	0.05	10.2	6.8	0.048					
48				10.0	7.5	0.040					
							1634		88.6	87.0	
final liquor assays for Au <0.01mg/L											
ASSAYS					NOTES						
residue		g/t Au	0.12	0.12							
		g/t Ag	0.3								
GOLD METALLURGICAL BALANCE											
material	amount	assay	mg Au	dist. %							
g/t Au											
carbon 8hr	15.13	57	0.862	81.9							
carbon 24hr	10.39	5	0.052	4.9							
carbon 48hr	10.18	1	0.010	1.0							
liquor	1634	0.005	0.008	0.8							
residue	1001	0.12	0.120	11.4							
total		1.05	1.05	100.0							
SILVER METALLURGICAL BALANCE					DISSOLUTION KINETICS						
amount	material	assay	mg Ag	dist. %							
g/t Ag											
carbon 8hr	15.13	48	0.726	31.4							
carbon 24hr	10.39	102	1.060	45.8							
carbon 48hr	10.18	21	0.214	9.2							
liquor	1634	0.010	0.016	0.7							
residue	1001	0.3	0.300	13.0							
total		2.3	2.32	68.6							
EXTRACTION % SUMMARY											
			Au	Ag							
calculated			88.6	87.0							
head & tails calculation			86.0	85.0							
REAGENT CONSUMPTION											
kg/t NaCN			1.59								
kg/t hyd. lime			3.09								
HEAD ASSAY											
			g/t Au	g/t Ag							
actual			0.86	2							
calculated			1.05	2.3							



APPENDIX 3

12.7mm Crush Size Heap Leach Tests

APPENDIX 4

50mm Crush Size Heap Leach Tests

KAY TANDA - SIMULATED HEAP LEACH LOG

Test SAMPLE		K6 OXIDE		AGGLOMERATION			FEED SOLUTION			COMMENTS
OBJECTIVE		Heap leach extraction @ 50mm		Date	1/03/2007		Volume tap water	40L		
				Weight kg	144.69		NaCN	0.05%		
				Crush size	50mm		pH	10		
				Cement kg/t	2		application rate	~10L/m2/hr		
				NaCN kg/t	0.76		HEAD ASSAYS	Au g/t	Ag g/t	
				Total water mls	5400		assay head	1.16		
				% moisture	3.6		calc head	1.09		
				Heap height m	1.42		RESIDUE ASSAYS			
				Heap diameter m	0.3		0.22, 0.20	2		
				Cure	2 days		CARBON ASSAYS	368		
				Slump m	0.08				340	
				carbon column	2 x ~150g in series					
DAY	DISCHARGE			Gold Dissolution					Au diss'n %	COMMENTS
	Vol (L)	pH	NaCN %	liq Au ppm	Au mg	cum mg	mg Au removed in liq sample			
0								0		
1	nil								60mL sub sample 1st day, subsequently 25mL	
2	13.11	10.4	0.180	4.12	54.013	54.013	0.247	35.0		
3	13.07	10.6	0.052	1.49	19.474	73.488	0.037	47.6		
4	12.67	10.3	0.042	0.72	9.122	82.610	0.018	53.5		
5	11.92	10.5	0.050	0.50	5.960	88.570	0.013	57.4		
6	12.30	10.3	0.052	0.35	4.305	92.875	0.009	60.2		
8	31.64	10.0	0.052	0.24	7.594	100.469	0.006	65.1		
10	24.99	10.0	0.052	0.16	3.998	104.467	0.004	67.7		
13	24.54	10.0	0.014	0.13	3.190	107.657	0.003	69.8		
16	23.96	9.7	0.016	0.14	3.354	111.012	0.004	72.0		
18	21.20	9.6	0.016	0.09	1.908	112.920	0.002	73.2	10g NaCN, 10g NaOH, 5L tap water added to feed	
21	27.23	10.0	0.020	0.04	1.089	114.009	0.001	73.9		
24	26.58	10.0	0.012	0.06	1.595	115.604	0.002	74.9	10g NaCN, 10g NaOH added to feed	
28	25.51	10.0	0.024	0.06	1.531	117.134	0.002	75.9	10g NaCN added to feed	
31	24.67	10.2	0.018	0.03	0.740	117.874	0.001	76.4		
35	24.15	10.1	0.012	0.03	0.725	118.599	0.001	76.9	10g NaCN added to feed	
39	23.09	9.8	0.012	0.03	0.693	119.291	0.001	77.3	10g NaCN, 10g NaOH added to feed	
43	22.29	10.0	0.024	0.04	0.892	120.183	0.001	77.9		
47	21.62	10.0	0.018	0.01	0.216	120.399	0.000	78.0	10g NaCN, 10g NaOH added to feed	
51	20.78	10.0	0.020	0.02	0.416	120.815	0.001	78.3	10g NaCN, 10g NaOH added to feed	
55	22.42	10.0	0.034	0.04	0.897	121.712	0.001	78.9		
58	22.01	10.1	0.024	0.03	0.660	122.372	0.001	79.3		
62	23.25	10.1	0.016	0.03	0.698	123.069	0.001	79.8	10g NaCN added to feed	
66	23.01	10.2	0.028	0.04	0.920	123.990	0.001	80.4		
70	22.97	10.2	0.020	0.02	0.459	124.449	0.001	80.7		
wash	9.70	10.0	0.004	0.01	0.097	124.546	0.000	80.7		

KAY TANDA - SIMULATED HEAP LEACH LOG

Test SAMPLE		K7 TRANSITION		AGGLOMERATION		FEED SOLUTION			COMMENTS	
				Date	1/03/2007	Volume tap water	40L	NaCN		0.05%
OBJECTIVE Heap leach extraction @ 50mm				Weight kg	161.54	NaCN kg/t	1.06	application rate	~10L/m2/hr	
				Crush size	50mm	Total water mls	3000	% moisture	2	
				Heap height m	1.8	HEAD ASSAYS		Au g/t	Ag g/t	
				Heap diameter mm	0.3	assay head	0.86	2		
				Cure	2 days	calc head	0.95	1		
				Slump mm	nil	RESIDUE ASSAYS				
				carbon column	2 x~150g in series		0.19, 0.19	<1		
						CARBON ASSAYS		348	288	
DAY	DISCHARGE			Gold Dissolution					COMMENTS	
	Vol (L)	pH	NaCN %	liq Au ppm	Au mg	cum mg	mg Au removed in liq sample	Au diss'n %		
0								0		
1	5.36	10.9	0.360	5.55	29.748	29.748	0.333	19.7	discharge liquor deep pink (maroon) in colour,	
2	14.67	10.9	0.120	1.82	26.699	56.447	0.046	37.4	60mL sub sample 1st day, subsequently 25mL	
3	14.03	10.9	0.072	0.81	11.364	67.812	0.020	45.0		
4	13.53	10.9	0.080	0.52	7.036	74.847	0.013	49.6		
5	12.87	10.9	0.084	0.40	5.148	79.995	0.010	53.0		
6	13.27	10.9	0.100	0.31	4.114	84.109	0.008	55.8		
8	25.81	10.7	0.032	0.21	5.420	89.529	0.005	59.4		
10	30.73	10.5	0.020	0.16	4.917	94.446	0.004	62.6		
13	30.45	10.3	0.036	0.15	4.568	99.013	0.004	65.6		
16	29.92	10.0	0.028	0.13	3.890	102.903	0.003	68.2		
18	21.92	9.8	0.018	0.08	1.754	104.657	0.002	69.4	10g NaCN, 10g NaOH, 5L tap water added to feed	
21	33.09	10.0	0.024	0.05	1.655	106.311	0.001	70.5		
24	32.34	9.9	0.020	0.06	1.940	108.252	0.002	71.8	10g NaOH added to feed	
28	31.13	9.7	0.016	0.06	1.868	110.119	0.002	73.0	10g NaCN, 20g NaOH added to feed	
31	30.19	10.0	0.018	0.03	0.906	111.025	0.001	73.6		
35	30.33	9.9	0.012	0.02	0.607	111.632	0.001	74.0	10g NaCN added to feed	
39	29.38	9.8	0.016	0.03	0.881	112.513	0.001	74.6	10g NaCN, 10g NaOH added to feed	
43	28.08	10.1	0.024	0.05	1.404	113.917	0.001	75.5		
47	27.77	9.7	0.016	0.02	0.555	114.472	0.001	75.9	10g NaCN, 20g NaOH added to feed	
51	26.93	9.8	0.026	0.02	0.539	115.011	0.001	76.3	10g NaCN, 20g NaOH added to feed	
55	28.31	10.2	0.040	0.04	1.132	116.143	0.001	77.0		
58	27.32	10.1	0.034	0.04	1.093	117.236	0.001	77.7	10g NaCN, 10g NaOH added to feed	
62	27.23	9.8	0.014	0.03	0.817	118.053	0.001	78.3		
66	27.21	10.2	0.030	0.050	1.361	119.414	0.001	79.2		
70	27.22	10.1	0.026	0.040	1.089	120.502	0.001	79.9		
wash	9.230	10.0	0.004	0.030	0.277	120.779	0.001	80.1		