



4 October 2010

Nyota Minerals Limited ('Nyota' or the 'Company')

Further Metallurgical Test Results from Tulu Kapi

Highlights

- Preliminary variability test work demonstrates consistently good treatment properties of the Tulu Kapi Deposit ore samples
- Average gold recoveries in excess of 95% are indicated
- Results will support capital and operating cost estimates for a gold recovery plant at Tulu Kapi
- Results demonstrate the potential for high recoveries and low operating costs at Tulu Kapi

Nyota Minerals Limited (AIM / ASX:NYO), is pleased to announce further encouraging results from the second metallurgical test work programme completed on samples taken in July 2010 from its Tulu Kapi Deposit in Ethiopia. The second phase of metallurgical test work examined ore variability in terms of response to gold recovery processes. A total of 28 individual samples of ore have been tested from lodes 1 to 4 (from near surface down to about 400 meters below surface).

The results build on and add confidence to those of the first test campaign, conducted in January 2010. This covered preliminary work on two samples that had been composited from multiple intersections from lodes 1 and 2 respectively. The composite nature of these two samples would have masked any variability between individual intersections.

The results indicate that the ore is hard and abrasive, but not to the extent that will pose problems for plant design and operation. The results also demonstrated consistently good gold recoveries and low reagent consumptions. There was an indication of high free gold content and excellent gravity recovery potential. With these characteristics, a combination of gravity and flotation recovery should be able to achieve very high (>95%) gold recoveries to a concentrate.

Terry Tucker, Nyota CEO, commented: "We are very encouraged by these test results. A large number of samples, representing head-grades ranging from 0.14 to 8.16 g/t gold and from near surface to down-hole depths of over 400 meters, have been tested. In all cases, excellent gold recovery potential has been demonstrated."

USE OF THE TESTWORK RESULTS

The test work results will be used to generate estimates of the gold recovery and the capital and operating costs of a gold recovery plant for Tulu Kapi. These results will be incorporated into the Preliminary Economic Assessment Feasibility Study ("PEA"). The comminution parameters will be used to specify crushing and grinding equipment and estimate wear parts consumption. The

cyanidation, froth flotation and gravity concentration results will be used to specify equipment requirements and estimate operating costs and gold recoveries.

Two alternative flow sheets will be considered. The first consists of crushing and grinding followed by conventional CIP gold recovery. This is the standard flow sheet used throughout the world where the ore is “free milling”. It will allow gold to be cyanide leached from finely ground ore.

An alternative flow sheet involving the production of a concentrate and then cyanidation of the concentrate will also be considered. This flow sheet has advantages in environmentally sensitive areas and has been implemented in a number of recent gold plants.

In the alternative, the ore is crushed and milled. The gold is then recovered to a concentrate with a mass of less than 10% of the feed by means of gravity concentration and froth flotation. The non-toxic tailings from this process, comprising more than 90% of the mass of ore, can be stored in a simple tailings storage facility. Excess water can be discharged to the environment.

The concentrate is then subject to intensive cyanidation to recover the gold. Cyanide is recycled in the leach process and the tailings are detoxified to destroy any residual cyanide. The tailings from concentrate leaching are then either sold for the sulfur content, or stored in a secure impoundment.

SUMMARISED RESULTS

TESTWORK DETAILS	NUMBER OF INDIVIDUAL TESTS	RESULTS
		Averages of All Tests
HEAD ANALYSIS		
Gold g/t (weighted average)	from all tests	2.13
Sulfur %	28	1.62
Silica %	28	61.3
COMMINUTION PARAMETERS		
Bond Rod Mill Work Index (kWh/tonne)	4	18.9
Bond Ball Mill Work Index (kWh/tonne)	4	18.1
Bond Abrasion Index	4	0.53
CYANIDATION		
Gold dissolution % at grind P80 of 75 microns	26	97.6
Gold dissolution at grind P80 of 150 microns	4	95.4
BULK ROUGHER FROTH FLOTATION		
Gold recovery % -excluding outliers	25	95.7
Concentrate mass pull % - excluding outliers	25	6.0
Gold recovery % -all results	28	91.2
GRAVITY CONCENTRATION (at 75 Microns P80)		
Free Gold %	12	53.2
Gold recovery to Knelson concentrate	12	81.2
Mass Recovery to Knelson Concentrate	12	6.1

DETAILS OF THE TEST WORK AND BRIEF COMMENTS ON THE RESULTS

Nyota Director, Dr Evan Kirby, selected 28 samples totaling 229 kg in weight at Tulu Kapi in July 2010. The samples were taken from four boreholes at down-hole depths ranging from near surface to 423 m. Material was selected based on the appearance of the mineralisation (albitisation of the syenite plus the presence of pyrite and quartz veins). Each sample covered a single contiguous intersection. In most cases, the intersection chosen represented a realistic mining width and included some non-albitised waste material. The metallurgical test work was conducted at AMMTEC Laboratories in Perth, Australia.

Depending on the available mass of sample, one or more types of tests were performed on each sample. Priority was given to froth flotation and cyanide leaching tests.

The comminution test work used standard methods and equipment. Closing screen sizes of 1180 microns and 106 microns were used in the Bond Rod Mill and Ball Mill tests. The cyanidation work comprised monitored bottle-roll tests on 1kg portions of sample. Leaching conditions included: water to solids ratio of 1.5:1, lime addition of 0.3 kg/t, a initial cyanide solution strength of 0.050% and total duration of 24 hours. An oxygen atmosphere was used in the leaching bottles. Solution samples were taken at 2, 4, 8 and 24 hours to monitor reagent concentrations and gold dissolution. No supplementary cyanide or lime additions were necessary during the tests. The reagent additions to the laboratory leach, 0.75 kg/t of cyanide and 0.3 kg/t of lime, are very low by industry standards. In practice, some recycling of reagents should be possible and actual plant consumption could be significantly lower than this.

The bulk rougher flotation tests were conducted on 1kg portions of sample in a standard laboratory flotation cell. The duration of each float was 15 minutes. A simple reagent suite comprising copper sulfate (activator), potassium amyl xanthate (collector) and MIBC (frother) was used. The oxidized ore sample from borehole 38 (8.6 to 19.5 m) gave an excessive concentrate mass of 43.3% of the sample. The other samples gave moderate concentrate mass, averaging 6% of the sample weight. Excellent gold recoveries to concentrate were achieved in all except two cases. Investigation of these two outliers indicated that in both cases there was poor gold accountability over the test and that this was the cause of the low recovery result.

The gravity concentration tests were done on 1kg portions of sample that had been ground to an 80% passing size of 75 microns. Samples were fed through a laboratory sized Knelson concentrator. The concentrate from the Knelson, averaging 6.1% of the sample mass, was then contacted with mercury to recover free gold. Mercury amalgam, amalgamation tails and Knelson tails were assayed and gold recoveries to Knelson concentrate and amalgam were calculated. Mercury will not be used in any Nyota processing plants. However, this industry-standard test gives a useful indication of the free gold content of the sample.

SELECTION OF THE PRELIMINARY VARIABILITY METALLURGICAL TESTWORK SAMPLES

At the time of sample selection, four boreholes (38, 41, 42 and 43) had been drilled to depths of over 300 m. The core logs for these holes were reviewed and the locations of albitised portions were noted. The core trays were then laid out and samples were then selected based on the appearance of the core. Each sample was a selected as a contiguous length, where possible covering a potentially mineable width.

The half core from these intersections was then sawn and portions of quarter core were taken as samples. The average intersection width and width-weighted average grade of the samples was 6.2 m @ 2.13 g/t.

The intersections making up the 28 samples are summarized below in Table One. For each sample, the gold grade shown is the average determined from all available assays including reconstituted heads from the analysis of test products.

Table One: Intersections comprising the 28 Samples with total weight of 219.5 kg.

GRID SECTION	BORE HOLE	DOWN-HOLE DEPTH		WIDTH	WEIGHT		GOLD GRADE
		FROM	TO		(kg)	(kg/m)	
		(m)	(m)	(m)			(kg)
"00"	TKBH38	8.6	19.5	10.9	9.5	0.87	1.29
		21.1	26.6	5.5	16.9	3.07	2.47
		86.8	89.65	2.85	5.3	1.86	1.11
		117	120.83	3.83	7	1.83	2.53
		226.65	229.2	2.55	4.6	1.80	1.90
		244	259.9	15.9	19.4	1.22	6.74
		375	379	4	3.9	0.98	8.31
80N	TKBH41	199.6	202.68	3.08	5.8	1.88	0.83
		215.9	229.5	13.6	25.9	1.90	0.77
		243.7	245.6	1.9	3.6	1.89	0.69
		258	264.1	6.1	4.9	0.80	0.97
		281.9	306.9	25	21.8	0.87	0.48
80S	TKBH42	209.8	215.5	5.7	6.3	1.11	0.44
		227.65	233.5	5.85	6	1.03	1.64
		239.4	241.6	2.2	2.5	1.14	0.85
		399.82	407	7.18	6.8	0.95	1.81
		410.5	423	12.5	11.5	0.92	2.71
80N	TKBH43	16.25	16.9	0.65	1	1.54	0.29
		48.6	51.7	3.1	4.2	1.35	3.67
		68.4	79.9	11.5	21.9	1.90	2.32
		121.43	125.4	3.97	7.7	1.94	1.06
		203.3	213.5	10.2	10.8	1.06	2.77
		220.4	224.2	3.8	7.8	2.05	3.89
		261	263.3	2.3	2.6	1.13	1.29
		334.6	338.1	3.5	3.6	1.03	0.51
		367	368.8	1.8	2	1.11	0.29
		376.2	378.8	2.6	2.8	1.08	0.14
		391.3	394	2.7	2.9	1.07	0.77

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The technical exploration and mining information contained in this Announcement has been reviewed and approved by Dr Evan Kirby. Dr Kirby has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' and as a qualified person under the AIM Note for Mining, Oil and Gas Companies. Dr Kirby is a director of Nyota Minerals Limited and is a member of the Australasian Institute of Mining and Metallurgy (Aus.I.M.M). Dr Kirby consents to the inclusion in this Announcement of such information in the form and context in which it appears.