TERRAMIN AUSTRALIA LIMITED

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#### FOCUS ON ZINC



Zinc extends the life and durability of steel, protecting against corrosion and reducing maintenance costs

TERRAMIN AUSTRALIA LIMITED ABN 67 062 576 238

### HIGHLIGHTS

• Safety milestone achieved at Angas

Quarter Report 2013

- A modified approach to mining the Tala Hamza deposit submitted by Terramin to Algerian JV partners
- Menninnie Dam drill results reveal significant silver, lead and zinc intersections at Mannequin and Viper, and broad zones of graphite at Mannequin
- Fleurieu drill results confirm the presence of a large copper-gold mineralised system at Pipeline
- Successful restructure of convertible note facilities
- Board strengthened through the appointment of two new Non-Executive Directors



## MANAGING DIRECTOR'S REVIEW



The focus on growth and development has remained at the core of the Company's activities during the first quarter of this year. The economic climate continues to present challenges to junior mining and exploration companies, however Terramin is withstanding external pressures after having positioned itself well during 2012.

Four objectives underpin Terramin's development agenda in 2013:

- 1. Progression of the Tala Hamza Project;
- 2. Continuing Angas Mine production optimisation and exploration;
- 3. Continuing exploration at Fleurieu and Menninnie; and
- 4. Evaluating and progressing merger and acquisition (M&A) opportunities.

#### 1. Tala Hamza project

Realising value from the Tala Hamza project remains the highest individual priority for the Company. Following discussions held during my visit to Algeria, which ended in early February, a modified approach to mining the Tala Hamza deposit was proposed to our Joint Venture (JV) partners in late February. A meeting was held with our Algerian partners in late April to continue discussions on that proposed revised mining method. These discussions have not lead to satisfactory outcomes thus far. The Company expects to make a decision shortly as to the way forward with the project.

#### 2. Angas Zinc Mine

Angas delivered lower results for many production metrics when compared with the record prior quarter (refer to page 5 for details). However, a recovery in performance in the second half of the quarter, coupled with the safety milestone of 1 year LTI free set a base for positive momentum to continue in the second quarter.

Drilling has commenced at Angas with the aim of extending the Angas Reserve, the results of which will determine the Company's decisions over mine life extension. In parallel, mine completion and rehabilitation plans are being developed for the last quarter of this year in the event that no extension of mine life is economically feasible.

The first stage of near-mine exploration was also undertaken during the quarter. Whilst mineralisation was intersected by the drilling, the widths and scope of mineralisation were not deemed economic. Follow-up drilling is planned to further identify possible extension of the mineralisation.

#### 3. Exploration

Exploration is once again an integral part of Terramin's growth strategy and activity is progressing across all South Australian projects. I am particularly encouraged by results received from drilling at Tank Hill and Mannequin (Menninnie); and Pipeline (Fleurieu) which confirm the presence of significant and varied mineralisation (refer to page 4 for details). Further exploration activity is underway and I look forward to continuing to report on progress as more results become available.

#### 4. M&A activity

Another anticipated avenue for growth for the Company will be via M&A activities. Terramin is actively engaging in the identification, review and development of opportunities. Shareholders will be kept informed of progress on this front, should appropriate opportunities be identified.

#### **Financial activity**

The Company has repaid \$5m in bank loans and agreed to restructure the Corporate revolving facility with our financiers. Convertible notes which were due to mature in September 2013 have been restructured successfully. Refer to page 8 for further details on these activities.

#### **Board activity**

I am pleased to welcome Mr Feng Sheng and Mr Kevin McGuinness to the Terramin Board, both of whom were appointed as Non-Executive Directors on 17 April. Mr Sheng is a principal of Terramin's cornerstone investors, the Asipac Group, and will strengthen our position with Asian investors. Mr McGuinness brings significant financial and governance capability to the Board.

Effective 30 April, Mr Peter Zachert tendered his resignation from the Board. I would like to reiterate the Company's appreciation and thank Peter for his valued contribution over the past 4 years.

#### **Concluding Remarks**

The year 2012 was a period of consolidation, with a focus on efficiency for existing operations, review of projects for divestment and partnership, and creation of opportunities. The Company faced many challenges and external pressures, so it was extremely encouraging to finish the 2012 year on a positive note with progress at its SA based tenements, annual production records at Angas, and a successful capital raising.

These positive milestones, coupled with the successful restructure of debt and convertible note facilities, and a fresh appetite for corporate activity, have set a solid base for a year of growth for Terramin. Supported by our cornerstone investors, and led by an experienced Board and management team, I am confident that 2013 will be a year of growth for the Company across many fronts.

Nic Clift Managing Director



## **REVIEW OF OPERATIONS**

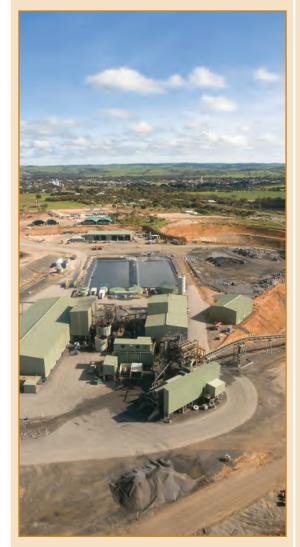
#### **Operation Description**

#### **Angas Zinc Mine**

100% Terramin owned and operated

A 400,000 tpa operation producing zinc and lead-copper-silver-gold concentrates.

There is a life of mine off-take agreement with Freepoint Metals and Concentrates LLC for zinc concentrate and a five year off-take agreement with Nyrstar Sales & Marketing AG for lead concentrate.



#### **Activities for the Quarter**

#### Safety, Environment and Community Report

The improved safety focus and reporting standards at Angas have resulted in a further quarter without any significant safety incidents to report. Furthermore, during the quarter Angas achieved a milestone of no significant physical injuries in the workplace for a full 12 months.

No environmental incidents were recorded during the period.

The TSF water level remained within compliance throughout the period and the surface area reduced by more than 4,000m<sup>2</sup>. Water management is an ongoing focus for the management team at Angas to ensure that the TSF remains within agreed parameters.

#### **Operations**

Production tonnages and development rates were lower than planned during January as a result of delayed paste fill operations and production drilling stemming from poor performance of ancillary equipment. Later in the period, ore production and development rates improved and ROM stockpiles increased.

Concentrate production was below expectation due to lower mill availability and lower feed grade, coupled with higher iron content in the ore feed (refer to page 5 for production statistics).

Metallurgical trials were undertaken to improve lead recoveries to lead concentrate, and zinc concentrate quality. Initial results indicate an improvement in lead capture as is evident in year to date recoveries which have improved by 2%. Results from the zinc trials are being collected to measure potential improvements.

#### **Ore Reserves and Mineral Resources**

On 20 March 2013, the Company announced a revised estimate of Angas Ore Reserves and Mineral Resources. The Reserve estimate has decreased by 0.44Mt from July 2012, which is primarily a result of mining depletion, the impact of lower forecast A\$ commodity prices on the economic cut-off grade, and the removal of the 75mL Crown Pillar from this category. The Crown Pillar has been moved into the Indicated Resource category and is subject to ongoing review.

#### **Exploration**

Also announced on 20 March 2013, underground diamond drilling commenced at Angas with the aim of extending the Reserve beyond the 400RL, and consequently the current mine life. The drill programme was completed in the same month and initial results prove up the extension of ore to the 360RL. Drill core from below the 380RL is currently being logged and further results are expected shortly.

Drill hole AN263 tested the Rowe gravity feature (refer to the announcement of 16 November 2012 for further details), which intersected weak base metal mineralisation within an iron sulphide rich shear. Summary intersection for AN263 from 584m; 4m @ 0.17% Zn, 0.06%Pb, 3g/t Ag and 0.1g/t Au. Modelling of downhole electromagnetic survey data has assisted in targeting the southern faulted offset of the Rankine mineralisation with drilling scheduled for the second quarter of 2013.

### **REVIEW OF OPERATIONS**

Operation Description	Activities for the Quarter		
<b>Oued Amizour Project</b> 100% owned by Western Mediterranean Zinc Spa (WMZ) Terramin holds a 65% shareholding in WMZ. The remaining 35% is held by two Algerian government-owned companies, Entreprise Nationale des Produits Miniers Non-Ferreux et des Substances Utiles Spa (ENOF) (32.5%) and Office National de Recherche Géologique et Minière (ORGM) (2.5%). Oued Amizour Exploration Permit 5225PE is a 125km <sup>2</sup> tenement which contains several lead-zinc deposits, including the Tala Hamza deposit.	Meetings were held with WMZ JV partners in early February, and a modified approach to mining the Tala Hamza deposit was submitted by Terramin in late February. A follow up meeting was held in late April, with the expectation of taking decisions as to how to proceed. Thus far, the discussions with ENOF have not lead to a satisfactory outcome. In the short term, the Company will consider and decide on the next steps it will take. The situation with the mining permit has not changed. The Algerian regulator has advised previously that the renewal of the exploration permit will be finalised upon an agreement being reached with the JV partner on the Definitive Feasibility Study.		
Menninnie Zinc Project 100% owned by Terramin subsidiary Menninnie Metals Pty Ltd The Menninnie Zinc project comprises a group of five Exploration Licences covering a contiguous area of 2,471km <sup>2</sup> . These licences are Menninnie Dam (EL5039), Nonning (EL4813), Kolendo (EL4285), Taringa (EL4669) and Wipipippee Hill (EL4865). Tenement applications have been lodged to extend Terramin's interest in the area: Unalla (ELA2012/00299), and Mt lve (ELA2012/00316). The area, covering 584km <sup>2</sup> , is contiguous with the Taringa EL and is prospective for base metals, silver and gold. Terramin has accepted the offer of Unalla and issue of the licence is pending. Menninnie Metals has entered into a binding heads of agreement with Musgrave Minerals Ltd (Musgrave) for the farm-in and joint venture of the Menninnie Dam EL. All the conditions included in this heads of agreement have been satisfied.	<ul> <li>On 1 March, Musgrave reported results from drilling at Phone Hill, Mannequin and Viper targets on the Menninnie Dam EL. Significant silver, lead and zinc mineralisation was intersected at Mannequin and Viper. This includes zinc up to 3.5% intersected within the same zone as a silver intersection of 20m @ 12.4g/t from 68m in drill hole MDRC28 at Mannequin. Broad zones of graphite were also intersected in the drilling at Mannequin, from which spot samples assayed up to 7.2% TGC. Further graphite evaluation work is planned. An airborne electromagnetic survey scheduled for mid-2nd quarter of 2013 will help define the extent of the graphite mineralisation.</li> <li>Shortly after period end, the Company released preliminary results from drilling carried out by Musgrave at Tank Hill, also on the Menninnie Dam EL. The results revealed encouraging zinc, silver and gold mineralisation in drill hole MDRC39, including 6m @ 4.9% Zn, 62g/t Ag, 1.2g/t Au from 133m (refer to the announcement of 8 April for further details).</li> <li>Further drilling will be undertaken by Musgrave during the 2nd quarter of 2013.</li> </ul>		
Fleurieu Exploration Project 100% Terramin owned Comprises five contiguous Exploration Licences adjacent to the Angas Mine Lease which together cover 1,186km <sup>2</sup> on the Fleurieu Peninsula in South Australia: Bremer (EL4936); Hartley (EL5078); Currency Creek (EL4210); Langhorne Creek (EL4466); and Pfeiffer (EL5102). The tenements cover an elongated zone stretching 60km northeast and southwest of the Angas Mine Lease and are considered prospective for lead, zinc, copper and gold. Exploration licence applications Tepko (ELA 2012/00315), and Kinchina (ELA 2012/00317) have been lodged with the regulator, covering 1,054km <sup>2</sup> . The applications extend the existing tenements and are considered prospective for copper and gold.	In January, drilling commenced on the Pipeline prospect which lies at the north of the Bremer EL, approximately 30km from Angas. The results, which were announced in early March, confirm the presence of a large copper-gold mineralised system consisting of multiple zones with a combined length of 1,200 metres and widths of up to 20 metres. The mineralisation is still open along strike to the north and south, and at depth (refer to the announcement of 5 March 2013 for further details). The results from Pipeline merit follow-up geophysics and diamond drilling to test the mineralisation further below the water table and along strike. This will also provide a better understanding of the mineralisation's controlling structures and its relationships with alteration of the host rocks. Priority targets to be tested in the second quarter of 2013 include several electromagnetic anomalies that were identified and prioritised from Terramin's Versatile Time Domain Electromagnetic (VTEM) survey of the region, with drilling planned at the Shimo prospect and IP surveys over the Glenalbyn and Heingus prospects. Ongoing geochemical sampling continues over regional prospects.		



# ANGAS ZINC MINE

#### Key quarterly statistics

Production	ı statistics	<b>June</b> Quarter 2012	September Quarter 2012	December Quarter 2012	March Quarter 2013	YTD 2013
Total ore min	ned (tonnes)	110,743	111,492	105,087	93,595	93,595
Total ore trea	ated (tonnes)	116,142	109,446	110,035	93,989	93,989
Ore grade:	- Pb%	3.44	4.58	3.47	3.12	3.12
	- Zn%	7.98	9.37	8.24	6.99	6.99
	- Cu%	0.23	0.25	0.21	0.23	0.23
	- Ag g/t	37.0	46.9	34.4	32.7	32.7
Zinc Concen	trate (tonnes)	15,354	16,706	15,630	10,827	10,827
Grade:	- Zn%	50.8	50.6	49.4	49.2	49.2
Recovery:	- Zn%	84.1	82.4	85.1	81.1	81.1
Lead Concer	ntrate (tonnes)	6,654	8,237	5,973	4,730	4,730
Grade:	- Pb%	51.6	52.7	54.1	52.0	52.0
	- Cu%	3.2	2.6	2.9	3.5	3.5
	- Ag g/t	528	510	509	508	508
	- Au g/t	8.6	7.2	9.5	8.6	8.6
Recoveries:	- Pb%	85.8	86.7	84.6	84.1	84.1
	- Cu%	77.4	77.8	73.3	75.6	75.6
	- Ag%	81.8	81.9	80.4	78.1	78.1
Payable met	al					
	- Zn t	6,564	7,114	6,466	4,459	4,459
	- Pb t	3,232	4,097	3,055	2,320	2,320
	- Cu t	43	40	34	35	35
	- Ag oz	102,170	121,870	88,151	69,689	69,689
	- Au oz	1,463	1,481	1,469	1,042	1,042

Notes: The payable metal figures include adjustments based on final invoice numbers where available. The ore mined figures are estimated based on tonnes trucked to the surface whilst the ore treated figures are calculated from a weightometer. Reconciliation between the mine and the mill continues.

#### **Production**

A total of 93,595 tonnes of ore were produced for the quarter, a reduction of 11% against the prior period. Whilst 7% of this was planned as part of scheduling, an additional 6% reduction was attributed to paste fill delays and low drill availability early in the quarter. Ore treated for the period of 93,989 tonnes was proportionally reduced in conjunction with the mine plan. As a result of the geology and scheduled mining locations, zinc and lead feed grades were lower than last period (10% and 15%) resulting in reduced concentrate production against the record prior period. Higher iron grade in the ore, bound up in pyrrhotite, effected zinc and lead recoveries (which were down 5% and 1%), further effecting metal production.

#### **Cash Costs**

The C1 cash for the quarter was US65c/lb, an increase of US8c/lb (14%).

The higher cost compared to the prior period was largely due to a lower zinc grade (15% lower). Zinc grades were planned to be lower this quarter however stoping sequence delays led to a change and further reduction in grade profile against the prior quarter. It is anticipated that grades will recover in the 2<sup>nd</sup> quarter.

#### Sales

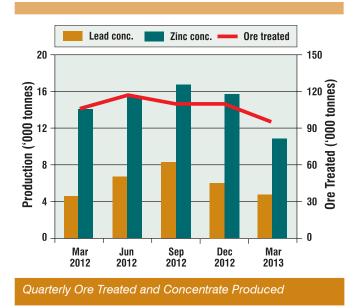
The average realised price for zinc increased by 4% from the prior quarter to US\$1,985/t, below the average market price of US\$2,033/t. The average realised price for zinc reflects pricing terms established in advance of the shipments delivered whilst lead is subject to pricing several months after shipment. The average realised price for lead increased marginally by 2% to US\$2,531 on the back of a strong increase (22%) in the December quarter. The average realised lead price was 10% higher than the average market price for the quarter.

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#### Key quarterly statistics

	June	September	December	March	
C1 Cash Costs	Quarter	Quarter	Quarter	Quarter	YTD
(US c/lb payable zinc)	2012	2012	2012	2013	2013
Production Costs	77	77	93	112	112
- Mining	44	41	46	63	63
- Processing	26	27	34	35	35
- Other Site Costs	7	9	13	14	14
Realisation Costs	34	32	32	34	34
- Transport & Handling	14	10	11	12	12
- Zinc Treatment Charges	21	21	21	22	22
Net By-product Credits	(61)	(76)	(68)	(81)	(81)
C1 Cash Cost	50	33	57	65	65
	June	September	December	March	
	Quarter	Quarter	Quarter	Quarter	YTD
Sales	2012	2012	2012	2013	2013
- Zinc concentrate (t)	9,826	19,948	14,380	9,761	9,761
- Lead concentrate (t)	6,487	7,943	6,149	4,794	4,794
Average Realised Price					
Average Price in US\$/t					
- Zinc	1,966	1,886	1,909	1,985	1,985
- Lead	1,732	2,023	2,470	2,531	2,531
Average Price in USc/lb					
- Zinc	89	86	87	90	90
- Lead	79	92	112	115	115
Commodity Prices					
Average Price in US\$/t					
- Zinc	1,928	1,895	1,951	2,033	2,033
- Lead	1,972	1,980	2,203	2,300	2,300
Average Price in USc/Ib					
- Zinc	87	86	89	92	92
- Lead	89	90	100	104	104

#### Key historical production data





TERRAMIN AUSTRALIA LIMITED 1st QUARTER REPORT 2013

### ANGAS ZINC MINE

#### Hedging

#### Zinc

The Company recorded a hedging gain of US\$50/t (US\$0.2m) in relation to the forward sale of 3,500t of zinc metal at an average price of US\$2,083/t, of which, 2,200t relates to forecast April and May 2013 sales.

#### Lead

The Company recorded a hedging loss of US\$199/t (US\$0.5m) in relation to the forward sale of 2,668t of lead metal sold in the December 2012 quarter (priced March 2013 quarter). Put options over 1,054t of lead metal lapsed, and participation in higher market prices throughout the first quarter resulted in an improved position (US\$189/t) after the payment of deferred option premiums. Price protection in respect of lead metal sold in the March 2013 quarter, with pricing due to settle in the June 2013 quarter, was executed via forward sales (1,225t at an average of US\$2,179/t).

Additional price protection in relation to 750t of 2<sup>nd</sup> quarter 2013 forecast lead metal sales was executed via forward sales at an average price of US\$2,377/t.

#### Currency

At 31 March 2013, the Company had US\$ forward sales in place covering US\$6.5m of future cash flows through to August 2013 at an average rate of 1.04. Foreign currency hedge contracts are maintained to align US\$ denominated revenue with the underlying commodity price risk. A gain of US\$0.1m was realised on delivery into maturing foreign exchange hedges during the period.

#### **Hedging Positions**

### Summary of hedging positions as at 31 March 2013

		2013	2013	
METAL		H1	H2	Total
Zinc				
Forward sale contracts	t	-	-	-
Average price	USD/t	-	-	-
Bought put options	t	-	-	-
Put option strike price	USD/t	-	-	-
Lead				
Forward sale contracts	t	1,225	750	1,975
Average price	USD/t	2,179	2,377	2,254
Bought put options	t	-	-	-
Put option strike price	USD/t	-	-	-
Gold				
Forward sale contracts	0Z	-	-	-
Average price	USD/oz	-	-	-
CURRENCY				
Forward sale contracts	USD(\$m)	4.698	1.783	6.481
Average price	AUD:USD	1.03	1.04	1.04
AUD call options				
Bought put options	USD(\$m)	-	-	-
Put option strike price	AUD:USD	-	-	-



# CORPORATE

#### **Financial Restructure**

The Company repaid \$5.0 million of bank loans and agreed with its financiers Investec Bank (Australia) Ltd, to restructure the Corporate revolving facility so that the \$10.5 million remaining balance be paid in September 2013.

In addition, Terramin has agreed a restructure of convertible notes maturing in 2013. The maturity date of the US\$15 million unlisted convertible notes held by the Asipac Group has been deferred from 16 September 2013 to 31 May 2014. The maturity date of the \$5 million unlisted convertible notes held by an institutional investor has been deferred from 17 September 2013 to 31 July 2014.

#### **Board Changes**

Subsequent to the end of the period, the Company announced the appointments of Mr Feng Sheng and Mr Kevin McGuinness as Non-Executive Directors of Terramin.

Mr Sheng is Chairman of Melbourne based Asipac Group and has owned and operated several businesses over the years, predominately focussed on property investment and development. Mr McGuinness is a finance executive with more than 20 years of experience as a director and in executive management with ASX listed and private companies in the mining, medical equipment industries and not-for-profit organisations. Mr McGuinness will chair the Company's Audit Committee.

In addition, Terramin advises that Mr Peter Zachert has tendered his resignation from the Terramin Board to focus on his current executive role. Mr Zachert's resignation will be effective as of 30 April 2013.

This activity follows the appointment of Mr Angelo Siciliano to the Board, which was announced on 2 January of this year.

#### Cash

The Company cash balance at 31 March 2013 was \$2.3 million.

### **CORPORATE INFORMATION**

**TERRAMIN** AUSTRALIA LIMITED ABN 67 062 576 238 Suite 116, 147 Pirie Street Adelaide, South Australia 5000

T +61 8 8213 1415 F +61 8 8213 1416 E info@terramin.com.au W www.terramin.com.au

#### **CAPITAL STRUCTURE**

at 30 April 2013
Shares on issue 789,182,128
Unlisted Options
Unlisted convertible/redeemable notes with 5 year term:
Conversion subject to minimum VWAP of \$1.70
(maturity September 2014) US\$10,000,000
Convertible at VWAP
(maturity May 2014) US\$15,050,000
Convertible at A\$2.21 per share
(maturity July 2014) \$5,002,400

#### DIRECTORS

Michael H Kennedy	Non-Executive Interim Chairman
Nic Clift	Managing Director
Peter Zachert	Non-Executive Director (resigned 30 April 2013)
Xie Yaheng	Non-Executive Director
Angelo Siciliano	Non-Executive Director (appointed 2 January 2013)
Kevin McGuinness	Non-Executive Director (appointed 17 April 2013)
Feng Sheng	Non-Executive Director (appointed 17 April 2013)
Stéphane Gauducheau	Company Secretary

The information in this report that relates to Exploration Results is based on information compiled by My Eric Whittaker, who is a member of The Australasian Institute of Mining and Metallurgy. Mr Whittaker is a consultant to Terramin Australia Limited. Mr Whittaker has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves'. Mr Whittaker consents to the inclusion in the report of the matters based on his information in the form and context in which is appears.

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