

## **4Q OPERATIONS REVIEW**

MDL owns 50% of TiZir Limited, which owns the Grande Côte mineral sands operation in Senegal, West Africa and an ilmenite upgrading facility in Tyssedal, Norway. Eramet of France is MDL's 50% joint venture partner in TiZir.

#### **HIGHLIGHTS**

- Mining operations continue to ramp-up at Grande Côte
- Dredge ramp-up gaining momentum December throughput represented 61% of operating capacity
- Ramp-up of the Mineral Separation Plant going well:
  - Wet Plant and the Ilmenite Circuit continuing to operate at design feed rates
  - On-spec premium zircon produced during the quarter
- · First shipment of ilmenite to the Tyssedal plant completed in late-October
- First shipments of premium zircon and rutile made in the quarter
- The Tyssedal plant in Norway operating to expectations

### **GRANDE CÔTE**

Mining operations are continuing in ramp-up mode at Grande Côte with mining throughputs gaining momentum. The dredge operated at an average of 51% of capacity throughout the quarter, including a December result of 61% of capacity which represented the best month to date for ore mined. As stated previously, MDL expects mining rates to progressively increase to a steady state production capacity of 4.5 million tonnes per month.

The ramp-up of the Mineral Separation Plant ('MSP') continues to go well. Both the Wet Plant and the Ilmenite Circuit of the Dry Plant continue to operate at design feed rates. The Primary Circuit of the Dry Plant has also been producing premium zircon since start-up in October. Grande Côte also achieved its best result to date in December for ilmenite and premium zircon production. The production of ilmenite and zircon has been increasing month-to-month and will continue to increase with the ramp-up of mining and associated increase in heavy mineral concentrate feedstock supply.

### **Grande Côte physical volumes**

100% basis		2Q	3Q	4Q
		2014	2014	2014
Mining:				
Ore mined	(kt)	2,609	4,717	6,776
Heavy mineral concentrate produced	(t)	37,240	57,526	89,333
MSP production:				
Ilmenite	(t)	11,463	47,702	41,425
Premium Zircon	(t)	-	-	763
Standard Zircon	(t)	-	3,762	4,515
Rutile	(t)	-	-	262
Leucoxene	(t)	-	190	211



#### **Grande Côte sales volumes**

100% basis		2Q	3Q	4Q
		2014	2014	2014
Sales volume				
Ilmenite	(t)	-	28,074	46,850
Premium Zircon	(t)	-	-	243
Standard Zircon	(t)	-	1,205	5,605
Rutile	(t)	-	-	162

Grande Côte completed its first ilmenite shipment of 26,780 tonnes to Tyssedal in late-October. This historic shipment is the realisation of a key element of the strategic rationale of integrating the Grande Côte mine and the Tyssedal ilmenite upgrading facility within the TiZir Joint Venture. Grande Côte ilmenite is already being used in the feed at Tyssedal and has demonstrated sound metallurgical performance.

Grande Côte also completed its first containerised shipments of premium zircon and rutile during the quarter. Feedback from customers indicated that these products are meeting or exceeding expectations.

Discussions with customers for 2015 shipments of ilmenite and zircon are ongoing, with some nearing finalisation.



Grande Côte mining operations



Grande Côte Mineral Separation Plant



#### **TYSSEDAL**

Titanium slag production of 47.5kt for the fourth quarter was slightly higher than 4Q 2013 and 3Q 2014 production. Sales of 47.8kt for the quarter were consistent with production levels. Pricing remained steady over 3Q 2014 and 4Q 2014.

On an annual basis, production was 3% lower in 2014, primarily due to shutdown maintenance on the pre-reduction rotary kiln in March 2014. Sales volumes were significantly lower at 178.2kt – primarily the result of lower production for the year and timing of shipments in the 2012/2013 years. Average pricing throughout the year decreased during 1Q 2014 and 2Q 2014 before stabilising in 3Q 2014 and 4Q 2014.

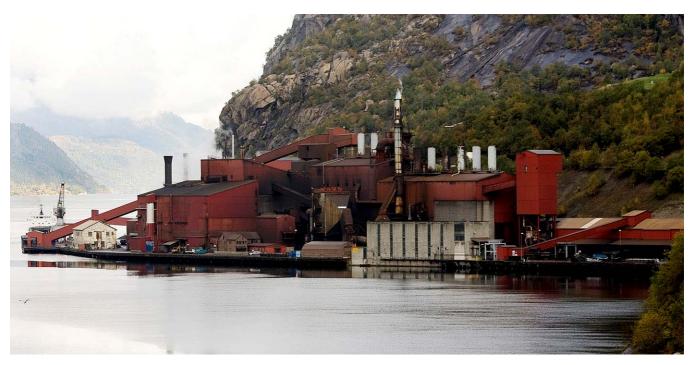
High Purity Pig Iron production and sales volumes for 4Q 2014 were solid at 26.4kt and 20.5kt respectively. Pricing in 4Q 2014 was consistent with 3Q 2014.

On an annual basis, production and sales volumes were slightly lower in 2014 and consistent with reduced titanium slag production. Average pricing throughout the year has remained consistent, with no significant movements experienced on a quarterly basis.

Cost cutting initiatives have been very successful throughout the year to date.

#### **Tyssedal physical volumes**

100% basis		4Q	1Q	2Q	3Q	4Q	CY	CY
		2013	2014	2014	2014	2014	2013	2014
Titanium Slag								
Produced	(kt)	44.5	42.0	48.4	45.8	47.5	190.3	183.7
Sold	(kt)	45.9	38.4	48.1	43.9	47.8	197.1	178.2
High Purity Pig Iron								
Produced	(kt)	25.4	23.5	27.4	25.7	26.4	106.9	103.0
Sold	(kt)	21.8	29.9	28.3	27.0	20.5	114.5	105.7



Tyssedal ilmenite upgrading facility, Norway





First bulk shipment of ilmenite from Dakar to Tyssedal

#### **MARKETS**

During the quarter, titanium feedstock markets continued to be weak. Demand for slag remained solid but pricing continued to be subdued. Ilmenite demand softened and prices continued to fall, being significantly impacted by excessive Chinese supply. Demand for Grande Côte's zircon was strong in an otherwise flat market, with prices remaining steady. Little change to underlying market conditions is anticipated in the coming quarter.

### **CORPORATE**

During the quarter, Rick Sharp stepped down as Managing Director of the Company to pursue other opportunities effective from 15 December 2014. The Board thanks Rick for his considerable efforts with MDL since his initial appointment in 2009.

The Company has no immediate plans to appoint a Managing Director. The existing executive directors of MDL, Nic Limb (Executive Chairman) and Martin Ackland, have assumed the core functions and duties of the Managing Director role, whilst the current Accounting Manager, Greg Bell, has been appointed interim Chief Financial Officer.

#### At 31 December 2014:

- issued shares were 103,676,341;
- cash was US\$25.3 million;
- zero debt;
- investment comprising 19.1% of World Titanium Resources (ASX: WTR) valued at US\$3.1 million.



#### **ABOUT MDL**

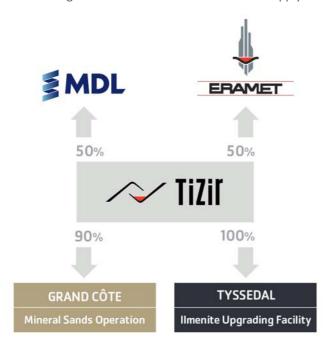
Mineral Deposits Limited (ASX: MDL) is an Australian based mining company in the business of mining, integrating and transforming mineral sands resources.

MDL owns 50% of TiZir Limited, with ERAMET of France also owning 50%. TiZir owns Grande Côte Operations SA, which operates the Grande Côte mineral sands operation in Senegal, West Africa, and TiZir Titanium and Iron AS, which operates the ilmenite upgrading facility in Tyssedal, Norway.

Grande Côte is anticipated to produce on average approximately 85ktpa of zircon and 575ktpa of ilmenite (and small amounts of rutile and leucoxene) when in full production over an expected mine life of at least 25 years.

The Tyssedal ilmenite upgrading facility smelts ilmenite to produce a high  $TiO_2$  titanium slag which is sold to pigment producers and a high purity pig iron which is sold to ductile iron foundries as a valuable co-product. The facility currently produces approximately 200ktpa of titanium slag and 110ktpa of high purity pig iron.

Once Grande Côte completes ramp-up and reaches nameplate capacity, TiZir will be producing approximately 7% of both global zircon and titanium feedstock supply.



#### **Forward looking statements**

Certain information contained in this report, including any information on MDL's plans or future financial or operating performance and other statements that express management's expectations or estimates of future performance, constitute forward-looking statements.

Such statements are based on a number of estimates and assumptions that, while considered reasonable by management at the time, are subject to significant business, economic and competitive uncertainties. MDL cautions that such statements involve known and unknown risks, uncertainties and other factors that may cause the actual financial results, performance or achievements of MDL to be materially different from the company's estimated future results, performance or achievements expressed or implied by those forward-looking statements.

These factors include the inherent risks involved in exploration and development of mineral properties, changes in economic conditions, changes in the worldwide price of zircon, ilmenite and other key inputs, changes in mine plans and other factors, such as project execution delays, many of which are beyond the control of MDL. Nothing in this report should be construed as either an offer to sell or a solicitation to buy or sell MDL securities.

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