ASX ANNOUNCEMENT

TERRAMIN AUSTRALIA

TALA HAMZA FEASIBILITY STUDY COMPLETED

Highlights

- Financial analysis of the project economics, based on metal prices averaging US$1.25/lb zinc (Zn) and US$1.05/lb lead (Pb), indicates the base case project generates a strong financial return, with a post-tax nominal[1] NPV (8%) of A$399m (US$303m) and IRR 14%, subject to the material assumptions on page 4;
- Over the 21 year Life of Mine (LoM), the plant is expected to produce an average of 129,300 tonnes per annum of zinc concentrate at 54% zinc (90% recovery) and 26,000 tonnes per annum of lead concentrate at 63% lead (73% recovery), peaking at 153,000 tpa zinc and 36,000 tpa lead concentrate;
- Total pre-production capital for the project is expected to be A$449m[2] (US$341m). Total LoM capital inclusive of pre-production capital and sustaining capital is expected to be A$639m (US$486m);
- Operating costs are expected to be competitive by world standards. The C1 cash cost, including all operating costs and excluding royalties, rehabilitation and capital expenditure, is estimated to be US$0.53/lb payable Zn with an All-in Sustaining Cost (AISC) of US$0.61/lb[3];
- The Tala Hamza deposit has a Mineral Resource of 53 Mt (at a cut off of 3.0% Zinc Equivalent (Zn.eq) including an Indicated Resource of 44.2 Mt. Total ore (Material Mined at a project evaluation cut-off grade of 4.4% Zn.eq) is 25.9 Mt at 6.3% Zn and 1.8% Pb with a nominal mine production rate of 1.32Mtpa and an estimated mine life of 21 years (23 years incl. pre-production);
- The project surface footprint has been significantly reduced in size from the 2010 DFS. The land needing to be acquired for surface infrastructure has been minimised, without reducing flexibility for expansion;
- Additional investigations for the DFS included a change in the mining method from block cave to Underhand Drift and Fill (UDF), a geotechnical drilling program, ground subsidence modelling, hydrogeology drilling and modelling, Cemented Paste Backfill (CPB) test work and replacing the tailings dam with a dry-stacked cake storage facility (CSF);
- An Environmental Impact Study (EIS) by an approved Algerian environmental consultancy has been completed and this study supplements previous work by international consultants; and
- The deposit remains open to the east and southeast, allowing the potential to expand production without reducing mine life.

1. Where nominal values are noted, costs and revenues are in 2020 dollars escalated at 2% CPI
2. Unless otherwise noted, values are in real 2020 US dollars, AU$/US$ = 0.76
3. Cost/lb are payable Zn, nett of by-product credits

Executive Summary

Terramin, through its subsidiary, Western Mediterranean Zinc Spa (WMZ), has completed an updated Definitive Feasibility Study (DFS) for the development of the Tala Hamza-Amizour zinc and lead Project (the Project) near Bejaia in northern Algeria. The updated DFS covers a zinc and lead deposit in the area of the Oued Amizour Mining Exploration Permit 6911 (PEM 6911), an area of 122.76 km^2 held by WMZ. Exploration Permit 6911 expired 31 January 2018 and is expected to be superseded by the Mining Licence (ML). Although discussions have been active and ongoing, until the ML is approved there can be no assurance that the project will be endorsed by the Algerian government.

The 2018 DFS contains a number of changes to the 2010 DFS undertaken to eliminate, or reduce to an acceptable level, environmental and social concerns with the block cave mining method. The changes include optimisation of previous studies, updating the Ore Reserve, revised plant layout, removal of the tailings storage facility and replacement with dry stacking, and updated economic analysis.

The changes proposed by WMZ to achieve this include changing the mining and tailings disposal methods. The new mining method, Underhand Drift and Fill (UDF) is a small scale, selective mining method which has a higher associated mining operating cost compared to the original block cave mining method. The adoption of the new mining method increased the mine cut-off grade and reduced mining dilution, overall resulting in a net reduction in minable ore tonnes over the life of mine (LoM).

Updated flowsheets, capital and operating costs, completed in conjunction with engineering company China ENFI Engineering Corp (ENFI), confirm the viability of an underground operation with a 1.4 million tonne per annum capacity process plant (utilised at the rate of 1.32Mtpa), which can deliver an average of 129,300 tpa of zinc concentrate at 54% Zn (90% recovery) and 26,000 tpa of lead concentrate at 63% Pb (73% recovery), at an average C1-cash cost of US$0.53c/lb and All-in Sustaining Cost (AISC) (including royalty) of US$0.61/lb.

Based on the positive DFS results and expansion potential, the company is progressing further optimisation studies and permitting in calendar 2018. This should allow the base case project to proceed in conjunction with studies into expansion cases.

Table 1: Tala Hamza Zinc-Lead Project: Key DFS Outcomes

Technical Parameters		Financial Parameter Estimates		
Schedule Production[4]	**129,300 tpa** zinc concentrate (**59,100 tpa** zinc metal)	**Commodity Prices**	**Base Case**[5] US$1.25/lb zinc US$1.05/lb lead	**High Case** US$1.50/lb zinc US$1.11/lb lead
	26,000 tpa lead concentrate (**15,500 tpa** lead metal)	**C1 Costs (LOM ave)**[7]	**US$0.53/lb**	**US$0.55/lb**
Ore Reserve	**25.9Mt at 6.3%** zinc and **1.8%** lead	**AISC (LOM ave)**[8]	**US$0.61/lb**	**US$0.64/lb**
Ore Resource	**53.0Mt** at **5.3%** zinc and **1.3%** lead	**Start-up Capital**[6]	**US$341M** (A$449M)	
Conc. Grade (LOM ave)[4]	**54%** zinc **63%** lead	**Sustaining Capital**	**US$144M** (A$190M)	
Design Throughput[4]	1.4 Mtpa	**Free Cashflow (Post-tax nominal)**	**US$1.5B** (A$2.0B)	**US$2.1B** (A$2.8B)
Production Mine Life	21 Years	**NPV8 (Post-tax nominal)**[9]	**US$303M** (A$399M)	**US$553M** (A$728M)
Payback Period	9 Years	**IRR (Post-tax nominal)**[9]	14%	19%

4. Schedule Production and Concentrate Grade represent the average values following initial operational ramp up period (approx. 2 years).
5. Long term Base Case commodity pricing assumptions are derived from Wood Mackenzie forecasts at Jun-18. Exchange rate assumption is AUD/USD FX 0.76.
6. Start-up Capital Costs represents pre-production capital requirements exclusive of working capital and sustaining capital.
7. C1 Costs are defined as direct cash operating costs produced, net of by-product credits, divided by the amount of payable zinc produced. Direct cash operating costs include all mining, processing, transport, treatment and refining costs and smelter recovery deductions through to refined metal.
8. All-in Sustaining Costs (AISC) includes C1 plus sustaining capital, indirect costs and royalties.
9. NPV has been discounted using a discount rate of 8% and is a post-tax nominal calculation. NPV and IRR are discounted from ramp up of start-up capital.

Commentary

"Terramin is excited to be able to release details of the Tala Hamza revised DFS. The result is the outcome of steady and patient negotiation with our joint-venture partners. It was important to engage and work consistently with our counterparts to ensure a robust long-life project that will be a flagship project in Algeria"

"Location is everything with Tala Hamza, proximity to deep water ports, well developed infrastructure, cheap and reliable energy and an educated workforce makes this a potential world class project"

"Getting the base case project at Tala Hamza permitted opens up optionality for expansion and exploration both within the existing exploration area and further afield in a highly prospective emerging mining country which is looking to diversify from oil and gas"

Richard Taylor
Chief Executive Officer

Pursuant to ASX Listing Rule 5.9.1 and in addition to information contained in this release and Appendix 1: Tala Hamza Resources and Reserves Statement, the company provides the following summary table:

Material Assumption	Outcome
Mineral Resources (Pg36 Appendix 1)	The Mineral Resources estimate (refer ASX Announcement: Tala Hamza Resources and Reserves Statement: 29 August & Appendix 1) for the deposit was prepared by Terramin's Competent Person(s). The estimate is based on 32 HQ sized diamond drill holes drilled by ORGM between 1988 and 1994. A further 64 diamond drill holes were drilled by Terramin's Algerian subsidiary, WMZ, between 2006 and 2010. Terramin's Tala Hamza database has been independently validated by Golder Associates. The Mineral Resources are reported inclusive of the Ore Reserve.
Mining Method and Assumptions (Pg40 Appendix 1)	The mining method selected for the study is underground mining using a mechanised Underhand Drift and Fill technique. Previous studies have examined options including sublevel open stoping with paste fill, sublevel caving and block caving. Regulatory requirements that proscribe surface subsidence, combined with a generally low rock mass competence and variable ore boundaries mean that Underhand Drift and Fill is regarded as the most suitable method for the deposit. Ore production will involve taking 5m layers (flitches) using a jumbo drift-advance/strip-retreat cycle in a top-down sequence under engineered reinforced paste backfill. Fill cycles will take place approximately every 3000t to 6,000t of mined ore. Inferred material inside the planned production shapes makes up 0.1% of the total and is justified as able to be included in the Ore Reserves estimate due to being less than the order of precision reported. In relation to the inferred material, there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.
Processing Method and Assumptions (Pg41 Appendix 1)	Between 2007 and 2010, detailed metallurgical test work was undertaken by Optimet Lab. Pty Ltd. Optimet on drill holes selected to represent the different styles of mineralisation present. Results indicate all styles of zinc and lead mineralisation are amenable to recovery by flotation with no issues apparent due to deleterious elements. Conventional flotation will be used to recover a Zinc Concentrate and a Lead Concentrate. Metallurgical recovery is modelled as 89.6% for Zinc to produce a product at 53.8% Zn and 73.2% for Lead to produce a product at 62.6% Pb.
Cut-off Grades (Pg40 Appendix 1)	The cut-off grade used for the Ore Reserves Estimate is a combined in-situ grade of 4.5% Zn + Pb. Production areas have been hand-designed based on digitising horizontal boundaries around grade shells generated at this grade using the Vulcan software package.
Estimation Methodology (Pg37 Appendix 1)	Drillhole assay data was composited downhole over 5m intervals using Vulcan Envisage, starting at domain boundaries, and flagged with priorities and domain codes. Golder investigated potential spatial continuity using correlograms. Correlogram maps did not indicate significant spatial anisotropy for either zinc or lead. Experimental downhole correlograms and omniplanar correlograms were calculated and modelled to obtain kriging parameters for resource estimation.
Material Modifying Factors (Pg41 Appendix 1)	A mining dilution of 5% at zero grade has been used for all ore production in DFS 2018. The proposed 2009 mining method of block caving limited the ability to exclude internal dilution. The 2009 Indicated + Measured Resource classification included approximately 8Mt @ 1.9% Zn + Pb of internal dilution. The proposed mining method of "Underhand Drift and Fill" allows for the exclusion of internal dilution. A mining recovery of 93% has been used for all production.
Other (Environmental, Legal and Social (Pg41 Appendix 1)	Terramin has been engaged in protracted discussions with authorities in Algeria to address environmental and social concerns with the previously proposed block cave mining method. DFS 2018 assumes discussions will be finalised in 2018 and a two year pre-production capital development program. The timeframe may be subject to unforeseen delays. PEM 6911 expired on 31 January 2018. WMZ is entitled to apply for a grace period under the Mining Act, or submit the Mining Lease Application. Although discussions have been active and ongoing, until the ML is approved there can be no assurance the project will be endorsed by the Algerian government.

Forward Looking Statements

This announcement includes certain 'forward looking statements'. All statements, other than statements of historical fact, are forward looking statements that involve various risks and uncertainties. There can be no assurances that such statements will prove accurate, and actual results and future events could differ materially from those anticipated in such statements. Such information contained herein represents management's best judgement as of the date hereof based on information currently available. Except for statutory liability which cannot be excluded, each of Terramin, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in this document and exclude all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this statement or any error or omission. The Company does not assume any obligation to update any forward-looking statement. Accordingly no person or entity should place undue reliance on any forward looking statement.

Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Eric Whittaker, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Whittaker is employed as the Principal Resource Geologist of 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 being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of 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 it appears.

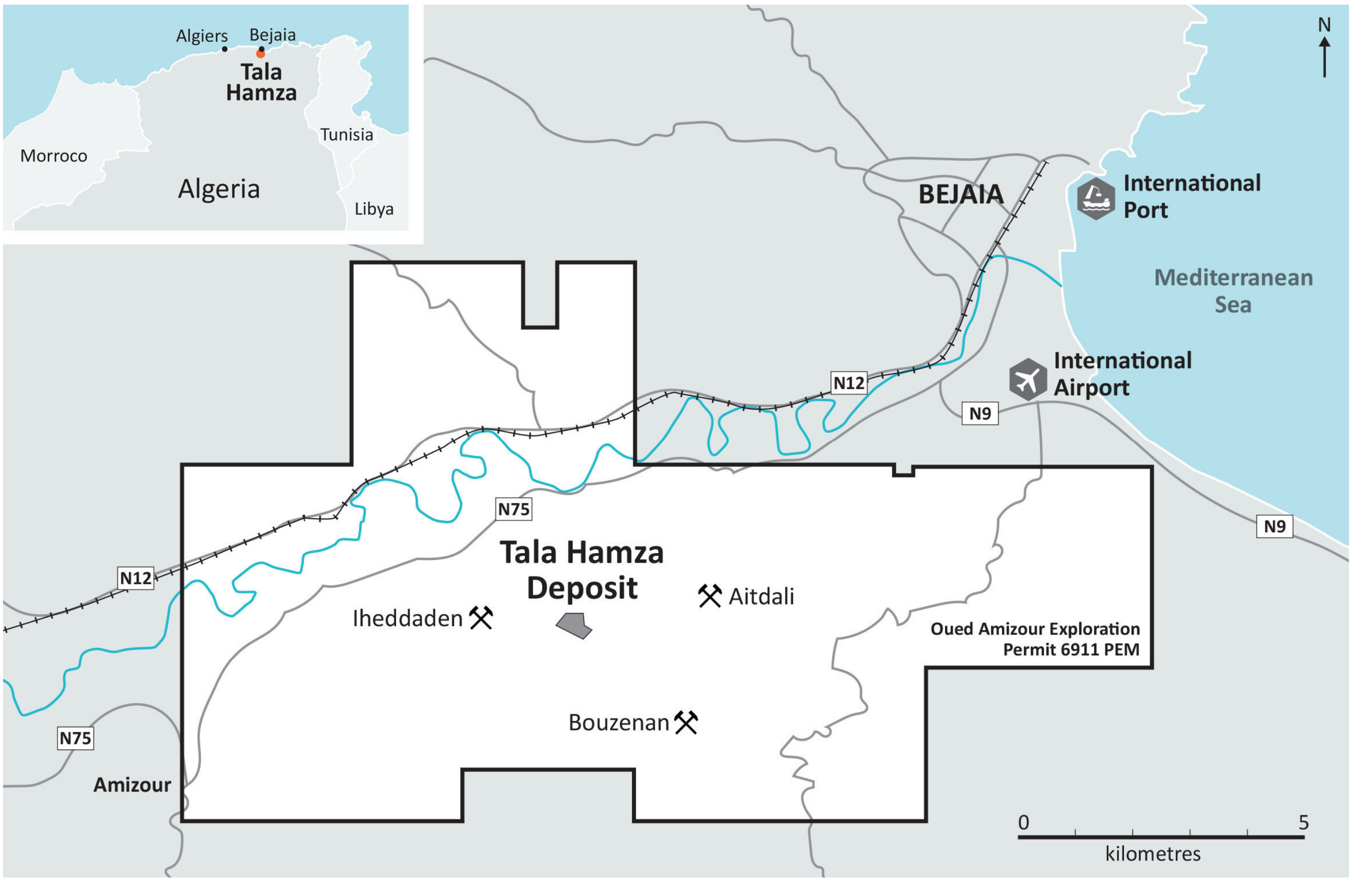
The information in this report that relates to Ore Reserves is based on information compiled or reviewed by Mr Luke Neesham, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Neesham is Principal Mining Engineer for GO Mining Pty Ltd a consulting firm engaged by Terramin Australia Limited to prepare mining designs and schedules for the Tala Hamza Feasibility Study. Mr Neesham has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Neesham consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Some information referred to in the body of this announcement has been extracted from the report titled "Tala Hamza Mineral Resources and Ore Reserves Statement – August 2018" published on the 29th August 2018. This report is available to view at www.terramin.com.au and is attached to this announcement in its entirety as Appendix 1. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Mineral Resources and Ore Reserves Statement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the Mineral Resources and Ore Reserves Statement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Mineral Resources and Ore Reserves Statement.

Project Overview & History

The Tala Hamza deposit is in the Wilaya of Bejaia, located in the north-east of Algeria. The deposit is located on the border of the dairas of Tichy and Amizour and is divided by the municipalities of Tala Hamza and Amizour near the Village of Ait Bouzid (Izghaine). The mine site is situated approximately 15 km south-west from the Mediterranean coast and port of Bejaia and approximately 270 km east of Algiers. Figure 1 indicates the proximity of the Tala Hamza Project to the city of Bejaia and its port facilities.

Figure 1: Exploration Permit No. PE6911 (previously 5225PE)



Tala Hamza was the subject of a previous feasibility study during Terramin's involvement in the project. This 2010 study had higher production rates (4Mtpa) and was reliant on the block cave mining method (see ASX:TZN release: Positive DFS for Tala Hamza Project, dated 12 October 2010). The block cave method would have resulted in a large surface depression and increased water management requirements that were deemed to be not appropriate for the Bejaia area.

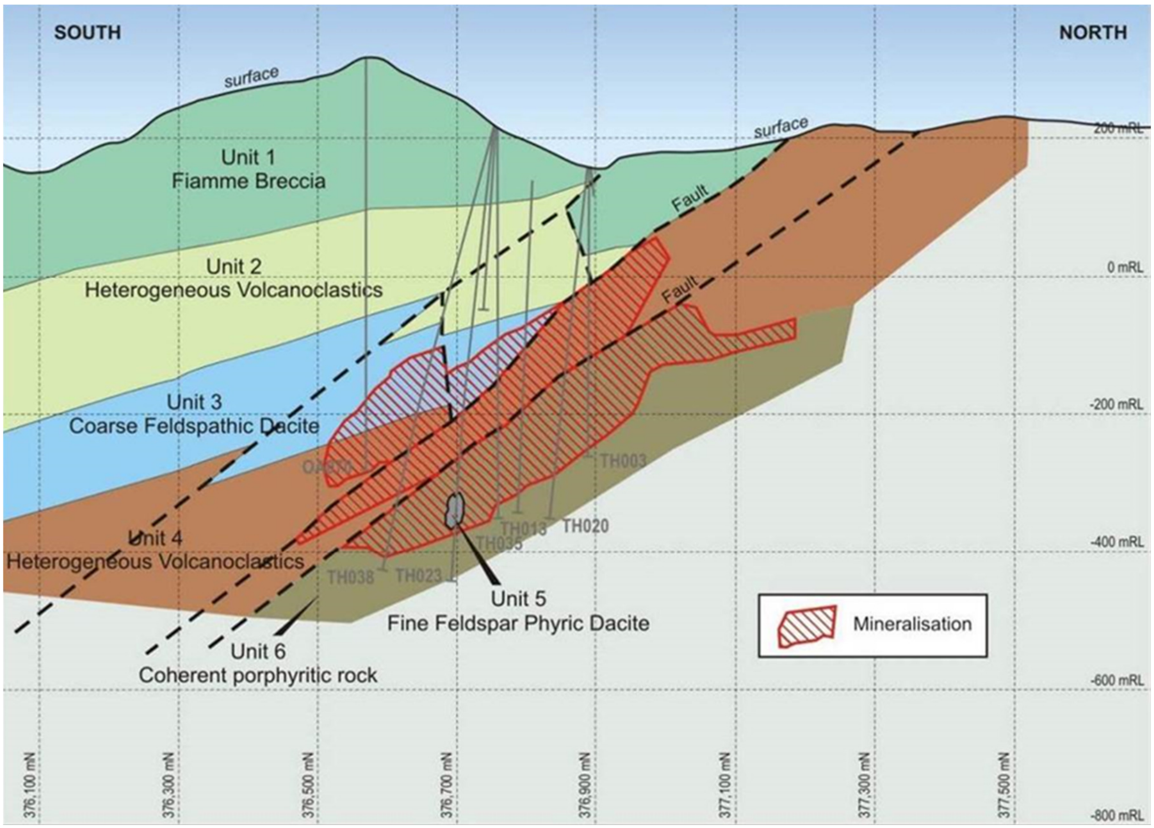
The 2018 DFS was prepared over the period 2014-2018 to address the concerns of the regulator and involved changing the key geological, resource, technical and financial components of the Project to support a decision to mine.

Geology

Mineralisation at Tala Hamza lies within a sequence of highly altered volcanic and volcaniclastic rocks located within a Miocene graben structure. For this reason it has been referred to in past studies as a volcanic hosted massive sulphide (VHMS) deposit. However, it is missing many of the features normally associated with such deposits. Most of the observed features are more akin to an epithermal/hydrothermal replacement style of mineralization.

The mineralisation is approximately 650m across strike, 600m down-dip, typically 150m thick and located between 120-680m below surface. Overall the mineralisation plunges approximately 20 degrees to the south-east. The fault controlled high grade core of the deposit is approximately 450m across strike, 500m down-dip, typically 100m thick, located between 200-680m below surface and plunges 40 degrees to the south-east. A geological cross section of the deposit showing the general domains is shown in Figure 2.

Figure 2: Geological cross section showing approximate geotechnical domains on section 703900E.



In the 1980's, geological and geochemical surveys were carried out by Soviet geologists on behalf ORGM. After several years of detailed exploration, the 'blind' Tala Hamza base metals mineralisation was discovered in 1988. From the discovery up until 1994, ORGM completed 32 drill holes into the Tala Hamza deposit.

Between 2007 and 2010 WMZ completed a further 64 drill holes, including 8 twins of ORGM Resource drill holes. This drilling supports the current global Resource of 53 Mt at 5.3% zinc and 1.3% lead including an Indicated Resource of 44.2 Mt at 5.54% zinc and 1.44% lead (See Appendix 1). The deposit is still open at depth and it is expected that there is excellent potential to extend the resource.

Further near-mine potential is highlighted by the regional drilling that ORGM continued to undertake up until 2000, completing an additional 47 drill holes, identifying several new prospects including Ait Ouyahia (AO002 from 403.1m, 4.2m at 12.9% PbZn) in 1997 and Ait Dali (OA127 from 553.95, 15.05m @ 6.33% PbZn) in 1998.

Study Parameters

The 2018 DFS was based on the following parameters;

- A global Resource of 53 Mt (cut off of 3.0% Zn.eq including an Indicated Resource of 44.2Mt;
- Underground mining with no large-scale surface deformation, using an internationally recognised mining contractor for initial development and owner fleet and workforce once production commenced;
- A 1.32Mtpa (110kt/mth) process flowsheet with a traditional crush, grind, float concentration process and dry stacked tailings;
- Process plant and infrastructure built under an Engineering, Procurement, Construction and Management (EPCM) arrangement with the plant being owner managed; and
- Power supplied from the local grid.

Table 2: Key assumptions used in the 2018 DFS

Parameter Assumptions	Units	Assumption
Zinc Price	$/t	2,756 (US$1.25/lb)
Lead Price	$/t	2,315 (US$1.05/lb)
USD/Dinar		114.94
USD/AUD		1.32
USD/Euro		0.84
Royalty	%	2
Corporate Tax	%	26
Electricity Price	US$/kWhr	0.04
Diesel Price	US$/L	0.18

Mining Method

The mining method proposed for the exploitation of the Tala Hamza zinc deposit is Underhand Drift and Fill. Activities include:

- Development of the mine access and supporting infrastructure;
- Mining of the ore using conventional drill and blast;
- Loading the ore into mining trucks and transporting the ore to surface; and
- Backfilling of extracted production areas.

UDF is a top down mining method where a cemented paste tailings backfill is used in combination with steel reinforcing, providing sufficient fill strength to allow mining to occur directly beside and below the fill. In UDF, the term drift is synonymous for any horizontal or sub-horizontal development tunnels made in a mine, where stoping is the process of extracting ore from an underground mine, leaving behind an open space, a stope. The UDF mining method permits mining in low strength rock types and provides for improved control of work areas. UDF provides the following benefits:

- Engineered roof support and safe mining conditions in weak orebodies;
- Continuous filling system prevents ground relaxation and subsidence on surface;
- Selective mining method allows for separation of ore and waste with minimal dilution;
- Potential for future extraction of lower grade material as metal prices rise; and
- Use of tailings for backfill reduces tailings storage on surface.

Ore Processing and Production

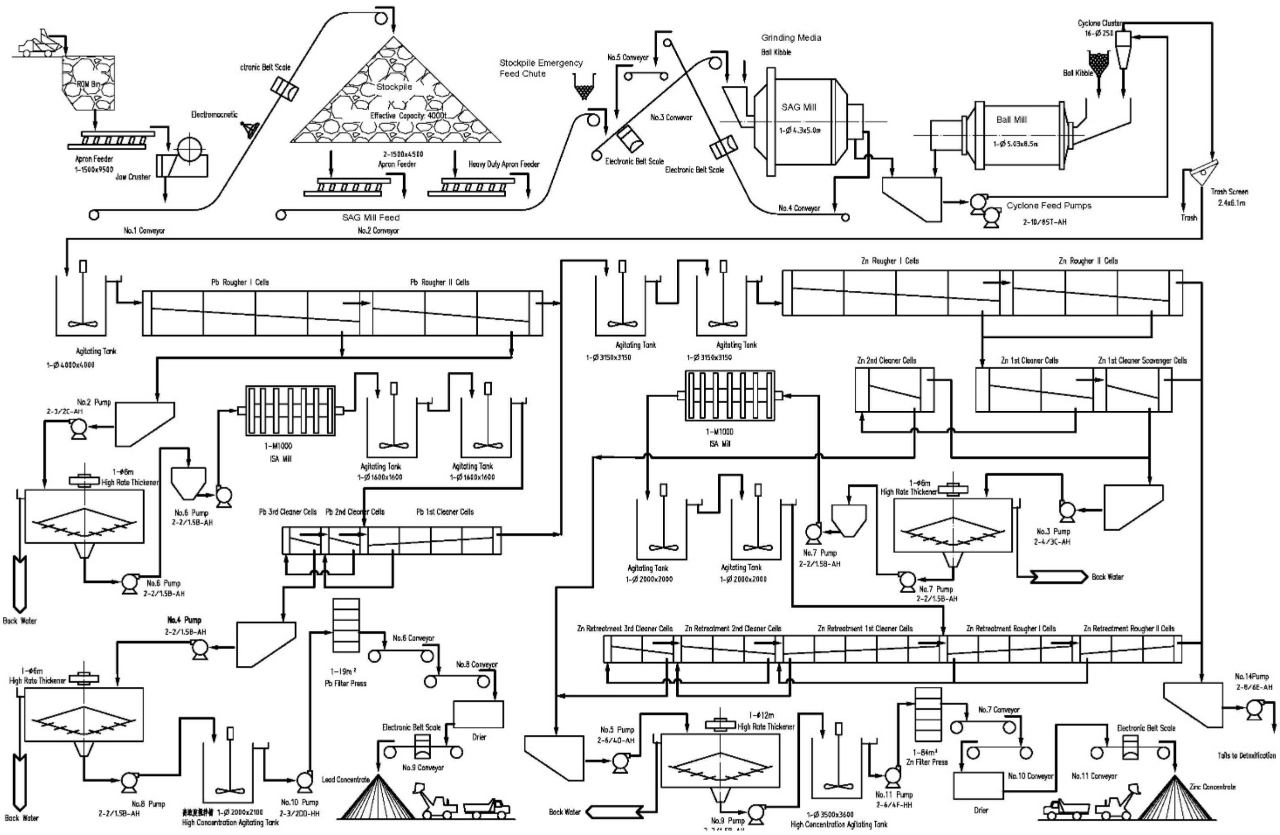
Ore from the Tala Hamza Project can be treated with conventional froth flotation to produce high grade zinc and lead concentrates. The bond ball mill work indices of samples tested ranged from 12.0 kWh/t to 14.4 kWh/t indicating the ore is relatively soft. Ultrafine grinding with Isa Mills, or their equivalent, will be used to improve the concentrate grade.

Table 3: Life of mine recoveries and concentrate grade estimates

Parameter Estimates	%
Zinc recovery	89.6
Lead recovery	73.2
Zinc concentrate grade	53.8
Lead concentrate grade	62.6

The process plant is expected be operated as a continuous process with a throughput capacity designed to meet the planned mine production rate of 4,000 tonnes per day. The plant is configured to produce a saleable average 54% zinc concentrate and 63% lead concentrate with a peak annual total zinc and lead concentrate production of 186,000dmt and a total of 3.26 Mt of concentrate produced over the LoM.

Figure 3: Flow diagram of the Tala Hamza ore processing

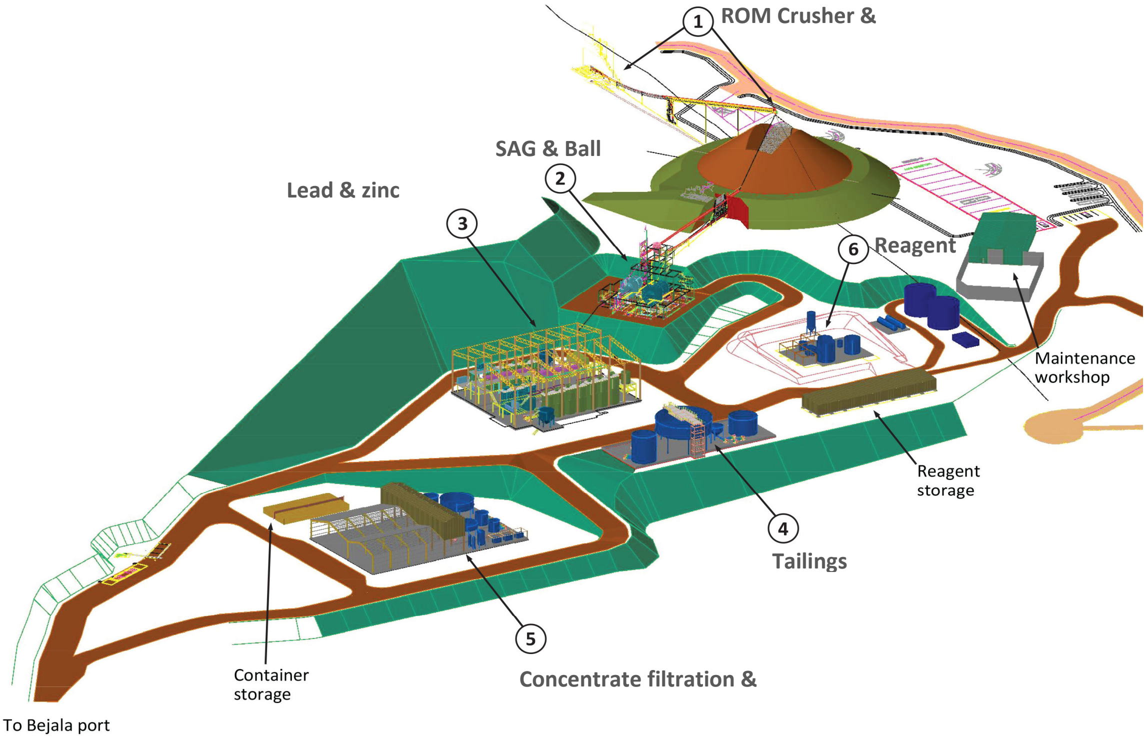


Plant Location

The process plant has been situated in a flat area of land above the main deposit known as ‘Valley B’. The plant starts from the upper valley with ore feed from the Run of Mine (ROM) pad, progressing to the concentrate filtration and storage area down the valley. The plant cascades down the valley using the natural topography of the valley to minimise energy and construction costs.

The project boundary has been adjusted to avoid community cemeteries and uninhabited historic villages, while ensuring there is minimal visibility of the project's operational areas from outside the valley in order to minimise the social impact of the Project. The location of the access corridor has been positioned on uninhabited private low quality unirrigated agricultural land. This minimises the economic and cultural impact of the project on the community and acquisition cost.

Figure 4: Process plant layout



Infrastructure, Transport and Services

Zinc and lead concentrates is expected to be shipped out of the Port of Bejaia to smelters in the Mediterranean and other parts of Europe (possibly also domestic sales) using a 'container-in and bulk-out' 'rotainer' system. Both zinc and lead concentrates are expected be shipped in dry bulk form with transport moisture limits (TML) of less than 10% and greater than 6% to control dust.

Various road upgrades will be undertaken by either the local authorities or by WMZ as part of construction. Road transport from the mine site via public roads provides a lowest cost solution, utilising existing infrastructure and providing opportunities to engage local businesses. The transportation and direct unloading of the concentrates from sealed dust proof shipping containers provides the best environmental controls and transport option.

Discussions with the local port authority are well advanced, including provisional costing and plans for a container storage and handling area adjacent to a suitable berth. Power is expected to be supplied by the Algerian generation company SONELGAZ via a 220kV powerline extension from the nearest switchyard to the mine. Backup generators for critical infrastructure are included in capital allowances. Water requirements will be minimised by the recovery of process water from dry-stacking and paste thickening. Water for construction is assumed to be able to be sourced from a nearby bore, to be drilled prior to commencement, and the longer term water supply is expected be from a series of surface bores dewatering the orebody.

Pre-Production Capital Cost Estimates

Project development costs include infrastructure, fleet and pre-production development of the underground mine, land rental payments, upgrades to existing housing for offices, accommodation, constructing the plant and associated infrastructure, establishing waste and tailings storage, commissioning and trial production of metal concentrate. Sustaining capital includes primarily fixed and mobile plant refurbishment and replacement.

Table 4: Project Capital Estimates – 2020 Dollars

Pre-Production Capital Estimates	Capital (US$ M)
Mining	
Mining Mobile Fleet	16.37
Mining Infrastructure	2.34
Mining Development	78.14
Sub Total Mining	**96.85**
Process Plant and Surface Infrastructure	
Crushing	4.60
Stockpile and Reclaim	3.11
Grinding / Milling	18.14
Flotation / Regrind	42.40
Dewatering and Filtration	29.93
Tailings	27.69
Reagents	8.65
Services	12.52
Plant Infrastructure	34.48
Port Infrastructure	4.79
Sub Total – Process Plant and Surface Infrastructure	**186.30**
Total – Direct Capital	**283.14**
Temporary Facilities	2.66
EPCM	**12.23**
First Fills	2.04
Commissioning and Start-up	1.42
Project Insurances	1.36
Professional Indemnity	0.12
Owners Costs	25.99
Total – Indirect Capital	**45.81**
Contingency	12.41
TOTAL PRE-PRODUCTION CAPITAL	**341.37**
Sustaining Capital	
Mining	144.43
TOTAL SUSTAINING CAPITAL	**144.43**
TOTAL LIFE OF MINE CAPITAL	**485.80**

Operating Cost Estimates

Table 5: Summary of operating cost estimates (2020 dollars)

Area	Annual cost[10] (US$ M)	Cost per t ore mined (US$/t)	Cost per t concentrate (US$/t)
Mining	35.15	30.21	223.70
Processing	22.62	19.44	143.97
Other Production Costs	2.85	2.45	18.15
Other Non-Production Costs	7.46	6.42	47.51
VAT	-	-	-
Customs Duty	0.18	0.15	1.13
Total site operating costs	**68.26**	**58.67**	**434.45**
Royalties	3.59	3.09	22.87
Other Government Charges	1.80	1.54	11.44
Ongoing Rehabilitation	0.18	0.15	1.14
Total cash costs	**73.83**	**63.45**	**469.89**

10. Note operating cost estimates included in this section are based on an average from 2031 to 2043.

Table 6: C1 unit cost estimates (2020 dollars)

Area	Unit Cost (USc/lb payable Zinc)
Mining	29.63
Processing	20.44
Other Site Costs	6.73
VAT and Customs Duties	0.11
Sub Total – Direct Costs	56.91
Zinc Concentrate Freight	2.94
Zinc Treatment Charges	16.71
By-product Credits	(23.88)
Total C1 Cash Costs	**52.68**
Sustaining Capital	5.28
Government Royalties	2.66
Indirect Costs	0.02
Total All-in Sustaining Costs	**60.64**

The C1 cash cost is an industry cost reporting measure whereby all operating-costs, including transport and refining-charges but excluding royalties, rehabilitation and capital-expenditure, are reported on a unit of payable-metal basis, net of any by-product credits. All-in Sustaining Cost (AISC) represents C1 costs plus sustaining capital, indirect costs and royalties.

Key Study Outcomes

Project returns have been calculated using Discounted Cash Flow (DCF) analysis to generate the Internal Rate of Return (IRR) and Net Present Value (NPV) of the total free cash flow from the project as a whole. All results included in this section of the report are based on after tax cash flows for 100% of the project. No financing arrangements, including interest payments have been included in the evaluation.

The base case project returns a post-tax nominal[11] NPV (8%) of A$399m (US$303m) and IRR 14%.

The project's total earnings before interest, tax, depreciation and amortisation is US$1,909 Billion.

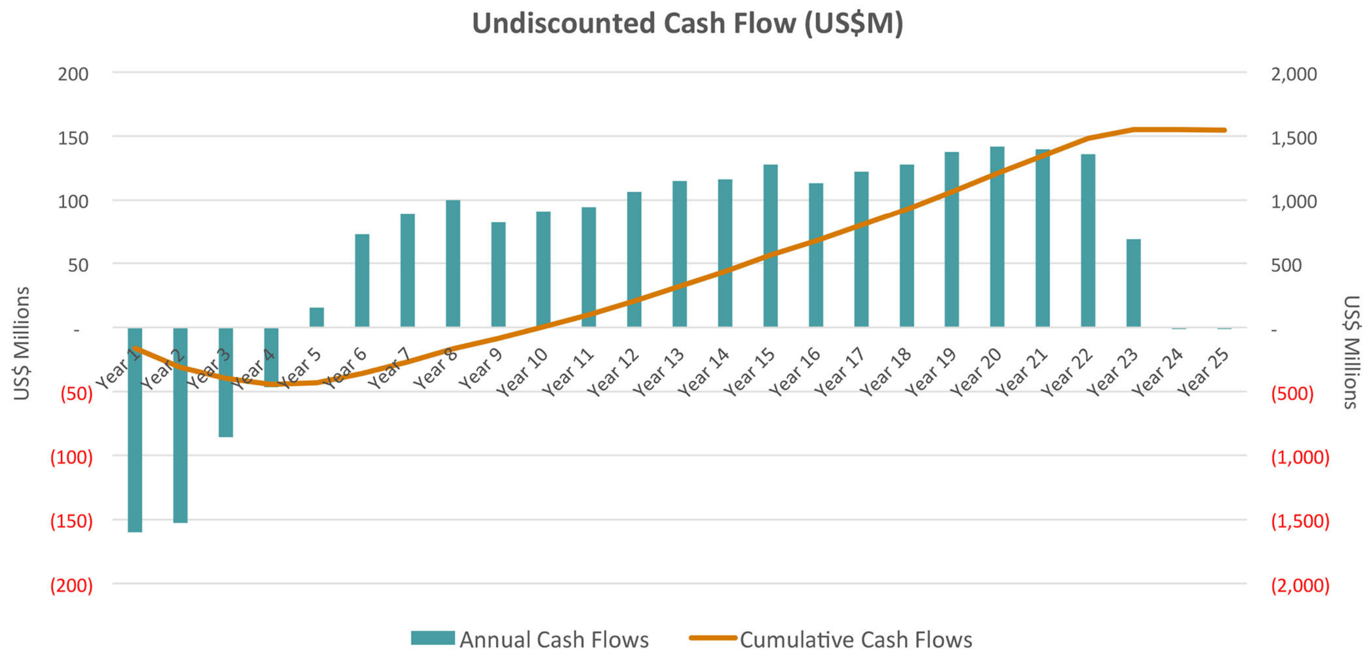
Revenues are derived from the June 2018 Wood Mackenzie metal price forecast and long term commodity prices of US$1.25/lb (US$2,756/t) and US$1.05/lb (US$2,315/t) for zinc and lead respectively. The referenced pricing is an average over the relevant period and actual pricing varies in accordance with market fundamentals over the 21 year mine life.

Table 7: Summary of project financial and physical estimates

Project financials and physical estimates	Unit	
Total Revenue (net of TC / RCs)	US$M	3,642
Total Earnings before interest, tax, depreciation and amortisation	US$M	1,909
NPV (8%) Pre-Tax nominal[11]	US$M	476
IRR (Pre-Tax nominal)	%	16
NPV (8%) Post-Tax nominal[11]	US$ M	303
IRR (Post tax nominal)	%	14
Payback (from 1st concentrate)	Years[12]	7
LOM Material Mined	Mt	25.9
LOM Zinc Grade	% Zinc	6.30
LOM Lead Grade	% Lead	1.80
Zinc Metal Produced (in concentrate)	Mt	1.46
Lead Metal Produced (in concentrate)	Mt	0.34
Pre-Production Capital	US$M	341.4
Life of Mine Capital	US$M	485.8
Life of Mine Operating Cost (excl. royalty and lead by-products)	US$/t Ore	62.7
Operating Margin	%	52.4
C1 Unit Cost (after Lead by-products) [7]	USc/lb Zn	52.7
AISC (after Lead by-products) [8]	USc/lb Zn	60.8
Life of project (from 1st ore)	Years	21
Annual Milling Rate	tonnes/year	1.32 M

11. Where nominal values are noted, costs and revenues are in 2020 dollars escalated at 2% CPI
12. Note: The payback is the time period to return to positive cumulative undiscounted cash flows from the period of first concentrate production, rounded to the nearest year.

Figure 5: Annual undiscounted cash flows



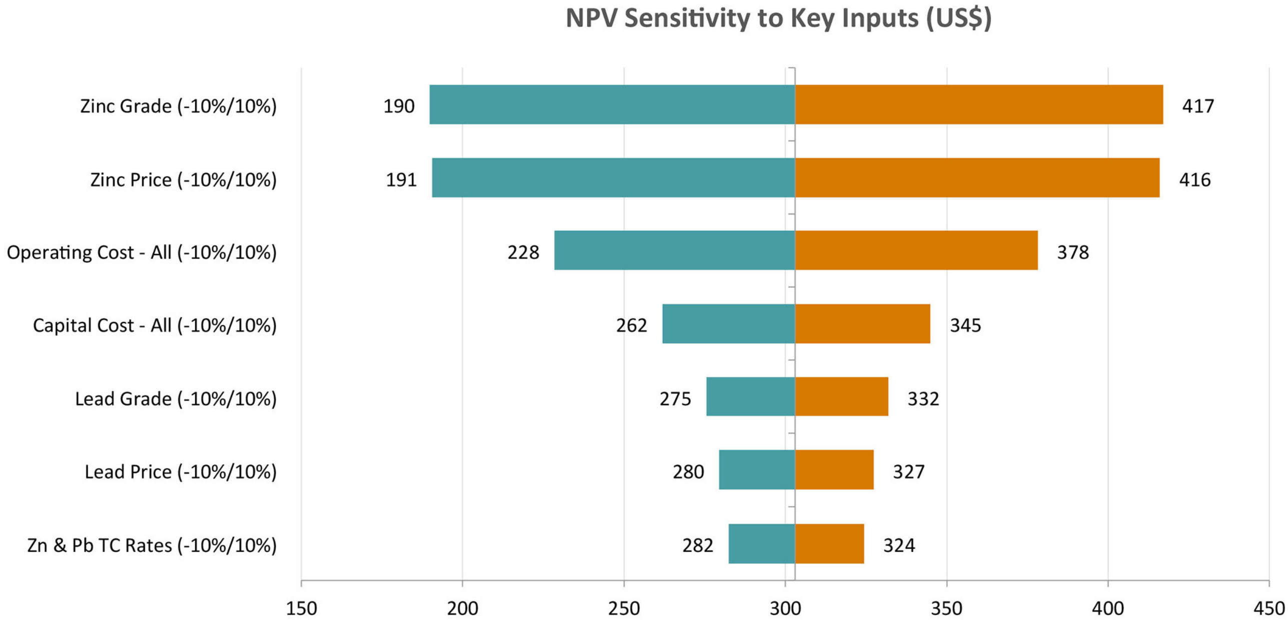
Accuracy of Estimates

The Tala Hamza DFS 2018 has been developed to a price and design guideline of +/-15% in compliance with requirements for the delivery of a DFS in Algeria.

Sensitivity Analysis

Sensitivity analysis was completed on a number of variables to identify key areas of potential financial variance. Changes in price, grade, capital and operational costs were identified as potential areas of sensitivity, both positive and negative.

Figure 5: Sensitivity Analysis



Note: Sensitivity is based from the post-tax nominal NPV (8%) of US$303m (A$399m) used in this Announcement.

Funding Options

To achieve the production-targets and forecast financial-information contained in the DFS, Terramin will require a suitable funding solution. Terramin's financing-solution will require discussions with its joint-venture partners and Algerian authorities. The financing-solution will include, but not be limited to, the following factors:

- Securing a fully funded solution for the Tala Hamza Project;
- Minimising potential dilution for Terramin shareholders;
- Managing preferences for joint-venture partners and the Algerian government; and
- Capitalising on prevailing positive trends in the zinc and lead market.

The company is evaluating its financing strategy with the objective of minimising dilution for existing shareholders and for managing the priorities of the joint-venture. Terramin expects that, due to prevailing economic-conditions, the technical work undertaken to date and the results of the DFS 2018, it should be in a position to secure funding on reasonable terms. Terramin has had discussions with state-owned Algerian banks with significant appetite for funding projects of 'national significance' as defined under Algerian regulation.

Economic Impacts and Sustainability

Tala Hamza will be the largest base metal mining operation in Algeria. Under full production, the study estimates WMZ will employ 600 people, over 550 will be Algerian. Terramin will purchase as much as it can locally and will make a significant contribution to the local economy, particularly utilising services companies and those local entities involved in earthworks and construction. Typical mining projects have a multiplier effect from direct economic contribution and Terramin aims to source as much as possible from within Algeria to contribute to the economic development of the country.

Terramin has significant experience owning and operating zinc and lead facilities gained through operating the Angas zinc and lead mine in Australia. Terramin's values highlight safety and environmental performance as integral to its operating model. Terramin's safety and environment systems align with best practice from the Minerals Council of Australia (MCA) (Enduring Value) and the International Council on Mining and Metals (ICMM) Principles.

At Tala Hamza, The Environmental and Social (E&S) Department aims to ensure the company complies with its environmental and social obligations and work to ensure that no breaches of regulatory requirements occur. WMZ's aim is to ensure all activities have no mitigatable detrimental effect on the community.

Project Approvals

The DFS and EIS have been submitted to Terramin's Algerian joint-venture partners. The joint-venture partners have completed their due diligence process, including engaging independent international consultants to review the DFS and financial assumptions. WMZ will commence engaging with the Algerian government on potential avenues for investment and financing support once the WMZ Board endorses the approach. Upon successful completion of the remaining reviews and consultation, the WMZ Board will make a decision to mine and will submit the Mining Lease Application (MLA) formally to the government. DFS 2018 assumes approvals are received in 2018 and a two year pre-production capital work program. Until the MLA is approved, there can be no assurance that the project will be endorsed by the Algerian government.

Project Execution

Project development will be managed by the owner's team and a detailed implementation plan has been developed as part of the DFS 2018. The activation plan ensures that from commencement a WMZ Project Implementation Unit will be established and in position to roll out Terramin's policies and procedures to the project, progress early works implementation and oversee management of the EPCM contractor. The contract and tendering process is predicated on approval from the Algerian authorities being received in 2018 and early commencement of the EPCM process.

Project Ownership and State Equity

WMZ is the management vehicle for the Oued Amizour Joint Venture signed in February 2006 (Joint Venture) in which shares are held by Terramin Australia Ltd (65%), Entreprise Nationale Des Produits Miniers Non Ferreux et des Substances Utiles (ENOF) (32.5%) and Office National la Recherche Géologique et Minière (ORGM) (2.5%).

The Government of Algeria has indicated that it intends to fund its full 35% share of the project. Discussions of debt and equity financing for the project will commence once a formal decision to mine is taken by the WMZ Board and the MLA is submitted to government.

Next Steps

The following activities are envisaged as the next steps in project development:

- Formal submission of the DFS to the Government of Algeria
- Wilaya (local administration) approvals
- Land access and acquisition of sites designated to host infrastructure
- Optimisation and FEED (Front End Engineering and Design) works
- Early works road access and administration establishment
- Owners team to be established
- EPCM tender process
- Financing discussions with Algerian banks

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Appendix 1: Mineral Resources and Ore Reserves Statement

TALA HAMZA MINERAL RESOURCES & ORE RESERVES STATEMENT – AUGUST 2018

Table 1: Tala Hamza Zinc-Lead Project: Mineral Resources Estimate

Category	Mt	Zn (%)	Pb (%)	Zn Mt	Pb Mt
Indicated Resource	44.2	5.54	1.44	2.44	0.64
Inferred Resource	8.9	4.0	0.7	0.35	0.06
Total Resource	**53.0**[13]	**5.3**	**1.3**	**2.8**	**0.7**

13. Numbers, totals and calculations included in this statement may be subject to rounding errors as a result of reporting to levels of precision appropriate to the category of Mineral Resources or Ore Reserves.

Notes: Mineral Resources are reported at a 3.0% Zn.eq cut-off
Mineral Resources are reported inclusive of and not additional to Ore Reserves

Table 2: Tala Hamza Zinc-Lead Project: Ore Reserves Estimate

Category	Mt	Zn (%)	Pb (%)	Zn Mt	Pb Mt
Proved	-	-	-	-	-
Probable	25.9	6.3	1.8	1.6	0.5
Total	**25.9**	**6.3**	**1.8**	**1.6**	**0.5**

Notes: Ore Reserves in Table 2 are for 100% of the project (Terramin share 65%)
Ore Reserves are reported at a 4.5% Zn+Pb cut-off (approx. 4.4% Zn.eq)

Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Eric Whittaker, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Whittaker is employed as the Principal Resource Geologist of 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 being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of 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 it appears.

The information in this report that relates to Ore Reserves is based on information compiled or reviewed by Mr Luke Neesham, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Neesham is Principal Mining Engineer for GO Mining Pty Ltd, a consulting firm engaged by Terramin Australia Limited to prepare mining designs and schedules for the Tala Hamza Feasibility Study. Mr Neesham has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Neesham consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Aspects of the information used as inputs to or generated as part of the Feasibility Study associated with the Mineral Resources and Ore Reserves Estimates rely upon information prepared by parties other than the Competent Persons and outside of their areas of expertise. The associated documentation has been reviewed and utilised by the Competent Persons in compiling the Mineral Resources and Ore Reserves Estimate and Table 1 commentary.

Geology

A revised estimate of the Mineral Resources at the Tala Hamza deposit in Algeria, based on available data as at 1 January 2018, has been prepared by the staff of Terramin Australia Limited. The estimate was prepared and is reported in accordance with the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves, December 2012 (JORC Code 2012) and also conforms to Algerian Executive Decree 05-252 of 19 July 2005.

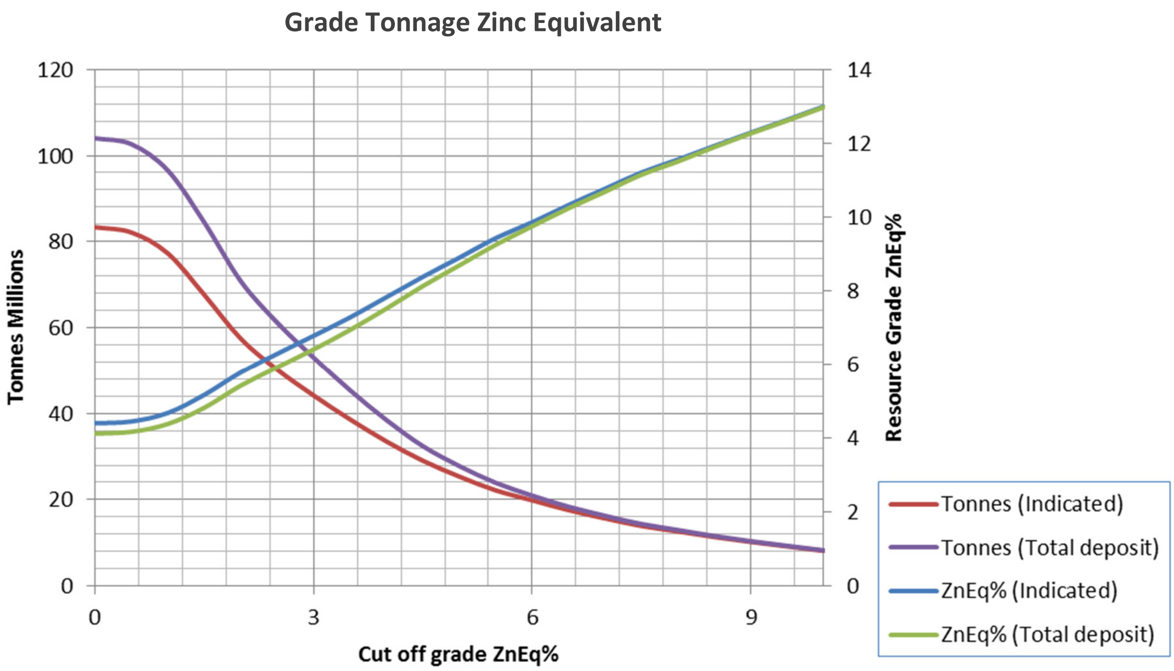
The global 2018 Resource Estimate for Tala Hamza deposit, at a 3% zinc equivalent (Zn.eq) cut-off is 53 Mt @ 5.3% zinc (Zn) and 1.3% lead (Pb). A summary of the results and comparison with the previous estimate is presented in Table 3. The grade tonnage curves for the Indicated portion and for the Total Resource are shown in Figure 1

Table 3: Comparison between the 2018 and 2009 Mineral Resource Estimates for Tala Hamza

Resource Classification	2018			2009		
	Tonnes (Mt)	Zn (%)	Pb (%)	Tonnes (Mt)	Zn (%)	Pb (%)
Measured	-	-	-	30.6	5.74	1.59
Indicated	44.2	5.54	1.44	20.5	3.57	0.79
Measured (2009) + Indicated	44.2	5.54	1.44	51.1	4.87	1.27
Inferred	8.9	4	0.7	17.5	3.7	0.6
Total Resource	**53.0**	**5.3**	**1.3**	**68.6**	**4.6**	**1.1**

Note: The January 2018 estimate is at a 3.0% Zn.eq cut off within the 1% lead + zinc outline. The November 2009 estimate is at a nominal 2.5% Zn.eq cut-off for the Measured and Indicated Resources with internal waste included. Inferred Resource is at a 2.5% zinc equivalent cut-off within the 1% lead + zinc outline. Resource is inclusive of Reserves.

Figure 1: Tala Hamza grade tonnage curves for Indicated and global Resource at different Zn.eq cut-offs.



The 2018 Resource Estimation is supported by a diamond drilling database comprising 93 drill holes, made up of 29 historic drill holes (pre 2005) drilled by the Algerian Government (ORGM) and 64 new holes (2006 - 2010) drilled by Western Mediterranean Zinc Spa (WMZ).

The geological model and estimation methods adopted were similar to those utilised for the 2009 Resource Estimation (reported to the ASX 3 December 2009). The 2018 Resource Estimate contains very similar metal overall to the November 2009 Resource Estimate used for Terramin's 2010 DFS. As per the 2009 Resource Estimate, the 2018 Resource Estimate has been completed in-house by Terramin using Ordinary Kriging (OK) on 20x20x10m parent blocks with sub-blocking to 5x5x5m. Grade-tonnage information was calculated by summation of blocks in the block model meeting specified criteria. The bulk of the Inferred Resource and all of the Indicated Resource are contained in two domains; Lower and Middle, shown in Figure 2 and Figure 3.

Figure 2: Views of the Tala Hamza mineralised domains

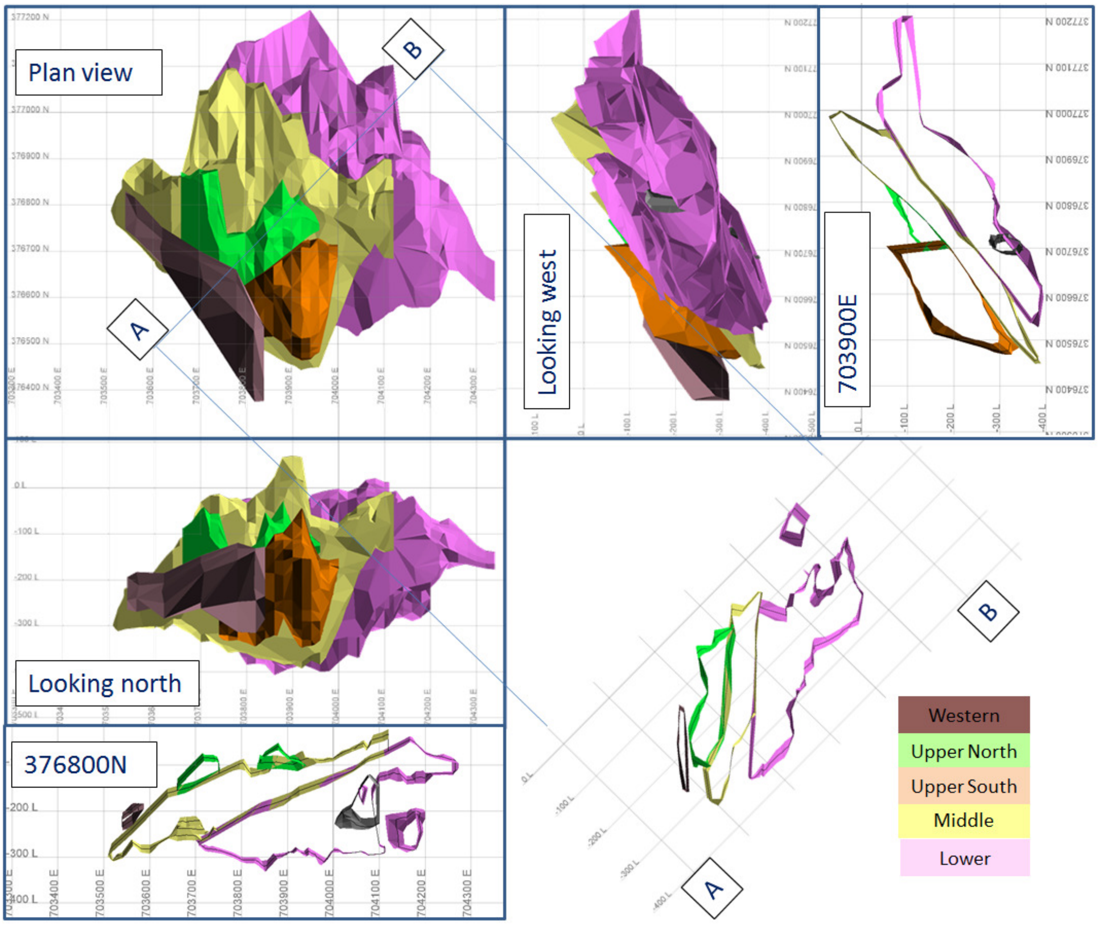
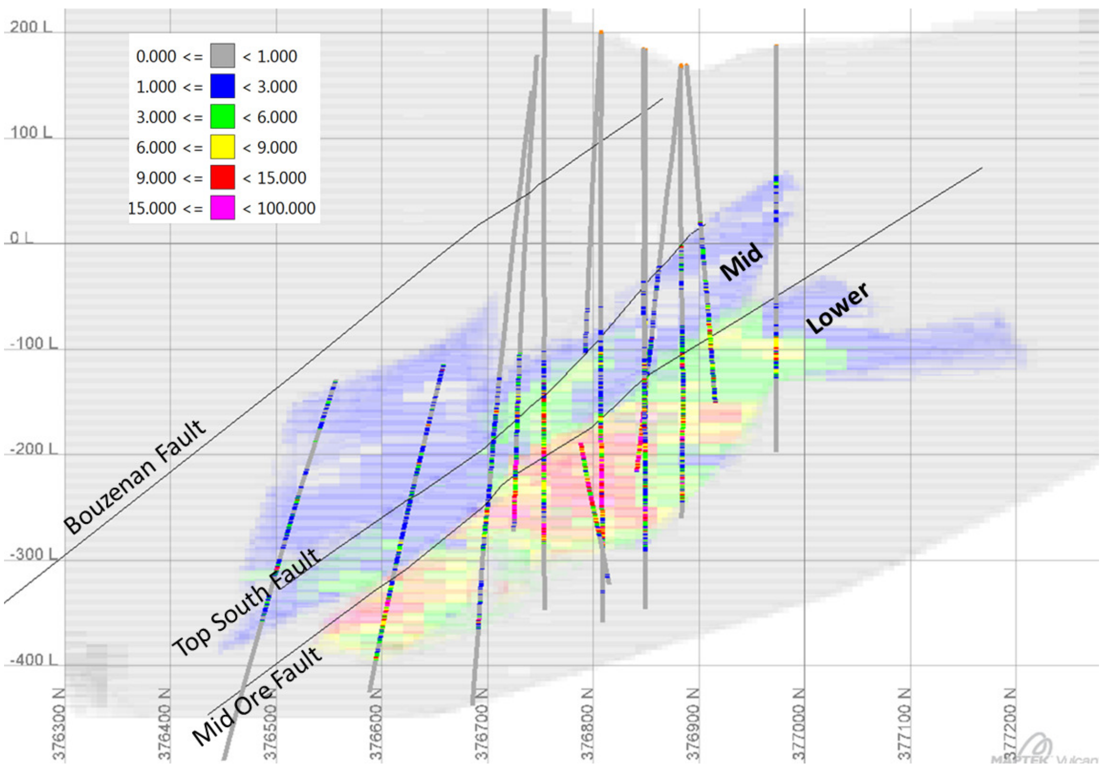


Figure 3: Comparison block model to drill hole Pb + Zn, 703900E



There are only small differences between the 2009 and 2018 defined mineralisation shells and estimation parameters. Only minor changes result from the inclusion of data from six new drill holes (TH064-TH068 and TH069C), five of which had been drilled and logged at the time of the 2009 Resource Estimate and were only awaiting assay results at the time.

The most significant changes to the Tala Hamza Resource result from the proposed change in the mining method from a bulk mining method 'block caving' to a more selective mining method 'Underhand Drift and Fill'. The proposed change in mining method necessitated a redefinition of how the 2018 Resource Estimate was classified to better reflect the significant reduction in the selective mining unit (SMU). The 2009 Resource Estimate was classified Measured where the drill spacing was better than 50 m and classified Indicated where drill spacing was between 50 and 75 m. For the 2018 Resource Estimate the highest resource classification of Indicated was assigned where the drill hole spacing is better than 75m.

In addition to the removal of the Measured classification, other significant changes include:

- The proposed 2009 mining method of block caving limited the ability to exclude internal dilution. The 2009 Indicated + Measured Resource classification included approximately 8Mt @ 1.9% Zn + Pb of internal dilution. The proposed mining method of 'Underhand Drift and Fill' allows for the exclusion of internal dilution;
- Removal of +2.5% Zn.eq 'bulk and carry', a requirement for the block cave Indicated classification; and
- Increase in the cut-off from 2.5% Zn.eq to 3% Zn.eq to reflect the change from a bulk mining method to a selective mining method.

The Zn.eq is based on the ratio of forecast zinc and lead prices; payables of 95% for lead and 85% for zinc; and metal recoveries of 62% for lead and 88% for zinc based on the 2010 'Definitive Feasibility Study' (reported to the ASX 12 October 2010). The 2018 zinc equivalent formula is; Zn.eq = Zn% + 0.856 Pb%.

Mining

Tala Hamza has been the subject of several pre-feasibility and feasibility level studies. These include a Scoping Study in 2007, Pre-feasibility Study in 2009 and Feasibility Study in 2010, all undertaken by or on behalf of Terramin.

Previous studies used extraction methods such as sub-level open stoping, sub-level caving and block caving however regulatory restrictions require a method that will not result in surface subsidence or long term environmental impact.

Following mining method studies in 2014-2015 by the China Non-Ferrous Metal Mining (Group) Co. Ltd (NFC) and China Non-ferrous Metal Industry's Foreign Engineering and Construction Co. Ltd (ENFI), an updated Feasibility Study was prepared by Terramin over the period 2017-2018 with the primary difference being a change in mining method from Block Caving to Underhand Drift and Fill.

The mineable ore zone at Tala Hamza extends from around 0mRL to minus 365mRL. The flat plunge and variable nature of the orebody is such that mining shapes vary significantly with depth. Ore zone strength is relatively weak, varying from less than 5MPa to an average of 25-30MPa.

The 2018 Feasibility Study was based on the following parameters:

- Conventional decline access, jumbo drill and blast, truck and loader haulage;
- Production cycles working under reinforced paste backfill as the sequence progresses downwards; and
- A 1.32Mtpa process plant with conventional crush, grind, float concentration and dry-stacked tailings.

Extraction is planned to be via 4 lifts ('panels'). Each panel is made up of a series of 5m high slices ('flitches') which vary from 30m x 50m to 500m x 300m in surface area. The flitches are in turn divided into up to 5 'districts'. Each district will be mined by jumbo in blocks of 3-6,000t stopes, sometimes referred to at other operations as 'cells'. This will be done by developing 5m wide ore drives up to 50m long and, depending upon the local rock quality, stripping up to 10m wide. Each cell will be filled with steel-reinforced cemented paste-fill before mining the production block alongside.

Flitches are expected to be mined in a downwards or 'underhand' progression to allow working under an engineered roof.

Figure 4: Simplified development layout: plan view

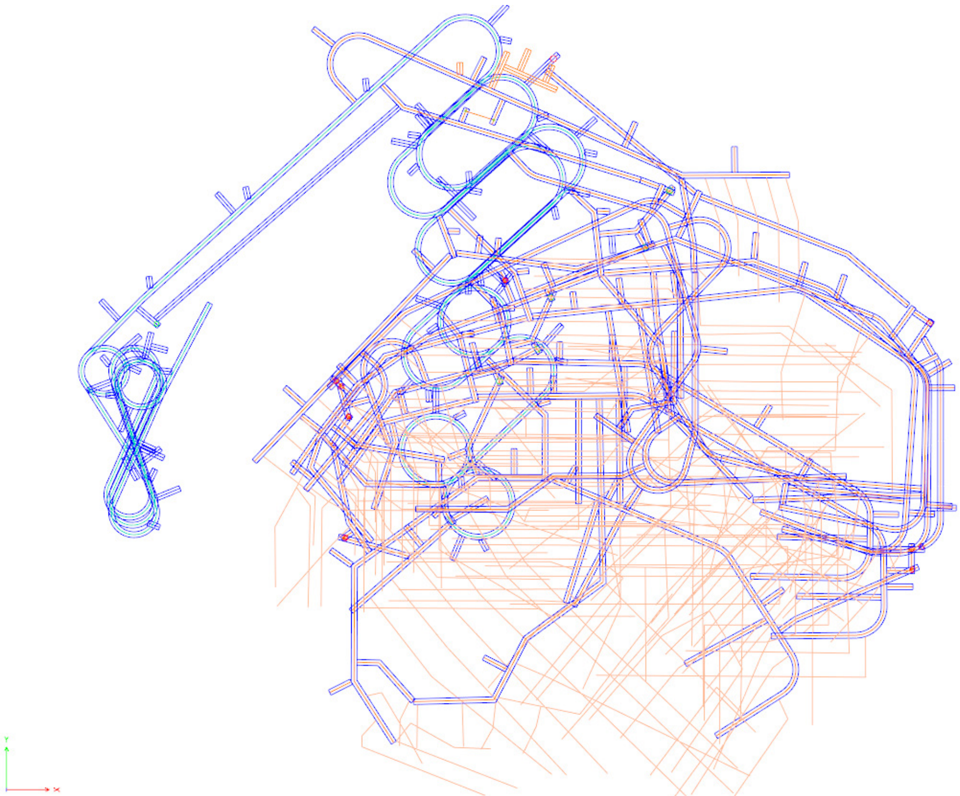


Figure 5: Development layout, looking down and south-east with 4.5% Pb+Zn grade shell

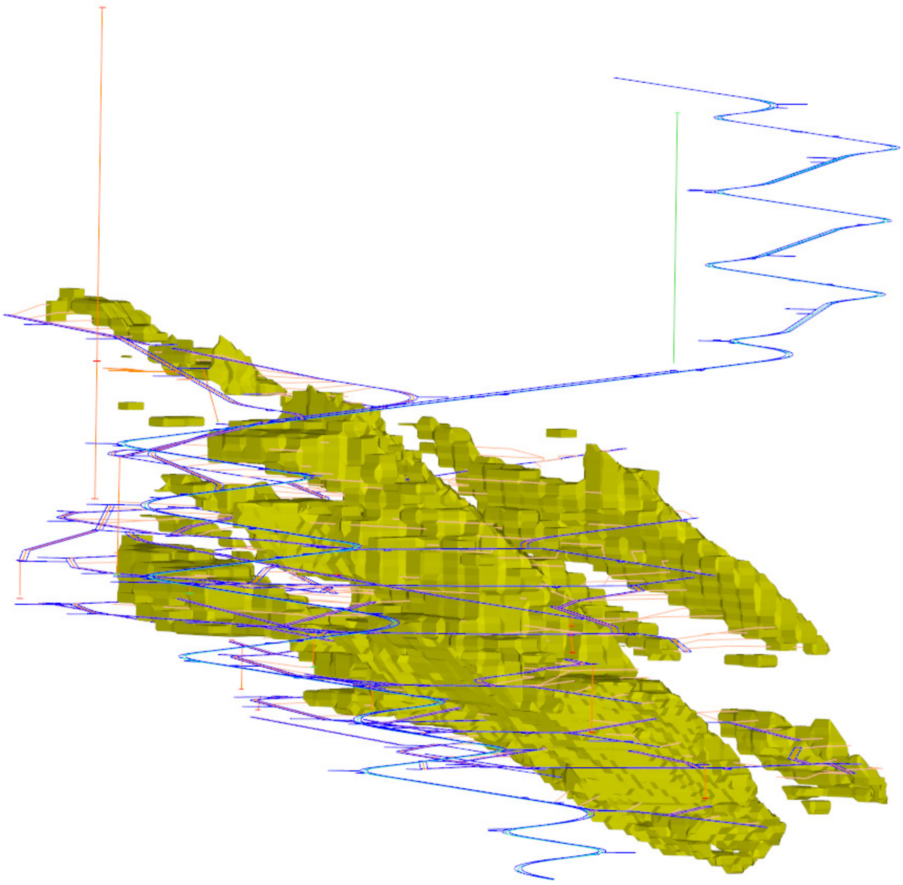


Figure 6: Upper mining flitches

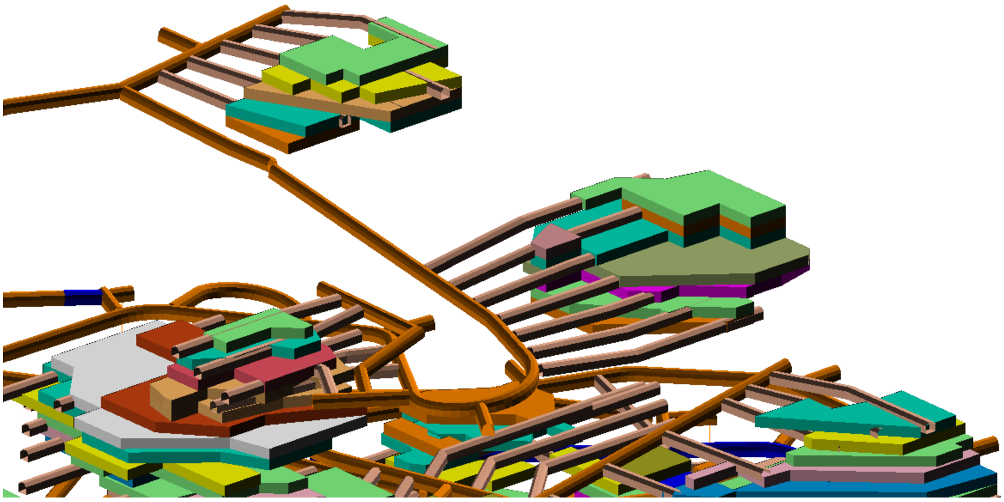


Figure 7: Panels A, B & C showing non-mineable pillar between panels: looking south-west.

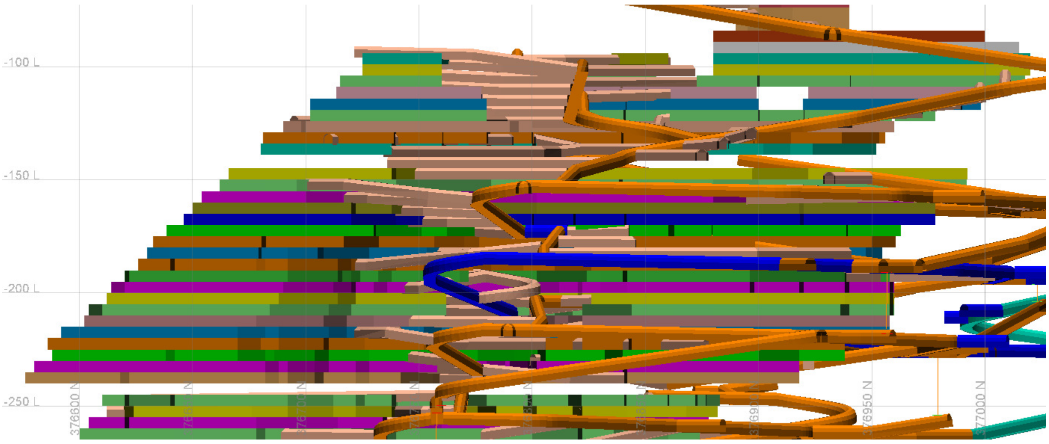


Figure 8: Typical level development showing multiple districts and flitches: looking down, south and west.

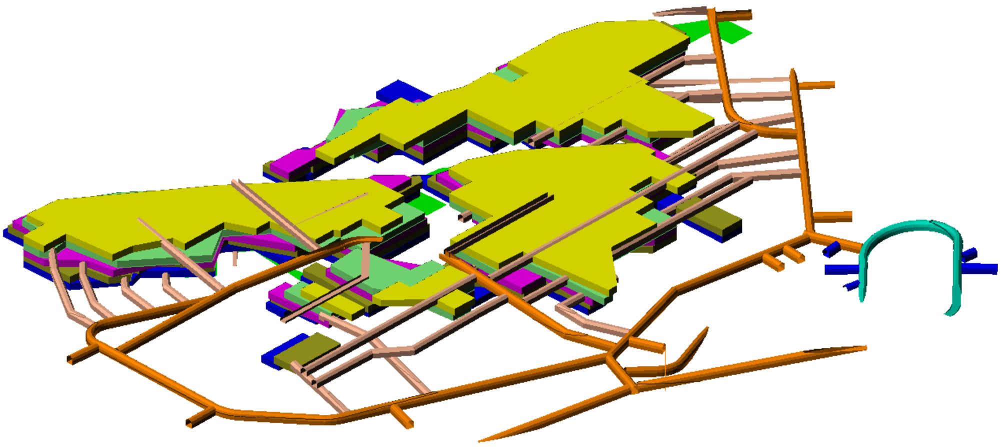


Figure 9: Typical flitch extraction concept.

Material Information relating to Ore Reserves

Table 4: Global inputs

Parameter	Units	Assumption
Zinc Price	US$/t	2,756 (US$1.25/lb)
Lead Price	US$/t	2,315 (US$1.05/lb)
USD/Dinar		114.94
USD/AUD		1.32
USD/Euro		0.84
Royalty	%	2
Corporate Tax	%	26
Electricity Price	US$/kWhr	0.04
Diesel Price	US$/L	0.18

Table 5: Cut-off grade parameters

Parameter	Input
Zinc price	US$1.25/lb
Concentrator Zn recovery	89.6%
Zn Concentrate grade	53.8%
Smelter payable Zn	85%, min 8% deduction
Zinc TC/RC	6.1% of price
Total Operating Cost	US$59.33/t mined
Op Cut off grade	3.7% Zn.eq
Capital Unit Cost	US$18.77/t mined
Cut off grade (inc Cap)	4.8% Zn.eq
Project Analysis Cut-off grade	4.5% Pb+Zn

The results in Table 5 are post-Study outputs. Preliminary first-principles models indicated that an operating cut-off grade around 3.0% Pb+Zn could be appropriate however this was regarded as likely to be too low once the Study had been completed. For the purposes of the Study, the cut-off grade was set at 4.5% Pb+Zn. Future optimisations are expected to include examining the effect of a lower cut-off on the project economics.

Table 6: Mining inputs, design outputs and modifying factors

Parameter	Design Parameter
Portal location	Valley B
Haulage Decline length	4.11 km plus 2.12km off-decline truck ramps
Haulage Decline grade	1 in 7
Haulage Decline dimensions (h x w)	5.5mW x 5.7mH fully-arched, when shotcreted, with 0.3m concrete floor
Total Lateral Development (not including ore driving)	33.11km
Total Vertical Development	870m
Waste development gradients	±1 in 50 to ±1 in 7
Truck haulage drives dimension (w x h)	5.5 m x 5.7 m, fully-arched
Stockpiles, ventilation drives, sub-stations, pump stations, refuge chamber cuddies, drill platforms	5.0m x 5.5mH, fully-arched, except stockpiles which will be square profile and sumps which will be 4.0mW x 4.0mH
Flitch Access drives, branch drives	5.0mW x 4.0-6.0mH, square profile
Truck loading, secondary fan stripping & truck tipping areas.	7.0mH
Ore drives grade	1 in 100 to 1 in 200
Ore drives dimension (h x w)	5.0mW x 4.0-6.0mH, square profile
Nominal Level Interval	30m
Nominal Panel height	65-145m
Total number of panels	4
Total waste trucking	2.65Mt
Total ore trucking	25.9Mt
Total paste backfilling	15.1Mt
Undesigned dilution factor	5% at zero grade
Mining recovery factor	93%

Table 7: Comparison between 2018 and 2010 Ore Reserves Estimates

Category	Mt	Zn (%)	Pb (%)	Zn (Mt)	Pb (Mt)
2010					
Proved	-	-	-	-	-
Probable	38.1	4.8	1.4	1.9	0.5
Total	**38.1**	**4.8**	**1.4**	**1.9**	**0.5**
2018					
Proved					
Probable	**25.9**	**6.3**	**1.8**	**1.6**	**0.5**
Total	**25.9**	**6.3**	**1.8**	**1.6**	**0.5**
Difference					
Proved	-	-	-	-	-
Probable	-12.2	1.5	0.4	-0.2	-0.1
Total	**-12.2**	**1.5**	**0.4**	**-0.2**	**-0.1**
As percentage					
Proved	-	-	-	-	-
Probable	-32%	32%	32%	-10%	-10%
Total [14]	**-32%**	**32%**	**32%**	**-10%**	**-10%**

14. Numbers, totals and calculations may be subject to rounding.

The 2010 Ore Reserve was net of allowances for waste material able to be separated at the draw-point (6.9Mt), low grade dilution (5.9Mt) and Inferred dilution (1.8Mt).

When compared to the 2010 Ore Reserves, the 2018 Ore Reserves estimate has a 32% reduced tonnage and 32% increased grade, which results in a net 10% reduction in contained metal. The main source of this difference is the change from a Block Caving method to Underhand Drift and Fill. There is also some contribution from adjustments to the Mineral Resource.

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	• Only diamond drilling has been utilised for the Tala Hamza Resource estimation. • Sampling of mineralised zones was predominantly half diamond drill core with a nominal 1m sample length.
Drilling techniques	• All ORGM and WMZ holes were diamond drilled for the entire hole. • A total of 32 HQ sized diamond drill holes were drilled by ORGM into the Resource between 1988 and 1994. A further 64 diamond drill holes have been drilled by WMZ into the Resource between 2006 and 2010. All WMZ holes were commenced with HQ but where ground conditions required, or where daughter holes were taken off of parent holes, NQ was used to complete the drill holes. In total NQ was used to complete 15 holes and makes up 14% of sampled intervals.
Drill sample recovery	• Due to poor recovery from some ORGM holes, 8 holes have been twinned and replaced by WMZ holes, while from the remaining 24 ORGM holes used in the resource calculation only 10 of these fall within the Indicated portion of the Resource. • Diamond drill core recovery from the WMZ drilling programs has been excellent, with an average of 97.1% core recovery within the orebody. The remaining historical ORGM holes have an average weighted core recovery of 83.3%.
Logging	• Geological logging has been undertaken by seven WMZ and ORGM geologists and two Terramin geologists. • Training was provided by Terramin geologists familiar with volcanic terrains and Professor Jocelyn McPhie from CODES (University of Tasmania) provided advice on classification and nomenclature of the volcanic rocks. Core was originally logged using paper logs and transcribing these logs into the database. Direct logging using hand held computers was later implemented, followed by laptops. All systems use the same standard codes, however these have been adapted to reflect increasing understanding over time. • Detailed logging routinely consisted of lithology, alteration, mineralisation, veining, structure, and geotechnical data. • All drill holes were logged in full. • All WMZ drill core was photographed using a digital camera. Photographs were initially transferred to the on-site directory and are backed up on compact disc. Advancements now see a Terramin server replicate a dedicated folder location on a WMZ server.
Sub-sampling techniques and sample preparation	• Mineralised intervals are identified by the site geologist who marks up the core sample intervals. Core sampling extends 20 metres above and below the main mineralised interval. Sample length interval is nominally at 1 metre but varies based on lithology and mineralisation styles. The core is cut on site by WMZ personnel using a diamond bladed core saw with individual intervals placed into numbered calico bags with all sample intervals and sample numbers recorded on a standard sample interval sheet. • Half-core samples were initially sent to commercial laboratories for sample preparation prior to assaying. To minimize shipping costs from July 2008 half-core samples were crushed and split by WMZ prior to shipping. The crushing procedures and equipment were chosen to replicate those used by OMAC Laboratories (OMAC). The sampled half core intervals are crushed to 90% passing 2mm using a JC2500 jaw crusher. Using a riffle splitter (450 x 200 x 25mm) a 250g sample split is taken from the crushed sample interval and placed into a numbered plastic bag that is then sealed for shipment to OMAC. • Quality control procedures during WMZ sampling included:

Criteria	Commentary
	1. Certified standards sourced from Geostats Pty Ltd inserted in the drill sample sequence every 25 samples 2. Inclusion of three blanks (very low level certified standards) at the start of every sample batch to act as a flush 3. Duplicate samples of crushed and split core are taken at frequency of 1 duplicate for every 50 original samples
Quality of assay data and laboratory tests	• A number of Laboratories were used for analysis of samples used in the Tala Hamza Resource Estimate. Drill holes completed by ORGM were sampled and analysed in their laboratory at Bourmedes, Algeria. Analyses for WMZ samples were completed at the following laboratories: 1. Amdel Limited (ISO 9001, ISO/IEC 17025), Adelaide, Australia (2007) 2. ALS Laboratory Group (ISO 9001, ISO/IEC 17025), Adelaide & Brisbane, Australia (2007) 3. Optimet Laboratories Adelaide, Australia (2007) 4. OMAC (ISO/IEC 17025), Ireland (2007 to 2008) • ORGM laboratory in Algeria used a two-stage, four acid digest to dissolve the aliquot. In the first stage HF + HCl or $HClO_4$ was used, followed by HCl + HNO_3. The samples were routinely analysed for zinc and lead by atomic absorption spectrophotometry (AAS), using Perkins Elmer equipment prior to 1990 and Phillips equipment subsequently. Standard solutions bought from suppliers in Germany and France were used to calibrate the AAS equipment prior to analysis of the sample solutions. Three percent of samples were automatically reanalysed by selecting a second 1g aliquot. • Assay method used by Amdel for lead, zinc and silver determinations was a customized MET1 technique as Terramin requested that hydrofluoric acid not to be used in the digest to avoid analysis of zinc bound up in silicate minerals. A 1.5 to 3 gram sample from the pulp was digested in a modified aqua regia leach (using a nitric and perchloric acid digest with a hydrochloric acid leach) with determinations done on an ICP OES machine (Optima 5300). • The ALS method selected was their ME-ICP41a-Ore Grade which involved a nitric acid/ hydrobromic acid pre-digestion, followed by an aqua regia digestion. The resultant mixture was then leached in a strong hydrochloric acid and made up to final volume in a volumetric flask, and then analysed by inductively coupled plasma – atomic emission spectrometry on Varian Vista-Pro ICP-AES. • OMAC's assay method used was their ICP-ORE technique where a portion of the pulverised material was digested using HCl-HNO_3-HBr which provided a strong oxidising digestion for sulphide minerals. The final analysis was done by an ICP-OES machine. The ICPORE upper detection limits for lead and zinc are 30% and 50% respectively. BM2/A a high precision atomic absorption technique is used on samples that have gone 'over range' for the ICPORE.
Verification of sampling and assaying	• A Terramin geologist was assigned the task of monitoring the QC of resource definition assaying. Assay quality was monitored on a batch by batch basis to identify and rectify problems immediately as well as on a six-monthly basis to monitor long term trends. The QC data was stored in Terramin's Maxwell Geoservice's Datashed database and accessed through a linked programme QAQCR also from Maxwell Geoservices. All QAQCR reports are stored on the Terramin server. • The QC implemented by Terramin for the WMZ drilling programme consisted of the following: 1. Certified standards sourced from Geostats Pty Ltd inserted in the drill sample sequence every 25 samples 2. Blanks (very low level certified standards) 3. grind sizing checks 4. check sampling using coarse duplicates and pulp duplicates 5. check assaying using umpire laboratories

Criteria	Commentary
	• In addition to QAQCR analyses further checks were carried out using: 1. Standardised Response Mean (SRM) plots for the lead and zinc assays for standards submitted 2. The analytical results for the original and duplicate samples were compared using scatter and Mean Absolute Paired Difference (MAPD) plots
Location of data points	• ORGM located drillhole collars using 'projection conique conforme de Lambert Nord Algérie' which uses the Voirol 1960 datum on the 1880 Clarke ellipsoid. WMZ relocated where possible and resurveyed ORGM holes. SARL Geomatica (an Algerian based surveying company) was contracted to obtain collar location surveys. Control points were established and measured using a Leica SR530 differential GPS with an accuracy of +/- 5mm. Measurements and transformations were conducted using SKI-PRO Version 3.0 software in WGS-84, using the UTM Zone 31 North projection for the purpose of providing local survey control. • All ORGM holes (except OA074) were collared vertically. ORGM completed downhole geophysical surveys in many of their drill holes. Downhole survey measurements were generally performed every 20m. These surveys included hole deviation logs, however the data is sporadic and cannot be used on a consistent basis. Partial information was retrieved for OA077, OA078, and OA079, OA102, and OA104. Attempts have been made to reopen some holes but all are blocked near the collar. The lack of downhole surveys for ORGM holes is of only limited concern as the vertical holes that have been drilled by WMZ have shown very little deviation from vertical. All ORGM holes (except OA074) have been assumed for modelling purposes to be vertical. • Vertical drill holes TH002D1 and TH003 to TH006 were surveyed nominally between 50 to 100 metres apart whereas holes TH007 through to TH064 were surveyed at a nominal 30 metres. • WMZ have used Flexit survey tools to conduct downhole surveys. The Flexit tools provide information on the magnetic susceptibility which assists in determining the validity of the survey. Surveys have shown very little variation in the intensity of the magnetic field strength. There is only limited evidence of magnetic minerals within the hanging wall or mineralisation, and the azimuth measurements are generally assumed to be accurate.
Data spacing and distribution	• The maximum drill spacing within the portion of the Resource categorised as Inferred is 120m. The Indicated portion of the Resource has been drilled out at a closer than 75m drill spacing. As the deposit is very thick (typically 150m) relative to its length and breadth (600m by 650m), at a 75m drill spacing this means the drill spacing is one-half of the body thickness so closer spaced drilling is not required to have confidence in the deposit geometry; • There is good geological predictability, with boundaries usually predictable within 1-3 metres • Subsequent drilling is unlikely to change the volume (and hence tonnage) estimate by a significant amount (<5%). • All drilling is by diamond core and therefore no sample compositing has been applied.
Orientation of data in relation to geological structure	• Overall the mineralisation plunges approximately 20 degrees to the south east but the fault controlled high grade core (+3.5% Zn.eq) plunges 40 degrees to 200. • The mountainous terrain limits the selection of suitable drill pads and the depth of the deposit means most holes are collared just off vertical. Drill holes typically intersect the plane of mineralisation at 60 to 80 degrees. • Orientations are not creating any known bias.
Sample security	• Drill core was transported from the drilling site to the Tala Hamza core yard by WMZ personnel on a daily basis. All samples are stored in the WMZ core yard which is either manned or locked at all times. The core will be transferred to the government on approval of the Mining Lease in accordance with the Mining Law. Once the core is logged cut and crushed the samples are then transported to the assay laboratory in Ireland using DHL. All deliveries are tracked using consignment numbers. Once they are received at the laboratory, the samples are reconciled against the sample dispatch.
Audits or reviews	• Terramin's Tala Hamza database has been independently validated by Golder Associates.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	• The Tala Hamza exploration license, PEM 6911 title was held by the Algerian registered company Western Mediterranean Zinc Spa (WMZ). This company is the management vehicle for the Oued Amizour Joint Venture signed in February 2006 between Terramin Australia (65%), Entreprise Nationale Des Produits Miniers Non Ferreux et des Substances Utiles (ENOF) (32.5%) and Office National de Recherche Géologique et Minière (ORGM) (2.5%). The ownership of the Mining Lease will remain unchanged from that of PEM 6911. • PEM 6911 expired on 31 January 2018. WMZ is entitled to apply for a grace period under the Mining Act, however discussions with the relevant authorities have indicated that this is unnecessary as a Mining Lease has been prepared for submission.
Exploration done by other parties	• In the 1980's, geological, geophysical and geochemical surveys were carried out by Soviet geologists on behalf ORGM. The 'blind' Tala Hamza base metals mineralisation was discovered in 1988, after several years of detailed exploration. ORGM undertook drilling at Tala Hamza until 1994 and regional exploration drilling until 2000.
Geology	• Mineralisation at Tala Hamza lies within a sequence of volcanic and volcaniclastic rocks located within a Miocene graben structure. For this reason it has been referred to as a volcanic hosted massive sulphide (VHMS) deposit or more commonly volcanic hosted sulphide deposit. It is however missing many of the features normally associated with such deposits. Many of the observed features are more akin to an epithermal or hydrothermal replacement style of mineralization.
Drill hole Information	• Exploration results previously reported and available from ASX or Terramin website.

Table A. Date and title of ASX releases and drillholes documented

Date	Report	Drillholes
05/01/2007	First Algerian assays	TH001 - TH004
31/01/2007	Fourth Quarter Activities Report 2006	TH001 - TH006
14/03/2007	Tala Hamza assay results	TH003
04/04/2007	New assay results enhance size and grade, Tala Hamza	TH004
30/04/2007	First Quarter Activities Report 2007	TH001 - TH008
30/07/2007	Second Quarter Activities Report 2007	TH005 - TH014
14/09/2007	Southerly high grade zone expands Tala Hamza Deposit	TH007 - TH011
28/11/2007	Further high grade intersections at Tala Hamza Deposit	TH012 - TH015
04/02/2008	Tala Hamza infill program	TH016 - TH021
08/07/2008	Oued Amizour Zinc Project	TH017B - TH031
24/10/2008	Third Quarter Activities Report 2008	TH030 - TH040
15/01/2009	Fourth Quarter Activities Report 2008	TH041 - TH047
15/01/2009	First Quarter Activities Report 2009	TH044 - TH049
29/07/2009	Second Quarter Activities Report 2009	TH050 - TH055
26/10/2009	Third Quarter Activities Report 2009	TH053B - TH059B
	Not reported non-mineralised geotechnical holes	TH060 - TH062
28/01/2010	Fourth Quarter Activities Report 2009	TH063 - TH064
19/07/2010	Drill results enhance Tala Hamza upside	TH065 - TH067

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>

- Collar 'set ups' of previously unreported drill holes discussed in below section 'Further work' are reported in Table B and assay results are reported in Table C These holes were not reported previously as they were not considered significant.

Table B. Drill hole collar information

Hole	East	North	RL (m)	Max depth (m)	Azimuth	Dip
TH039	704067.5	376829.4	211.47	516.9	50.4	-78
TH068	704223	376512.9	303.22	555.4	12.5	-65
TH069C	704186.6	376709.3	234.39	422.5	75.5	-82

Table C. Summary drill intersections

Hole	From (m)	To (m)	Length (m)	Approx. true width (m)	Pb	Zn	Comment
TH039	253.1	280	26.9	25	0.76	5.81	Mineralisation open to east
and	381	487.4	106.4	105	0.57	5.03	Mineralisation open to east
TH068	465.3	509.1	43.8	41	0.40	4.81	Hole failed to reach main target 570-605m
TH069C	352.85	373	20.15	17	0.53	3.42	Hole failed to reach main target 440-510m
and	391	414.6	23.6	22	0.44	3.62	

- TH068 was abandoned at 509.1m due to poor ground conditions both in the hanging-wall and due to a large open fault breccia in the footwall of the reported mineralisation. Several attempts were made to intersect the same deeper target position as TH068 with the TH069 series of holes; TH069 (max. depth 59.4), TH069B (max. depth 65m) and TH069C, none of which were successful in reaching the target depth due to poor ground conditions in the top 70m and in the case of TH069C due to the same footwall breccia intercepted in TH068.

</td></tr>
<tr><td>Data aggregation methods</td><td>• Summary intercepts reported in Table C are a 'bulk and carry' of better than 2.5% Pb+Zn.</td></tr>
<tr><td>Relationship between mineralisation widths and intercept lengths</td><td>• Drilling has wherever possible been designed to intercept mineralisation at a high angle and as such the previously reported downhole intercepts widths are a good indicator of true widths.</td></tr>
<tr><td>Diagrams</td><td>• The company has maintained continuous disclosure of significant drilling details and results for Tala Hamza, which are presented in Table A in the above section 'Drill hole Information'.</td></tr>
<tr><td>Balanced reporting</td><td>• Comprehensive reporting is undertaken.</td></tr>
<tr><td>Other substantive exploration data</td><td>• There are no further Tala Hamza exploration results to report.</td></tr>
<tr><td>Further work</td><td>• The deposit is still open and there is excellent potential to extend the Resource. Geological and structural modelling has shown potential for extensions up dip and for fault offsets and extensions particularly in the south and east of TH039.</td></tr>
</table>

Criteria	Commentary

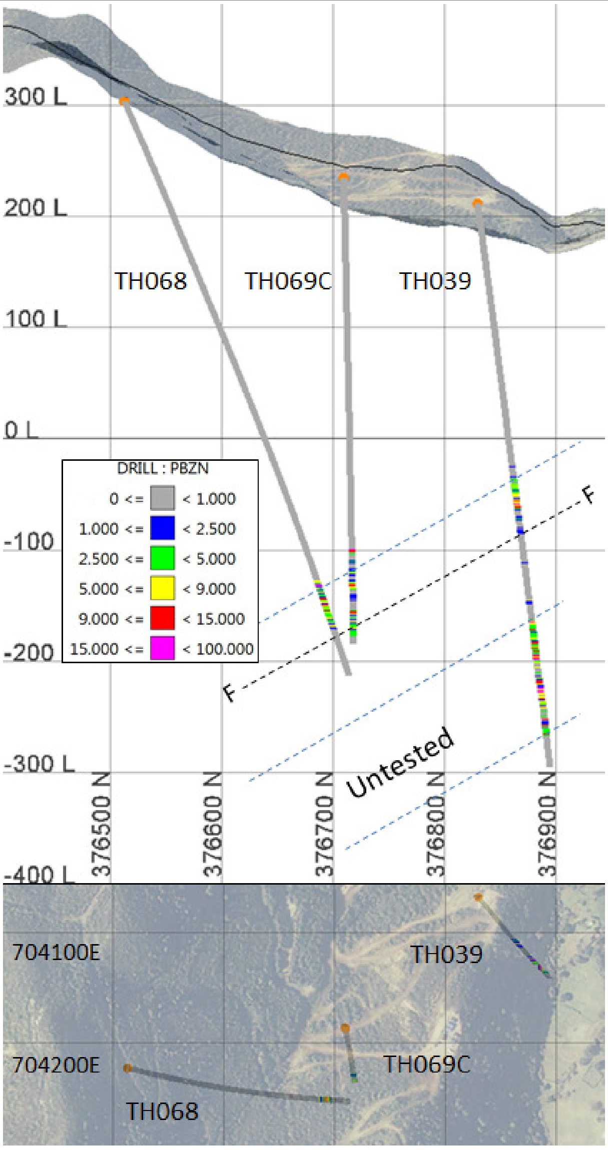
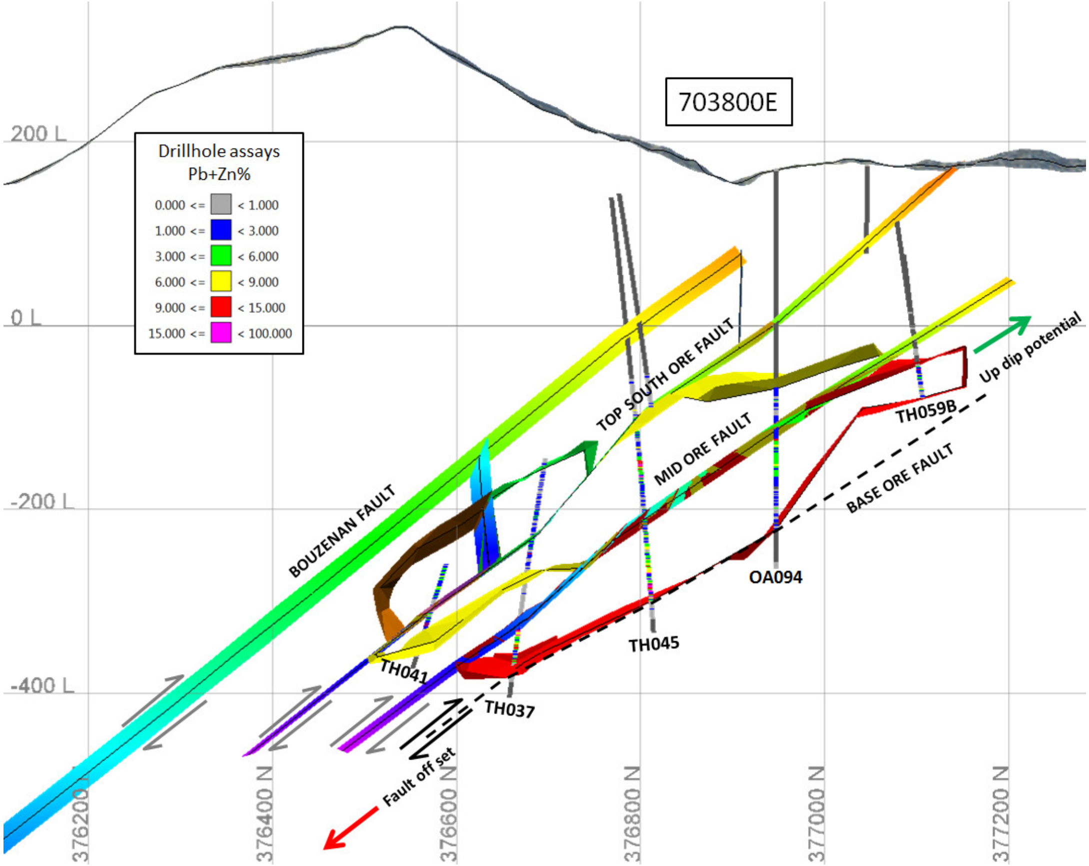


Figure 1. Oblique section showing down-dip potential of TH039 from 381m, 106.4m @ 5.6% Pb+Zn

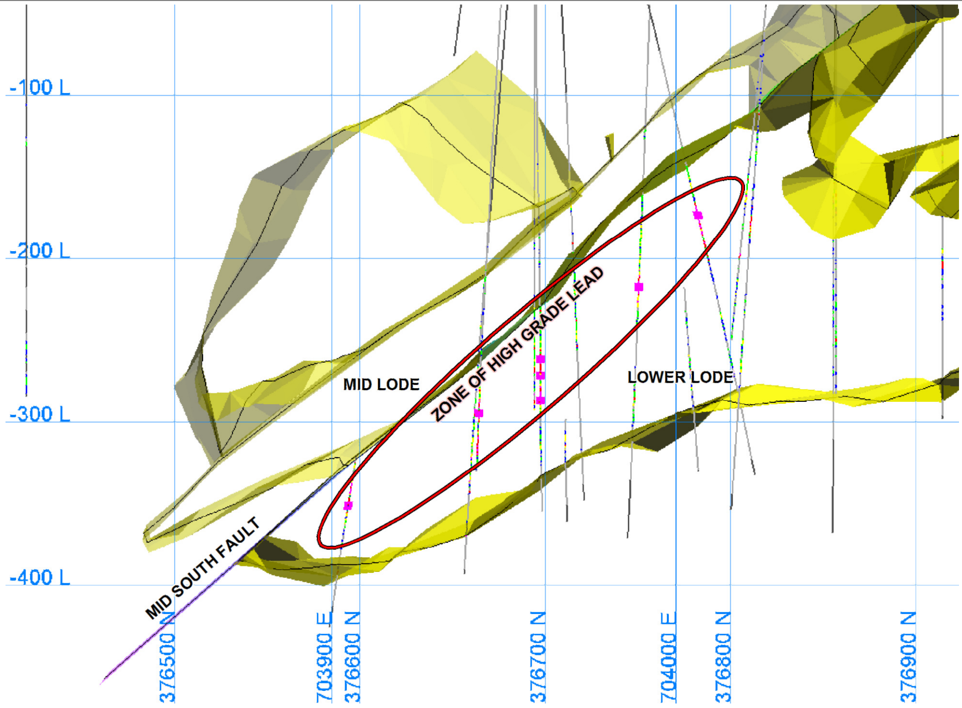
Criteria	Commentary
	 **Figure 2. Cross section at 703800E showing up-dip exploration potential at Tala Hamza** • Figure 2 shows the exploration potential up dip and east of the known Tala Hamza Resource. The green arrow locates where the Lower mineralised domain has not been closed off. The base of the Lower domain appears to be fault controlled which means there's potential for a fault offset of the mineralisation at depth.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Commentary
Database integrity	• All drill hole and assay data for WMZ/Terramin is stored in an SQL database, which is maintained by Terramin's fulltime Database Manager. User access to this database is through Maxwell Geoservices' DataShed software. • Full daily database backups are made to a dedicated local server and offsite at Terramin's IT service provider LogicPlus Pty Ltd's datacenter. Annual backups are stored indefinitely at a secure offsite facility. • Drill hole templates in MS-Excel format are distributed to geologists. Each hole is drilled, sampled, surveyed and logged in the template. Once the hole is completed the data is forwarded to the Data Manager who then loads this information into DataShed. • The Database Manager is responsible for validation of all data loaded into DataShed. All codes used are matched with records held in the appropriate libraries within DataShed. Overlapping intervals, depth past end of hole and incorrect codes will not be loaded into the database and

Criteria	Commentary
	these records are flagged and a file generated. These errors are corrected and then loaded into the database. The collar name and sample numbers are unique and all assay information is loaded automatically to that sample number. • Visual validation is performed using Vulcan 3D to check data against surrounding drill holes, geological model, and mapped information. • Assay data is received from the contract laboratories in electronic form. Assay merges are performed on the day of receipt of assays. The assay merge is an automated process that is activated by the Database Manager. Repeat and duplicate assays are stored separately within the database. No average results are used or stored in the database. Initial assays are used in resource estimations. • Quality control reports are run after every assay load and forwarded to the geologist and any reports of suspect data are checked and rectified.
Site visits	• The competent person for the Resource section of this report, Eric Whittaker (Terramin Consultant Geologist) has spent several months at Tala Hamza mentoring WMZ geologists and observing field practices.
Geological interpretation	• The geological model of the blind Tala Hamza deposit was developed by Terramin. As a first pass the location of faults intersected in drill holes that were seen to truncate mineralization were spatially located in Vulcan 3D. Through a process of disambiguation, possible fault planes were generated from selected fault intersections and tested for continuity. Further modelling of a distinctive coarse feldspathic dacite identified additional faults. • Alteration zones were not modelled separately due to the complex overprinting relationships. However, alteration was used as a guide for interpreting mineralised envelopes. • Mineralisation was modelled using wire frames constructed from interpretations on 20 metre sections oriented north-south. Where not controlled by faults the limits for the lodes were based on a >1% Pb+Zn cut off boundary that represented the mineralised envelope.
Dimensions	• Tala Hamza mineralisation is approximately 650m across strike, 600m down-dip, typically 150m thick and located between 120-680m below surface. Overall the mineralisation plunges approximately 20 degrees to the south-east. • The fault controlled high grade core (+4.5% Zn.eq) is approximately 450m across strike, 500m down-dip, typically 100m thick and located between 200-680m below surface and plunges 40 degrees to the south-east.
Estimation and modelling techniques	• Drill hole assay data was composited downhole over 5m intervals using Vulcan Envisage, starting at domain boundaries, and flagged with priorities and domain codes. • Golder investigated potential spatial continuity using correlograms. Correlograms were selected to define appropriate variograms for ordinary kriging (OK) as they are robust when erratic grades are present. Correlogram maps did not indicate significant spatial anisotropy for either zinc or lead. Consequently, experimental downhole correlograms and omniplanar correlograms were calculated and modelled to obtain kriging parameters for resource estimation. • Cumulative probability plots for zinc and lead composites on a log scale were generated, in order to examine the shape of the distributions of grades and in particular the high-grade tails. These indicate that the distributions are moderately skewed and identified upper population breaks at 30% for zinc and 16% for lead representing 0.25% and 0.41% respectively of all samples. Analysis of these higher values showed that they are spatially correlatable, coincident with the search parameters of the variograms and that they are located in the higher grade portion of the Lower Lode. The spatial association of these samples supported their assays inclusion as un-cut in the Resource.

Criteria	Commentary
	 **Figure 3; Oblique cross-section showing the spatial association of the +16% lead composites (shown as pink squares)**
Moisture	• A total of 979 measurements of moisture loss were made on samples collected from core trays that had been naturally air-dried for four to six days (during the period February to June 2008). Samples of a little over 1kg were dried in an oven at 105°C for four hours. The average moisture loss was 1.7% and only minor variation between the months was noted. There was no correlation between the number of natural drying days and the moisture loss. • Density and moisture loss measurements were determined for a further 1073 samples. Each sample was dried in an oven at 105°C for four (4) hours. The average moisture loss was 1.48%. The moisture loss in the 'altered lithologies' (massive sulphide, semi-massive sulphide, metasomatite and intensely silicified rock) was generally less than 2%. the majority of samples, which show moisture loss after four hours of oven drying of less than 2%, it appears that the total moisture content may not be much higher than 2%. From these tests it was concluded that an average allowance of 2% moisture content is required to correct the bulk density measurements obtained using the whole tray method.
Cut-off parameters	• A cut-off grade of 3% zinc equivalent has been used, which is based on economic modelling undertaken by Terramin and is comparable to deposits of a similar size and style. • Zinc equivalent is calculated by conversion of Lead grades at a factor of 1% Pb = 0.856% Zn. This is based on price forecasts from Macquarie Research of $2,400/t for lead and $2,425/t for zinc, applied to relative metallurgical recoveries of 69% for lead and 89% for zinc. Average silver content in concentrates does not reach a point where it would be a credit and so does not affect calculations.
Mining factors or assumptions	• The Resource Estimate assumes the selective mining method of Underhand Drift and Fill. The 2009 Tala Hamza Resource assumed block caving as the preferred mining method, the change from a bulk mining method has seen an increase to the Resource cut-off grade from 2.5% Zn.eq to 3% Zn.eq and a change in Resource classification as discussed below.
Metallurgical factors or assumptions	• Between the period 2007 to 2010 detailed metallurgical test work was undertaken by Optimet on drill holes selected to represent the different styles of mineralisation present at Tala Hamza. Results indicate all styles of zinc and lead mineralisation are amenable to being recovered by

Criteria	Commentary
	flotation with no issues apparent due to deleterious elements.
Environmental factors or assumptions	• Waste rock will be disposed of in a combination of plant construction foundations, water catchment ponds (Emergency Tails Storage pond and CSF seepage pond), as armouring on the CSF and various drains, encapsulated inside the CSF itself and in a mine waste dump. Material will be separated as Acid Forming, Non-Acid Forming and Potentially Acid Forming for disposal in the appropriate locations. • Tailings will be disposed of in a combination of Cemented Paste Backfill (approx. 60%) and dry-stacked tails. • Excess mine and processing water will be treated prior to release into local waterways.
Bulk density	• The presence of vughs along with the variability in style and type of alteration (especially kaolinisation) and or friable sections of Tala Hamza core limited the use of Archimedes, stoichiometric, pycnometric and regressional methods of determining the dry bulk density of core. The method chosen for density determination for Tala Hamza core was the calliper method, done on a tray by tray basis. Calculating the density by whole trays reduces the potential bias introduced by sub sampling heterogeneous core. • A weak positive correlation between bulk density and both the zinc and lead grades. The scatter plot shows large amount of scatter, suggesting that the bulk density of the core is controlled not only by the zinc and lead grades but also by the amount of alteration of the rock (eg. pyritisation, kaolinisation, and silicification) and by the occurrence of vughs. Fitting of second order polynomial regression curves to length-weighted average zinc and lead grades versus bulk density indicates an average bulk density of 2.40 t/m^3 for unmineralised core.
Classification	• The previous Resource estimate (2009) classified mineralisation of +2.5% Zn.eq with a drill spacing of <50 m classified as Measured, while material with drill spacing between 50 and 75 m classified as Indicated. These classifications were suitable for the preferred mining method of the time, block caving. • The 2014 ENFI study recommend the Underhand Drift and Fill mining method in preference to block cave. • In light of this more selective mining method all material previously classified as Measured has now been reclassified as Indicated. This reclassification has no effect on Reserve classification no material had previously been classified as Proved.
Audits or reviews	• There has only been minor additional information since the 2009 resource estimation and no remodelling of the geology or block model estimation parameters was required. The zinc and lead numbers assigned to individual blocks remain essentially unchanged from the 2009 estimate. The main changes in the reported Resource result from the updating the Zn.eq formula based on current long term forecasts and resource reclassification based on the updated proposed mining method. • For the 2009 Resource polygons for Measured and Indicated Resources were defined based on drill hole spacing and a nominal 2.5% Zn.eq cut-off. To reflect the preferred mining method of block caving, a bulk mining technique the reported Measured and Indicated Resources included all material within the respective polygons including internal dilution of 7.8Mt @ 0.27% Pb and 1.59% Zn. • The change to 'drift and fill' as the preferred mining method has led to a change in the way the Resource is reported. The drift and fill method is a selective mining method allowing the 2018 Resource to be reported at straight 3.0% Zn.eq. • In the opinion of the Competent Person the results are a fair and reasonable representation of the Mineral Resource.
Discussion of relative accuracy/ confidence	• In the opinion of the Competent Person the results are a fair and reasonable representation of the Mineral Resource.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• The Mineral Resource consists of an Indicated Resource of 44.2Mt @ 5.54%Zn and 1.44%Pb plus an Inferred Resource of 8.9Mt @ 4.0%Zn and 0.7%Pb for a total of 53.0Mt @ 5.3%Zn and 1.3%Pb. • Mineral Resource block models and geological wireframes used in the generation of Ore Reserves are as provided by Eric Whittaker of Terramin. Ore Reserves have been generated using the Vulcan software package. • The Mineral Resources are reported inclusive of and not additional to the Ore Reserves.
Site visits	• The Competent Person has not visited the site. The fact that no mining has yet taken place meant that this was regarded by the CP as unnecessary. Four visits were undertaken to the Terramin Offices in Adelaide to discuss the project with staff who have extensive on site experience. The Competent Person is satisfied with relying on the information provided. Detailed topographical and photographic information has been used in the preparation of designs. • Persons preparing the bulk of the Feasibility Study were either based in Algeria or made several visits to Algeria over the period 2016-2018. There were also visits to China to view similar underhand mining techniques in operation. • Processing, environmental and social aspects of the Study were undertaken, verified or supervised by in-country expatriate and national staff who make regular visits to the site.
Study status	• The study is regarded as meeting the JORC 2012 criteria for a Feasibility Study. It incorporates detailed designs, schedules, financial workups and analysis in all key material aspects other than as mentioned below. • The mine plan is technically achievable and economically viable and material Modifying Factors have been considered. • Before mining of the ore body commences, it is envisaged that a further program of testing geotechnical performance of reinforced backfill as a roof element will be required to address local regulatory requirements. The design and financial parameters used for the study are regarded by the CP as sufficiently conservative that any adjustments to the plan as a result of this work are unlikely to result in a material change to the Ore Reserves Estimate.
Cut-off parameters	• The cut-off grade used for the Ore Reserves Estimate is a combined in-situ grade of 4.5% Zn + Pb. Production areas have been hand-designed based on digitising horizontal boundaries around grade shells generated at this grade using the Vulcan software package. • Analysis of outputs from the study indicates that an operating cut-off grade of 3.5% Zn.eq (approx. 3.6% Zn+Pb) would be able to be used in future work. This difference is not expected to have a negative or otherwise material impact upon future estimates.
Mining factors or assumptions	• The mining method selected for the study is underground mining using a mechanised Underhand Drift and Fill technique. Previous scoping, pre-feasibility and feasibility studies have examined options including sublevel open stoping with paste fill, sublevel caving and block caving. Regulatory requirements that proscribe surface subsidence, combined with a generally low rock mass competence and variable ore boundaries mean that Underhand Drift and Fill is regarded by the CP as the most suitable method for the deposit. • Access is planned to be by decline with medium to large sized diesel truck and loader haulage. Development will be by conventional jumbo techniques with conventional drill and blast. • Ore production involves taking 5m layers (flitches) using a jumbo drift-advance/strip-retreat cycle in a top-down sequence under engineered reinforced paste backfill. Fill cycles will take place approximately every 6,000t of mined ore. • Designs and schedules incorporate four panels or lifts over 365 vertical metres and 30m level intervals with footwall truck access and loader flitch access. 5m pillars will be left between panels.

Criteria	Commentary
	• A mining dilution of 5% at zero grade has been used for all ore production. • A mining recovery of 93% has been used for all production. • A minimum mining height of 4m and maximum of 6m has been assumed with all designs generated as 5m thick slices (flitches). • Inferred Mineral Resources are ignored outside of the planned production shapes (eg. where development to access the production areas passes through Inferred material). These areas are assumed to be waste rock at zero grade. Inferred material inside the planned production shapes makes up 0.1% of the total and is justified as able to be included in the Ore Reserves estimate due to being less than the order of precision reported. • No sensitivity analysis has been done on the potential for inclusion of Inferred Mineral Resources. • Mobile fleet is modelled to include; twin-boom jumbos, 8m^3 loaders, 50-60t underground trucks, surface tails haulage trucks and loaders, dozers, charge wagons, shotcreting fleet, toolcarriers and telehandlers, light vehicles, medium service vehicles and ancillary ground support equipment. • Fixed plant (for underground operations) will include light and medium submersible pumps, mid-sized modular pump stations, secondary fans, primary fans, surface and underground substations, electrical starters and switching to Australian standards, conventional steel wire armoured and polyethylene reticulated services, surface compressors, paste filling plant and reticulation, shotcrete batching plant, surface maintenance facilities, offices, surface refuelling, and leaky feeder, wireless and wired communications.
Metallurgical factors or assumptions	• Between 2007 and 2010, detailed metallurgical test work was undertaken by Optimet on drill holes selected to represent the different styles of mineralisation present at Tala Hamza. Results indicate all styles of zinc and lead mineralisation are amenable to being recovered by flotation with no issues apparent due to deleterious elements. • Conventional flotation will be used to recover a Zinc Concentrate and a Lead Concentrate. • Metallurgical recovery is modelled as 89.6% for Zinc to produce a product at 53.8%Zn and 73.2% for Lead to produce a product at 62.6%Pb.
Environmental	• Environmental, Socioeconomic, Archaeological, Anthropological, Climatological, Water Management, Noise, Visual Impact, Flora and Fauna, Closure and other required Studies have been undertaken by a combination of international and in-country consultants with reference to national regulatory requirements and international standards. • Waste rock will be disposed of in a combination of plant construction foundations, water catchment ponds (Emergency Tails Storage pond and Cake-Storage Facility (CSF) seepage pond), as armouring on the CSF and various drains, encapsulated inside the CSF itself and in a mine waste dump. Material will be separated as Acid Forming, Non-Acid Forming and Potentially Acid Forming for disposal in the appropriate locations. • Tailings will be disposed of in a combination of Cemented Paste Backfill (approx. 60%) and dry-stacked tails. • Excess mine and processing water will be treated prior to release into local waterways.
Infrastructure	• The deposit lies approximately 10km from the port city of Bejaia, the capital of the local province with a population of 175,000 in the city and 950,000 in the province. • Loading and transportation facilities exist at the port, ship loading to bulk carrier will be undertaken using a ‘rotainer’ rotating container system. The city has an international airport with flights to Algiers and Europe. • The deposit is located across several hills and valleys at elevations from 100-300mASL. Locations have been selected for construction of all plant and dumps. Under Algerian law land required will be acquired by the government. • Undertakings have been received from government suppliers that sufficient electrical power will be provided to the planned operation.

Criteria	Commentary
	• Make up water will be sourced from orebody perimeter dewatering bores.
Costs	• The financial model used for the study is appropriate, taking into account such items as local taxation regimes, projected variations as a result of government incentive arrangements, ongoing sustaining capital requirements, discounted cash flows and other detailed factors. • Capital infrastructure costs have been estimated from designs submitted to various potential EPCM suppliers, estimates provided by local authorities and international suppliers and/or costs for similar items at recent projects. • Capital mining equipment and development costs have been derived from first principles using in-country prices and costs from similar operations both in Australia and overseas. • Operating costs have been derived from a detailed build-up of fixed and variable unit costs using in-country prices and costs from similar operations both in Australia and overseas. These have been applied to physical outputs from a schedule generated in the Deswik software package which has in turn derived it's activities from development and production designs generated in the Vulcan software package. • Metal prices are variable in the early years, derived from the June 2018 Wood MacKenzie forecast projected beyond the forecast period at a constant rate. • Exchange rates have been set based on recent spot projected at a constant rate. • Transportation costs are based on local trucking rates and discussions with the local Port Authority who have provided indicative charges and indicated the availability of a suitable laydown area and ship berth. Detailed capital and operating costings are included in Study documents. • No deleterious elements or penalties are expected. • Smelter and treatment charges have been estimated from standard contract rates for similar products. • An allowance of 2% has been made for royalties.
Revenue factors	• Head grades are determined by schedule outputs • See above regarding derivation of metal prices metal, exchange rates, transportation and treatment charges, etc. • The long term projected zinc price is USD2,756/dmt • The long term projected lead price is USD2,315/dmt • The exchange rates used are EUR/USD = 1.19, AUD/USD = 0.76 and DZD/USD = 115 • Treatment and refining charges have been derived from industry standards. There are no contracts yet in place. – Payable zinc is 85% of the contained metal with a minimum 8% of the concentrate grade. – Payable lead is 95% of the contained metal with a minimum 3% of the concentrate grade. – TC/RC's for zinc are 6.1% of the metal price. – TC/RC's for lead are 7.0% of the metal price.
Market assessment	• Tala Hamza concentrate is of high quality and low in penalty elements. The proximity of the mine to Europe also means that the product is expected to sell at a premium and in preference to product from other operations. • Expected market conditions have been sourced from the June 2018 Wood Mackenzie forecast.
Economic	• CPI rate for calculating nominal estimates is 2% pa, higher than recent experience but the lower target range for Australian and US regulators • NPV for all estimates is discounted at 8% pa • Pre-tax IRR is 16%, post-tax is 14%
Social	• Sociological studies and engagement with stakeholders have been ongoing for many years. Compulsory acquisitions of a number of homes in one village and land will be required. If the

Criteria	Commentary
	project is designated a 'Project of National Importance' acquisition will be undertaken by the government. • The project may be designated a 'Project of National Importance' once the ML is granted. As such there is priority placed on providing the assistance necessary to facilitate operations.
Other	• The Project lies in an earthquake prone zone. This has been allowed for in relevant parts of the Study. • Some adjustments to government supplied commercial explosives and initiation systems may be required in order to undertake the project as planned. Alternative non-blasting extraction techniques exist and if found to be appropriate to the project are thought likely to have a positive impact on the overall Ore Reserves and project economics. • Terramin has been engaged in protracted discussions with regulatory authorities in Algeria in order to address environmental and social concerns with the previously proposed block cave mining method. DFS 2018 assumes discussions will be finalised in 2018 and a two year pre-production capital development program. The timeframe may be subject to unforeseen delays. • PEM 6911 expired on 31 January 2018. WMZ is entitled to apply for a grace period under the Mining Act, however discussions with the relevant authorities have indicated that this is unnecessary as a Mining Lease has been prepared for submission.
Classification	• The Ore Reserve Estimate is classified entirely as Probable. • Previous studies included Measured Mineral Resources however these were also entirely classified as Probable for the purposes of the 2010 Block Caving DFS. Due to changes in the selectivity of the mining method relative to the drill spacing available the updated Mineral Resource has reclassified the Measured component as an Indicated Mineral Resource. • The reclassification of the Mineral Resource is considered to be an appropriate course of action. The selectivity associated with the mining method means that classifying the whole of the Ore Reserve according to the Mineral Resource classification also remains appropriate. • The resulting Ore Reserve Estimate appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• WMZ is subject to statutory auditing by an independent locally qualified auditor. Terramin is audited by Grant Thornton.
Discussion of relative accuracy/ confidence	• The confidence level of the Mineral Resource Estimate is regarded as the main consideration with regard to relative accuracy of the Ore Reserves Estimate. • No statistical or other techniques have been used to estimate the accuracy or confidence level of the Ore Reserves Estimate other than those performed on the Mineral Resource Estimate. • The DFS 2018 is completed to +/-15%. The estimated Ore Reserves should remain economic within these tolerances based on Terramin's modelling. This would include both the Cut Off Grade and cost inputs. Alternative courses of action are available should known areas of technical uncertainty affect the mining method, these alternatives are unlikely to negatively impact the overall size of the Ore Reserves. • The selective mining method means that the modifying factors used are considered by the Competent Person conservative yet sufficiently close to the unmodified design physicals that changes to these factors are unlikely to have a material impact on the Ore Reserves Estimate.