



CONFIDENTIAL

**GRAVITY CONCENTRATION AND CYANIDE LEACHING
TESTWORK ON AN ORE SAMPLE SUBMITTED BY
LAKE VICTORIA RESOURCES P/L**

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PROVISIONAL ONLY

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.

1. TEST PROCEDURES

1.1 FEED PREPARATION

The sample was crushed to 100% passing 1.0mm using a Rockdasta impact crusher. The crushed product was subjected to gravity concentration as outlined below.

1.2 GRAVITY CONCENTRATION TEST AFTER CRUSHING

The prepared sample was pulped to 50 % solids and the resultant pulp was subjected to gravity concentration (2 pass) via a Knelson Centrifugal Concentrator Model KC-MD3. The primary concentrates generated were upgraded via careful hand panning to produce pan Concentrate 1 and Pan Concentrate 2 which were assayed via total fusion to eliminate sampling error and nugget effect. Secondary concentrate (pan tail 1 and pan tail 2) and final tailings were dried, weighed and split for Au assay.

1.3 GRADING ANALYSIS OF KNELSON TAILS FROM ABOVE

The representative portion was wet-screened on a series of test sieves, products were weighed and assayed.

1.4 VAT LEACH SIMULATION ON KNELSON TAILS FROM 1.2 ABOVE

A 10kg representative portion from the sample was subjected to flooded percolation vat leaching as follows:

The sample was thoroughly mixed with lime and placed into a static leach vat. Cyanide solution was poured onto the charge and allowed to remain in contact for 16 hours before draining. Thereafter fresh cyanide solutions were percolated through the charge daily until gold dissolution fell to low level. The solids were finally displacement washed with water, dried and fire assayed

1.5 GRAVITY CONCENTRATION TEST AFTER MILLING

The Knelson tailings product was milled to 80% passing 75 micron via a Laboratory ball mill and the ground product was subjected to gravity concentration as outlined above.

1.6 CYANIDE LEACH TESTS

1kg representative aliquots of the final Knelson tailing samples were prepared and leached as follows: Each portion was pulped to 40% solids with water, lime was added to achieve pulp pH of 10.5 – 11.0 and 0.10% KCN solution strength was added. 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 residues were dried, split and assayed.

2. ASSAYS

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

2.1 SAMPLE: ORE

Assayed head grades (g/t Au)	7.21 7.26
Average (g/t Au)	7.24
Calculated head grade (g/t Au)	7.27

All assays were conducted by Performance Laboratories (Pvt) 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.

3. RESULTS

Results are summarised below and concentrates photographs are shown in Appendix.

3.1 Sample: ORE

Table 1: Knelson Concentration Results After Crushing to -1mm

Product	Mass			Assay (g/tAu)		Gold		
	(g)	Fract'n	Cum.	Fract'n	Cum.	Units mg	Fract'n	Cum.
Pan Concentrate 1	15.1	0.08	0.08	1795.37	1795.37	27.11	18.6	18.6
Pan tailings 1	44.8	0.22	0.30	1.45	453.67	0.06	0.0	18.7
Pan Concentrate 2	9.2	0.05	0.35	616.41	475.34	5.67	3.9	22.6
Pan tailings 2	46.2	0.23	0.58	49.24	304.60	2.27	1.6	24.2
Knelson tailings	19884.7	99.42	100.00	5.55	7.27	110.29	75.8	100.0
Feed	20000.0	100.0		7.27		145.42	100.0	

- The calculated head grade of the sample was 7.27 g/t Au.
- Crushing of the sample using a Rockdasta impact crusher to 100% passing 1.0mm prior to gravity concentration utilising a Knelson Centrifugal Concentrator realised gravity gold recovery of 1.76 g/t Au representing 24.2 % of the test feed.
- Of the gravity recovery 22.5% of test head was as free gold and the remaining 1.6% was associated with heavy mineral.

Table 2: Knelson Concentration of gravity tails After milling to 80% - 75 micron

Product	Mass			Assay (g/tAu)		Gold		
	(g)	Fract'n	Cum.	Fract'n	Cum.	Units mg	Fract'n	Cum.
Pan Concentrate 1	13.7	0.14	0.14	1134.75	1134.75	15.55	28.0	28.0
Pan tailings 1	51.9	0.52	0.66	62.50	286.43	3.24	5.8	33.9
Pan Concentrate 2	40.5	0.40	1.06	34.28	190.20	1.39	2.5	36.4
Pan tailings 2	47.8	0.48	1.54	42.03	144.17	2.01	3.6	40.0
Knelson tailings	9846.1	98.46	100.00	3.38	5.55	33.28	60.0	100.0
Feed	10000.0	100.0		5.55		55.47	100.0	

- The calculated head grade of the gravity tail sample was 5.55 g/t Au.
- Milling the gravity tail sample to 80% passing 75 micron prior to gravity concentration utilising a Knelson Centrifugal Concentrator realised gravity gold recovery of 2.22 g/t Au representing 40.0 % of the test feed.
- Of the gravity recovery 30.5% of test head was as free gold and the remaining 9.4% was associated with heavy mineral.

Table 3: Overall Recovery via Impact crush/Knelson & Grind/Knelson

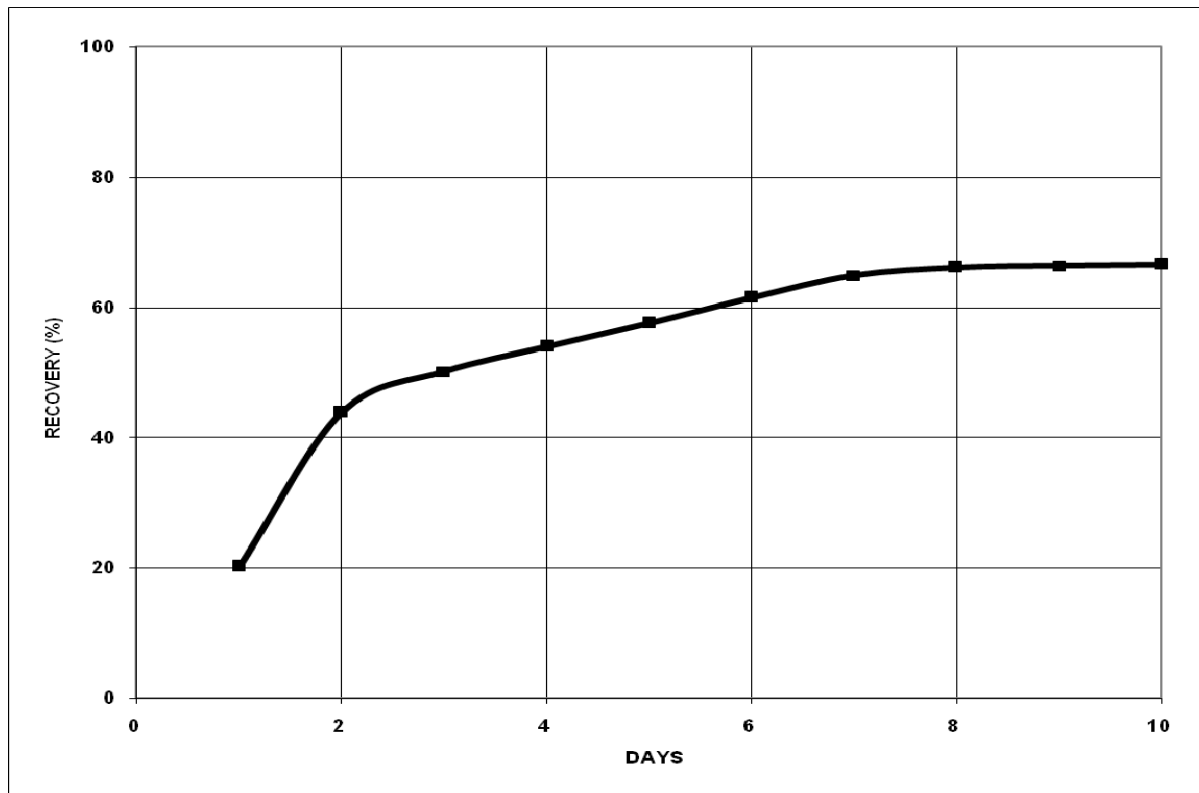
Product	Mass			Assay (g/tAu)		Gold		
	(g)	Fract'n	Cum.	Fract'n	Cum.	Units mg	Fract'n	Cum.
Pan Con 1 @ -1mm	15.1	0.08	0.08	1795.37	1795.37	27.11	18.6	18.6
Pan Con 2 @ -1mm	9.2	0.05	0.12	616.41	1349.01	5.67	3.9	22.6
Pan Con 1 @ -75µm	27.2	0.14	0.26	1134.75	1235.85	30.87	21.2	43.8
Pan Con 2 @ -75µm	80.5	0.40	0.66	34.28	503.07	2.76	1.9	45.7
Pan Tail 1 @ -1mm	44.8	0.22	0.88	1.45	375.97	0.06	0.0	45.7
Pan Tail 2 @ -1mm	46.2	0.23	1.12	49.24	308.28	2.27	1.6	47.3
Pan Tail 1 @ -75µm	103.2	0.52	1.63	62.50	230.52	6.45	4.4	51.7
Pan Tail 2 @ -75µm	95.0	0.48	2.11	42.03	188.01	3.99	2.7	54.5
Knelson tailings	19578.8	97.89	100.00	3.38	7.27	66.18	45.5	100.0
Feed	20000.0	100.0		7.27		145.37	100.0	

- Overall gravity gold recovery after fine milling was therefore 54.5% of the test head.

Table 4: Vat Leaching Results of gravity tails after impact crushing to – 1mm

Built-up head grade (g/t Au)	5.57
Leach residue value (g/t Au)	1.86
Extraction (g/t Au)	3.71
Extraction (%)	66.6
Lime Required (kg/t)	4.0
NaCN Consumed (kg/t)	0.79

Figure 1: Dissolution Rate Curves

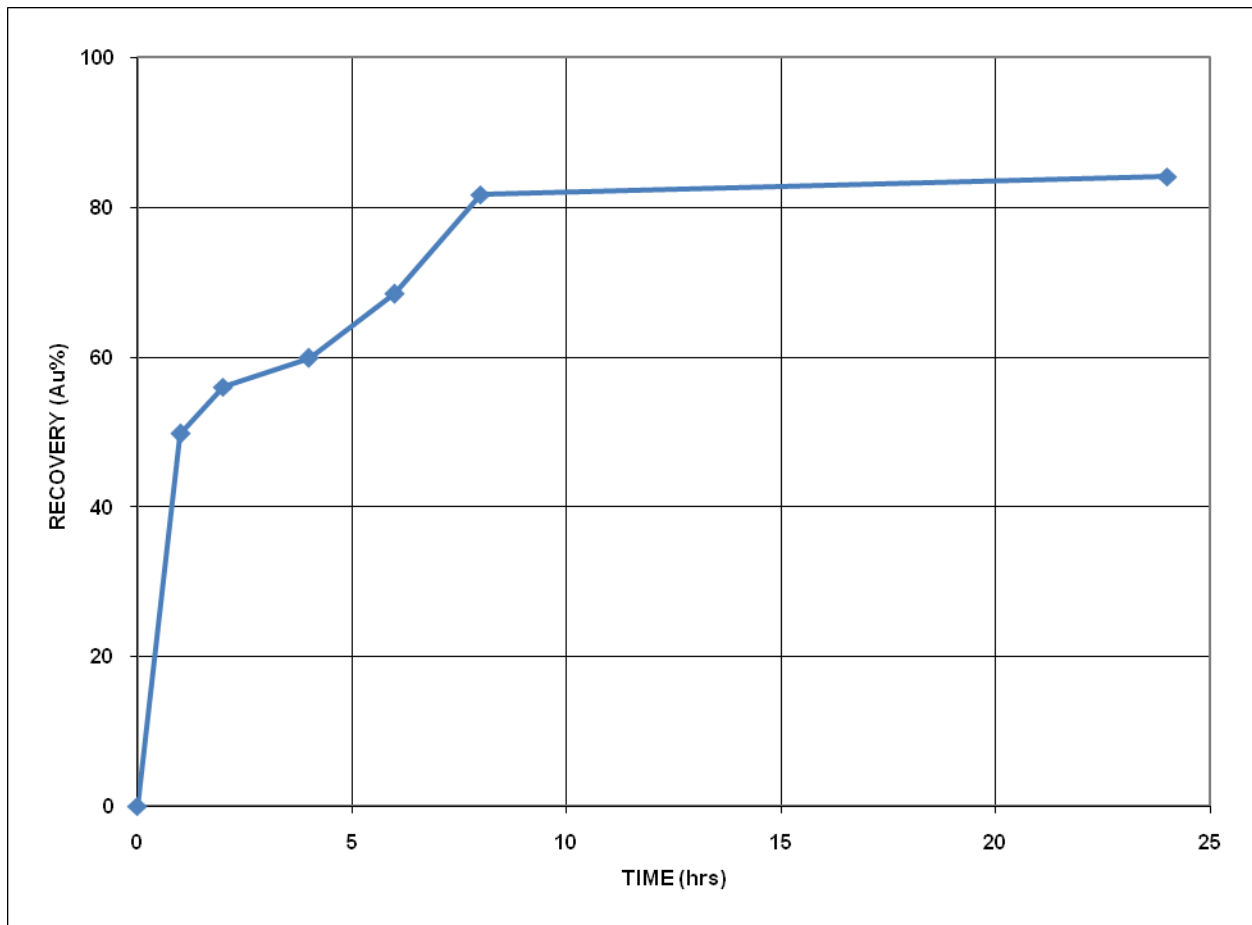


- Gold recovery after 10 days was 66.6% of the leach feed.
- Sodium cyanide consumption was 0.79 kg/t and lime added was 4.0 kg/t.

Table 5: Cyanide Agitation Leaching Results of gravity tails after milling to 80% -75 micron

Built-up head grade (g/t Au)	3.20
Leach residue value (g/t Au)	0.51
Extraction (g/t Au)	2.69
Extraction (%)	84.1
Lime Required (kg/t)	1.50
NaCN Consumed (kg/t)	0.84

Figure 2: Dissolution Rate Curves



- Gold recovery after 24 hours was 84.1% of the test head.
- Dissolution rate was rapid achieving gold recovery of more than 82.0% in 8 hours.
- Sodium cyanide consumption was 0.84 kg/t and lime added was 1.5 kg/t.

Overall Gold Recovery via Knelson Concentration and Cyanide Leaching

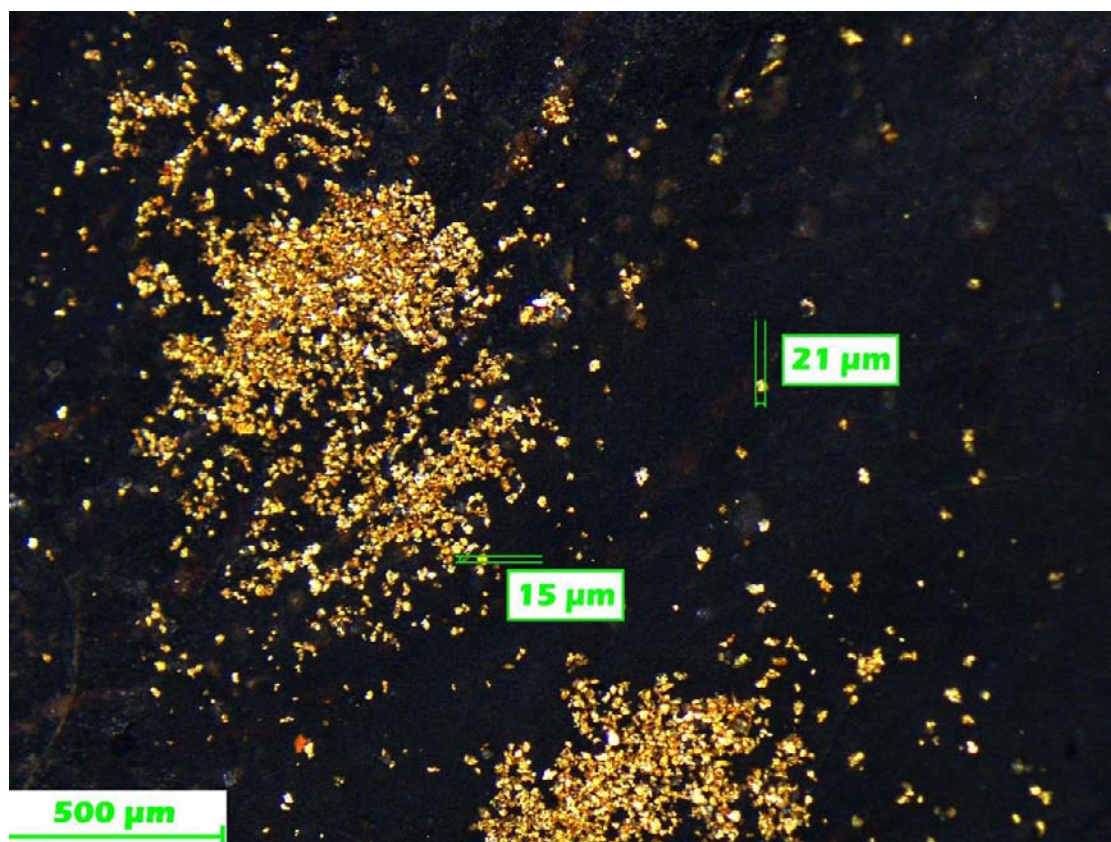
Overall gold recovery via Knelson Centrifugal Concentration and cyanide leaching of Knelson tailings was as follows:

Knelson concentration (% of test head)	=	54.5 %
Cyanide leaching of Knelson tailings (84.1% of 45.5%)	=	38.2 %
Overall gold recovery	=	92.7 %

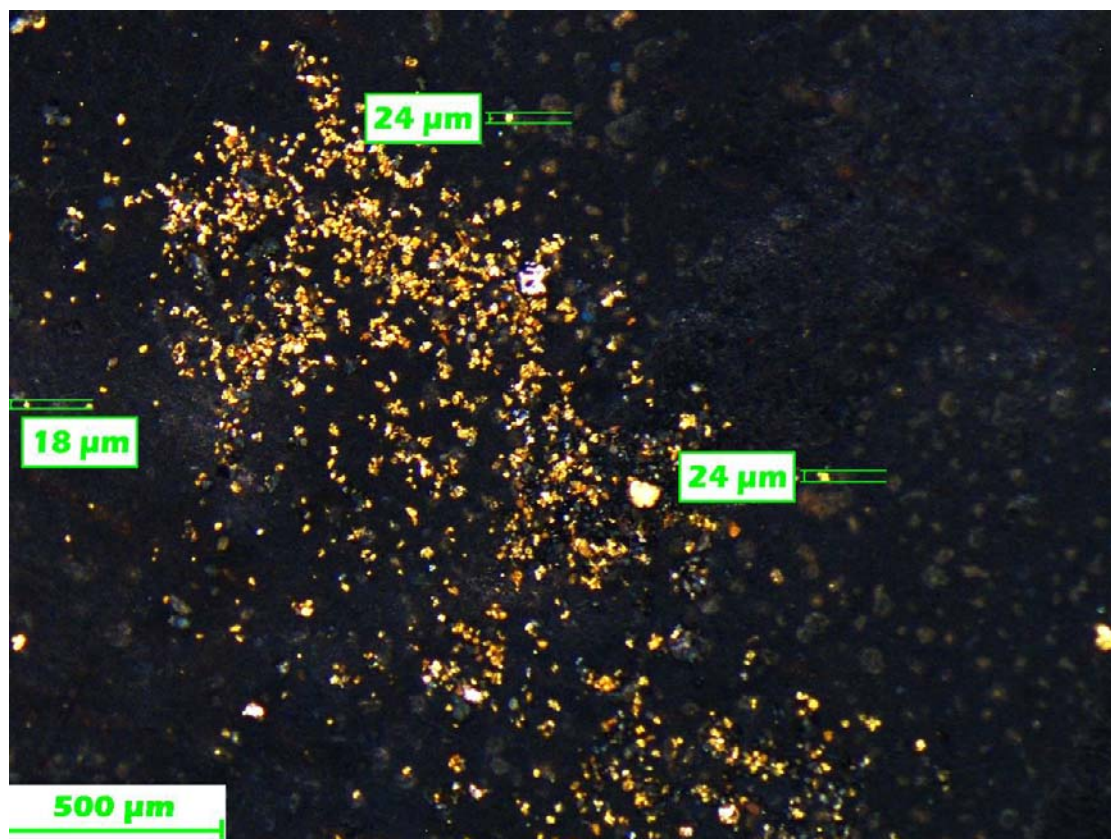
APPENDIX

CONCENTRATE PHOTOGRAPHS

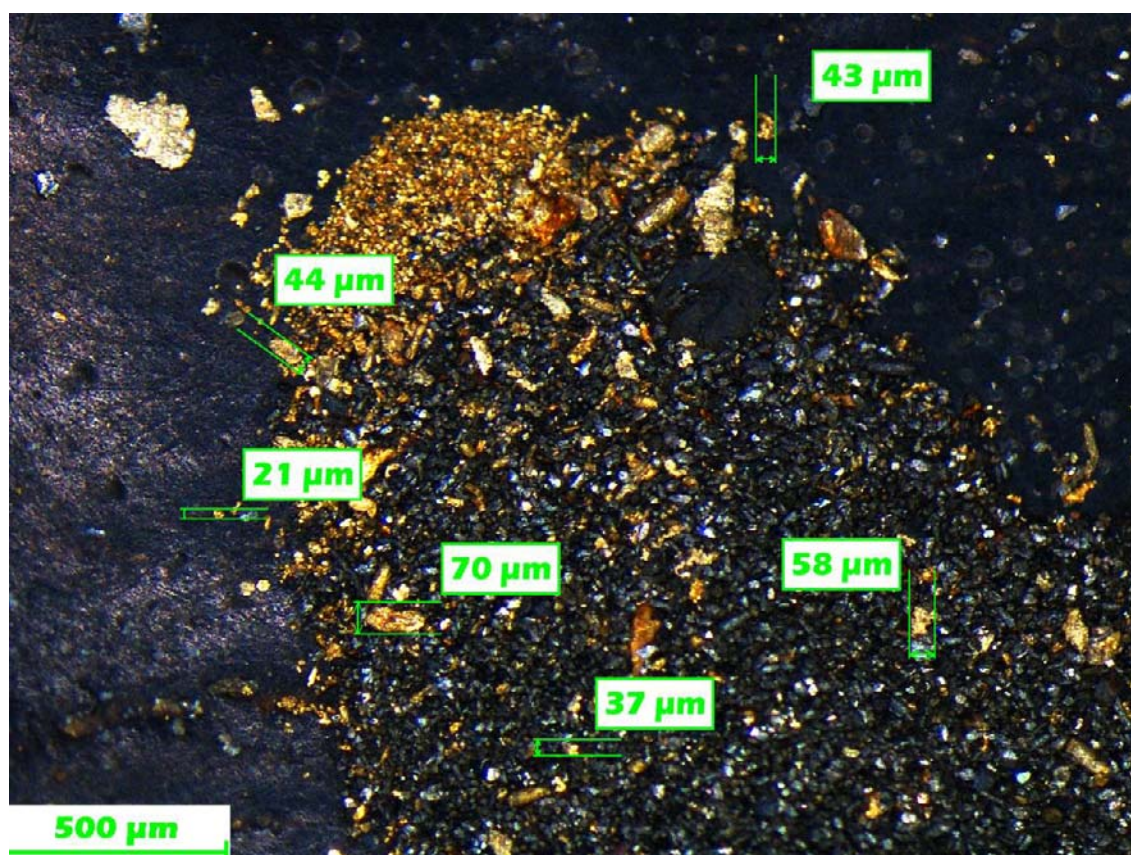
Ore, Crush to – 1mm, Knelson Test – Pan Concentrate 1



Ore, Crush to – 1mm, Knelson Test – Pan Concentrate 2



Knelson tails, Mill to 80% – 75 micron, Knelson Test – Pan Concentrate 1



Knelson tails, Mill to 80% – 75 micron, Knelson Test – Pan Concentrate 2

