

## **EXCELLENT GOLD RECOVERIES FROM ANDY WELL TESTWORK**

**Excellent gravity and cyanide gold recoveries from Wilber Lode indicate potential for very low processing costs.**

- **Gravity recoveries average ~85%**
- **Average total gold recoveries exceed 97%**
- **Low-moderate reagent consumption and rapid leach kinetics**

**Doray Minerals Ltd** (ASX: DRM, Doray) is pleased to announce excellent results from the first metallurgical test work on the Wilber Lode mineralisation at its Andy Well project (Doray 80%) within the Murchison region of Western Australia.

Samples ranging from oxide/transitional material to fresh rock were tested for potential milling characteristics and gravity and cyanide recoveries. The results show excellent recoveries, especially for gravity recoverable gold, which exceeds 85%. Total gold recoveries exceed 97%.

Doray's Managing Director, Mr Allan Kelly said the results were amongst some of the best gravity recoveries seen from gold projects in WA.

"This test work confirms our initial observations, that the Wilber Lode mineralisation was likely to have very high gravity recoveries and, therefore, the potential that resulting processing costs for the Wilber Lode deposit could be very low."

"Importantly, the very high gravity recovery also reinforces the potential viability of a low capital cost treatment option without significant effects on the profitability of the deposit," he said.

The test work confirmed rapid leach characteristics, with most gold dissolved within two hours, and moderate milling characteristics.

### **Metallurgical Test Work**

A total of eight 20kg samples were collected from various zones within the Wilber Lode orebody, with samples representative of both the expected ore types and feed grades for future mining and processing activities. Samples were submitted to AAMTEC Laboratories of Perth for systematic grind establishment, bond ball mill and bond rod mill work index determination and abrasion index establishment. Four of these samples were then selected for further gravity and intensive leach recovery, as well as standard cyanide leach recovery of residual gravity tailings. All recovery test work was completed at an established grind size of 80% passing 125µm, in order to simulate achievable grind sizes for commercial gold production.

Results of the initial test work are summarised in Table 1 and Figure 1.

Comminution tests suggest moderate bond rod mill work index (RWi) of 14.9 kWhr/t and bond ball mill work index (BWi) average of 16.7kWhr/t. Bond abrasion index (Ai) determination carried out indicates relatively high Ai of 0.42. This high Ai is not unexpected due to the predominately vein quartz composition of the Wilber ore.

Metallurgical recovery tests were carried out on four of the samples at a grind size of 80% product passing 125µm. The gravity recoverable component was initially concentrated using a bench top scale Knelson concentrator, followed by intensive cyanide leaching of the concentrate. A conventional 24hr cyanide leach was then carried out on the residual material from the Knelson concentration with readings taken every two hours to determine leach kinetics of the samples. Of the four samples tested, an average gravity recovery of 85% was determined, with three of the four returning gravity recoverable gold components of between 80-90%. An average total recovery with combined gravity and conventional cyanide leach of 97.2% was calculated, with three of the four samples demonstrating total recoverable gold of 98-99%. In addition, all samples demonstrated that maximum leaching of gold during cyanide leach occurred within the first two hours. Moderate to low average cyanide consumption of 0.49 Kg/t and moderate to low average lime consumption of 0.53 Kg/t were also calculated from the test work.

Further metallurgical test work will now be carried out on other samples in order to gather additional supporting data for use in the project evaluation process. Additional test work will also be conducted to determine maximum potential grind sizes and possible process flow sheets.

### **Wilber Lode Development Schedule**

A number of activities as part of the Wilber development schedule have progressed, including:

- No Mining Act objections raised in response to Mining Lease Application (M51/870). Native title negotiations to commence in April 2011.
- Stage 2 of hydrological test work and assessment
- Initial mining engineering studies of both open pit and underground mining options
- Initial environmental assessments including subterranean fauna, waste rock characterization studies and surface vegetation and flora surveys
- Preliminary geotechnical assessments

### **Andy Well Drilling Update**

A combined RC and diamond drilling campaign is scheduled to commence in April 2011, which will focus on systematic testing of the Wilber South, Judy and Western Zones discovered by recent aircore drilling, testing potential for depth extensions to the existing Wilber Lode resource, and infill drilling aiming to upgrade Inferred resources at Wilber to Indicated status.

-ENDS-

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## About Doray Minerals

Minerals explorer **Doray Minerals Limited** (ASX: DRM) listed on the ASX in February 2010 with the aim of acquiring and developing highly prospective mineral properties. Doray was one of Australia's best performing IPOs in 2010 based on results from the Andy Well gold project.

Doray has an enviable portfolio of properties within WA and South Australia, and each presents Doray with multiple discovery opportunities heading into 2011.

## About Andy Well

The Andy Well gold project (Doray 80%) is located approximately 45km north of Meekatharra, in Western Australia's Murchison Region.

In March 2010, Doray announced high-grade gold results from drilling of the Wilber Lode, a quartz lode within sheared basalts, adjacent to the Great Northern Highway. Subsequent drilling has now defined the lode over a strike length of 200m and to a depth of at least 200m. In February 2011, Doray announced a maiden high-grade JORC-compliant gold resource for the Wilber Lode.

## Wilber Lode Resource Inventory

	Indicated			Inferred			Total			Doray 80%
	Tonnes	Grade (g/t)	Ounces	Tonnes	Grade (g/t)	Ounces	Tonnes	Grade (g/t)	Ounces	Ounces
<b>Quartz Vein</b>	130,000	24.1	101,000	81,000	27.4	71,000	<b>211,000</b>	<b>25.3</b>	<b>172,000</b>	<b>137,600</b>
<b>Shear Zone</b>	100,000	0.8	2,000	-	-	-	100,000	0.8	2,000	1,600
<b>Total</b>	<b>230,000</b>	<b>14.0</b>	<b>103,000</b>	<b>81,000</b>	<b>27.4</b>	<b>71,000</b>	<b>311,000</b>	<b>17.5</b>	<b>174,000</b>	<b>139,200</b>

## Competent Person Statement

The information in this announcement that relates to Mineral Resources is based on information compiled by Mark Cossom.

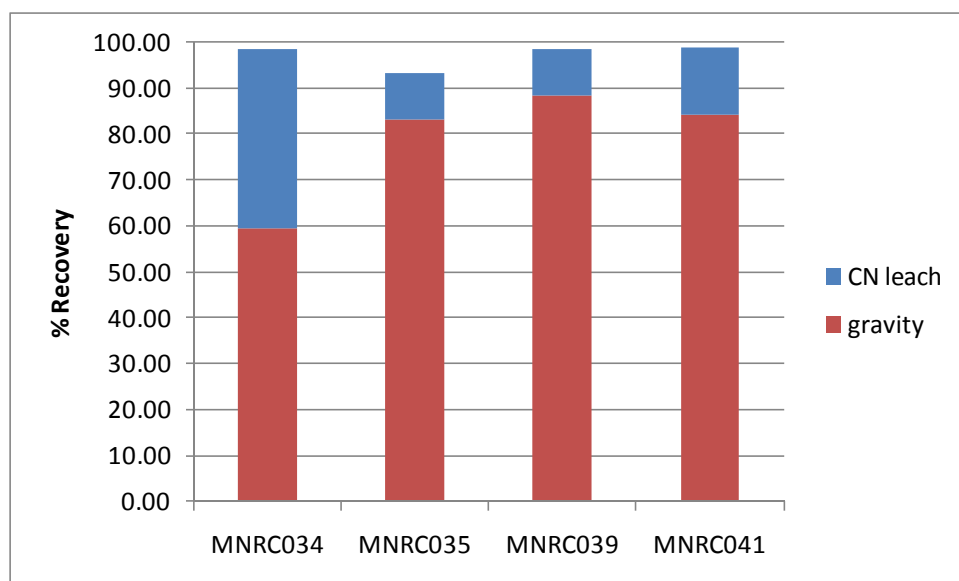
Mr. Cossom is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Cossom is a full time employee of Doray Minerals Ltd, and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity, which they are undertaking. This qualifies Mr. Cossom as a "Competent Person" as defined in the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr. Cossom consent to the inclusion of information in this announcement in the form and context in which it appears.

## APPENDICES

**Table 1.** Summary of Ammtec test work on four gold ore samples for Doray Minerals. Results from gravity separation / oxygen sparged cyanidation time leach test work - March 2011. Test Conditions: - 3kg samples with grind size of P80 of 125 micron.

Sample Name	Ore Type	Gold Recovery %			Tails Grade	Calc. Head	Reagent Consumption		Grind Size
		Total	Gravity	Leach	Au g/t	Au g/t	NaCN (kg/t)	Lime (kg/t)	p80 (µm)
MNRC034 20-28 m	Transitional QV & Shear Zone	98.60%	59.57%	39.02%	0.24	16.76	0.36	0.40	125
MNRC035 45-48 m	Transitional QV	93.27%	83.15%	10.12%	0.75	11.15	0.77	0.47	125
MNRC039 98-100 m	Fresh QV	98.55%	88.40%	10.15%	0.06	4.14	0.39	0.94	125
MNRC041 97-101 m	Fresh QV	98.92%	84.22%	14.70%	0.17	15.72	0.47	0.33	125



**Figure 1.** Summary of Gravity and Total recoveries from Wilber Lode samples