

Djebba Zinc-Lead Project, Tunisia - Historical Resource Estimate

Celamin Holdings Ltd

ACN 139 255 771

ABN 82 139 255 771

Board and Management:

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Simon Eley	CEO
Nic Clift	Non-Exec Director
Sue-Ann Higgins	Non-Exec Director
Tim Markwell	Non-Exec Director

Company Secretary

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Securities on Issue

89,733,939	ordinary shares
8,656,616	unlisted options
135,027	unlisted options
3,787,500	unlisted options

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HIGHLIGHTS:

- **Djebba historical resource estimate:**
 - **2.7 Mt at 6.1% Zn and 3.3% Pb¹**
- **Le Groupe SIDAM-Minorex 1986-98 mining study at the Djebba Zinc-Lead deposit highlights economic potential of the deposit and surrounding area**
- **Historical resource and study were based on drilling completed by the Tunisian Office National des Mines near the historical Djebba mine**
- **Acquisition and review of reports and data from subsequent exploration and validation programs conducted by AIM-listed Maghreb Minerals in the period 2004-08 is continuing.**

In July 2018 Celamin was granted two exploration permits in Tunisia – Djebba and Zeflana. Both are prospective for zinc and lead.

Since the grant of the exploration permits, Celamin has acquired the report on the mining study completed in 1989 by Montreal-based consultancy, Le Groupe SIDAM-Minorex, for the Office National des Mines (ONM) in Tunisia, and engaged CSA Global to review this study to enable announcement of the historical resource estimate.

The mining study, titled “Etude de faisabilité préliminaire de l'exploitation du gite plomb-zincifere de Djebba” (Pre-feasibility study on mining the Djebba Zinc-Lead deposit) documents historical resource estimates and mining studies for the deposit completed in the period 1986-89. The study was based on drilling completed by ONM at the historical Djebba mine site which was used to estimate and report the historical resource of 2.7 Mt at 6.1% Zn and 3.3% Pb.

Better results from the historical ONM drilling include:

- S-30bis 16.6m @ 8.36% Zn & 1.8% Pb from 66.1m
- MDJ2 10.45m @ 17.52% Zn & 1.57% Pb from 21.85m
- MDJ7 8.55m @ 9.55% Zn & 0.81% Pb from 32.85m

¹ This estimate is a historical estimate and is not reported in accordance with the JORC Code. A Competent Person has not done sufficient work to classify the historical estimate as Mineral Resource in accordance with the JORC Code. It is uncertain that following evaluation and/or further exploration work that the historical estimate will be able to be reported as Mineral Resource in accordance with the JORC Code.

Celamin cautions that this resource estimate is a historical estimate and was not reported in accordance with the JORC Code. A Competent Person has not done sufficient work to classify the historical estimate as a Mineral Resource and/or Ore Reserve in accordance with the JORC Code and it is uncertain that following evaluation and/or further exploration work that the historical estimate will be able to be reported as a Mineral Resource or Ore Reserve in accordance with the JORC Code.

ASX Listing Rule 5.12 specifies the additional information that must be provided in a market announcement that contains historical estimates. This information is contained in the Annexure to this Release together with further details on the historic mineral resource estimate.

Reporting of the historical estimate is considered material as it provides an indication of the presence of potentially economic mineralisation on the property. Although it can only be considered a qualitative indication at this time, it provides an indication of the prospectivity of the area and supports investment in further exploration.

Subsequent to the 1989 study, additional drilling and other exploration work was completed at Djebba by ONM (1992), ONM-Metallgesellschaft (1993-94), VSX-listed Consolidated Global Minerals Ltd (2001-04), and AIM-listed Maghreb Minerals (2002-2008). Celamin is in the process of acquiring, compiling, and assessing the available data and reports for this subsequent work.

Celamin will now focus on validation of the historical resource based on confirmatory drilling and target generation work to define new targets for drill testing as this style of mineralisation can be extensive and form large deposits.

Celamin also continues to review other new opportunities in Tunisia consistent with its strategy to build a portfolio of resource assets to add shareholder value.

Celamin CEO Simon Eley said *“This is a very encouraging outcome and one that underpins our continued presence in Tunisia. While we await the return of our interest in Chaketma, we will concentrate on completing the confirmatory work required on the resource as well as target generation on both the Djebba and Zeflana projects.”*



Figure 1. Location map of Djebba and Zeflana projects in Tunisia

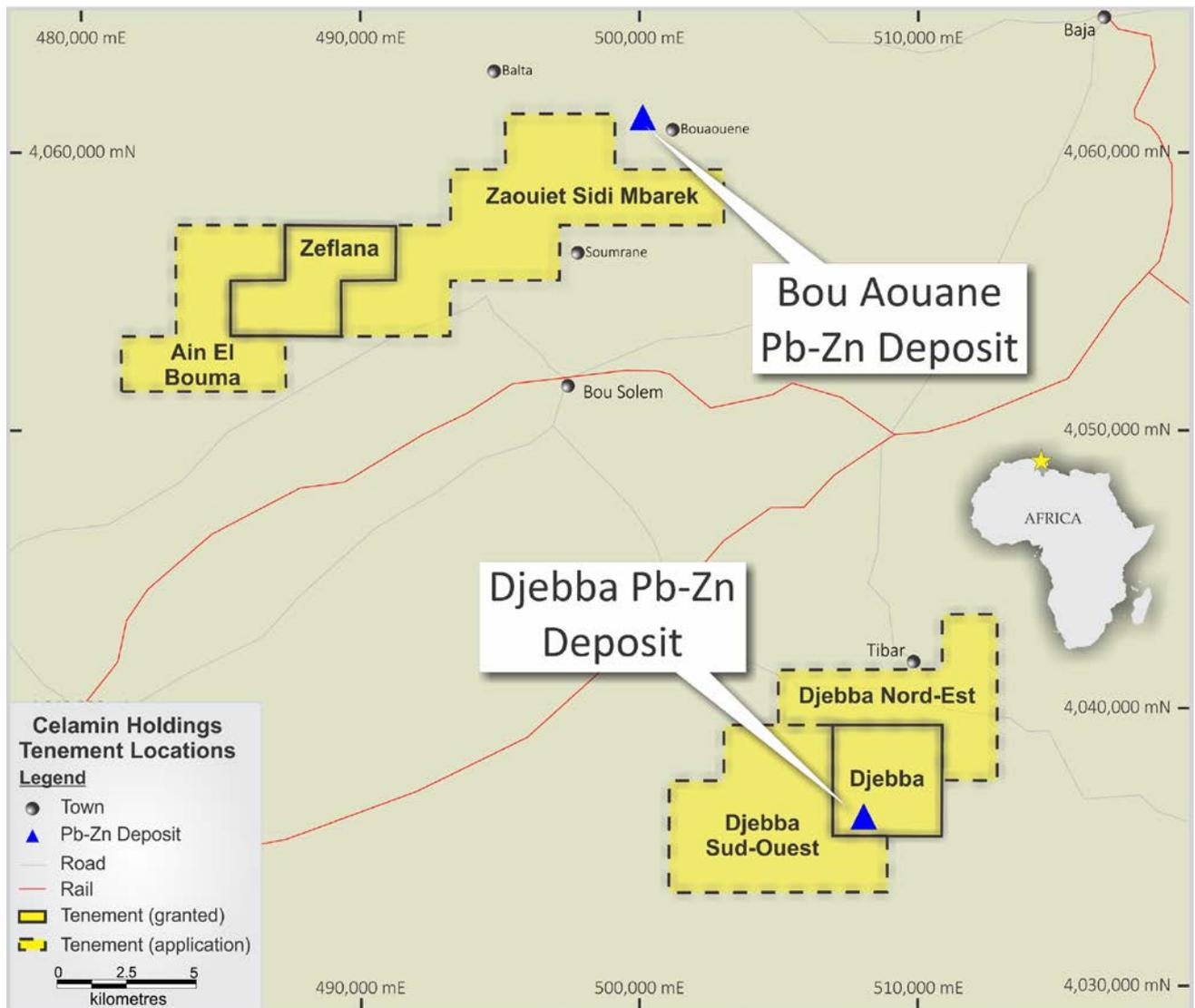


Figure 2. Location of granted permits, Djebba and Zeflana and recent applications

Regional Setting

The Djebba Zinc-Lead deposit is located in the Atlas Zinc-Lead belt that runs from Tunisia west through northern Algeria and Morocco. The belt has an ancient history of zinc-lead mining stretching back to Phoenician and Roman times. In more recent times, significant mines in the belt have included the Touissit-Bou Beker-El Abed district in Morocco and Algeria and the Bou Grine deposit in Tunisia. Wadjinny (1998) reported total production and ‘reserves’ in the Touissit-Bou Beker-El Abed mining district as 2.71 Mt contained Pb and 1.97 Mt contained Zn at grades of 2%-16% Pb and 3.5-5.7% Zn. Schmidt (1999) reported the pre-mining resource at Bou Grine as 5.5 Mt at 12% Zn and 2.5% Pb². Modern exploration in the belt has been very limited, the most extensive exploration in Tunisia occurring in the period between 2004 and 2008 by companies including Albidon Ltd in joint venture with Zinifex Ltd, and Maghreb Minerals.

The zinc-lead deposits of the Atlas belt are broadly of Mississippi Valley Type (“MVT”), low-temperature carbonate-replacement deposits formed within the Mesozoic-aged broad carbonate shelf sedimentary sequence deposited on the southern margin of the Tethys Ocean. Most deposits formed during collision, uplift and subsequent extension related to the Atlas orogeny. This style of mineralisation is known to form some very large deposits globally. In Tunisia, many deposits show a close relationship to salt diapir and salt wall structures that initially developed during extension and continued to be active during deformation.

² This estimate is a historical estimate and is not reported in accordance with the JORC Code. A Competent Person has not done sufficient work to classify the historical estimate as Mineral Resource in accordance with the JORC Code.

Djebba Property

The Djebba Zinc-Lead Property is located in the Beja Governate of north-western Tunisia approximately 130 km by road southwest of Tunis and about 2 hours' drive. It is about 30 km south of the railhead in the town of Beja and 22 km from the railhead in the town of Bou Salem.

A concentration of small historical zinc-lead mines is recorded along a 5 km trend at Djebba which are believed to have a history of mining dating back to Roman times. Most of the exploited mineralisation was in veins and breccia zones in Eocene- and Cretaceous-aged limestone. The more recent exploration since the 1980s has defined more extensive stratabound mineralisation in younger Neogene rocks.

Djebba Zinc-Lead Deposit Geology

The Djebba Zinc-Lead deposit is located on the southern fault-controlled margin of the Neogene- to Quaternary-age Majerda Basin. Numerous zinc-lead occurrences and old mines occur along both the northern and southern faulted margins of the basin, including the Bou Aouane mine, 24 km north of Djebba, that was mined until the 1980s.

The stratabound mineralised zone at Djebba occurs within a Neogene basin along a major northeast-trending fault zone that is occupied by a Triassic salt diapir. The deposit is located at a relay zone in the fault associated with a northwest-trending transfer structure.

The main stratabound mineralised zone where most of the drilling to date has concentrated is north-northeast of the historic Djebba mine workings which targeted vein-hosted mineralisation in Eocene and Cretaceous limestones. The stratabound mineralisation occurs in Neogene basin sediments characterised by marl, mudstone, sandstone and conglomerates. The fault-controlled eastern basin margin is marked by diapiric Triassic rocks.

The mineralization mined historically at Djebba occurs as fractures, veins, and pods of smithsonite ($ZnCO_3$) and cerussite ($PbCO_3$) near surface, with sphalerite (Zn,Fe)S and galena (PbS) below the water table. In contrast the stratabound mineralization is shallow-dipping disseminated sphalerite and galena with pyrite and barite occurring in the matrix of dolomitic conglomerate lenses interbedded with carbonate-cemented sandstones and mudstone. Mineralization has been drilled over an area of c. 1 km x 300 m.

The style of mineralisation at Djebba is similar to that at the old Bou Aouane mine and other mines and prospects in the Neogene basins of northern Tunisia. The setting of this basin mineralisation shows similarities to the giant Jinding deposit in Yunnan, China (Reynolds and Mackay, 2007; Reynolds and Large, 2010).

1989 Djebba Zinc-Lead Deposit Mining Study – Le Groupe SIDAM-Minorex

The 1989 report for the ONM by Le Groupe SIDAM-Minorex (LGSM) documents the geological and resource assessment and mining study completed in the period 1986-1989. The study was based on exploration by the Société Tunisienne d'Expansion Minière (SOTEM) in the 1970s and by ONM in the 1980s (Madeisky, 2001). SOTEM contracted BulgarGeomin to drill eight shallow drill holes that intersected mineralisation in the Neogene dolomite conglomerate units. ONM is reported to have drilled more than 30 additional diamond drill holes from 1981 to 1986 that outlined the main stratabound mineralised zone (Madeisky, 2001).

The input data to the resource estimate are not described in detail in the LGSM report. As a result, the details of number of drill holes, sampling and assay methods are not available. It is expected that drilling will have been completed by ONM, which was then the state-owned exploration entity, and that analysis would have been completed at the ONM laboratory in Tunis. At this time, no information is available on collar coordinates or survey methods.

The mining study considered open-pit and underground exploitation with processing occurring at the then-mothballed Bou Aouane mill and flotation plant, about 30 km by road from Djebba. Initial historical resource estimates in 1986 based on 39 drill holes (totalling 4573 m) included a sectional polygonal estimate and geostatistical block-model estimates using inverse distance weighting to the power of 2 and ordinary kriging.

The final reported historical resource estimate that was used for the mining study was completed using a planimetric polygonal method for four separate stratabound lenses of mineralisation. Each drill hole had a nominal radius of influence of 30 m. Using a density value of 2.6, the polygonal estimate was 2.7 Mt at 6.1% Zn and 3.3% Pb.

Celamin cautions that this Resource estimate is a historical estimate and was not reported in accordance with the JORC Code. A Competent Person has not done sufficient work to classify the historical estimate as a Mineral Resource and/or Ore Reserve in accordance with the JORC Code and it is uncertain that following evaluation and/or further exploration work that the historical estimate will be able to be reported as a Mineral Resource or Ore Reserve in accordance with the JORC Code.

Reporting of the historical estimate is considered material as it provides an indication of the presence of potentially economic mineralisation on the property. Although it can only be considered a qualitative indication at this time, it provides an indication of the prospectivity of the area and supports investment in further exploration.

Celamin is continuing to seek records of the 1970s and 1980s drilling but expects that this work will need to be superseded by new drilling combined with the more recent Maghreb Minerals drilling results, before it would be possible to report any Mineral Resource in accordance with the JORC Code.

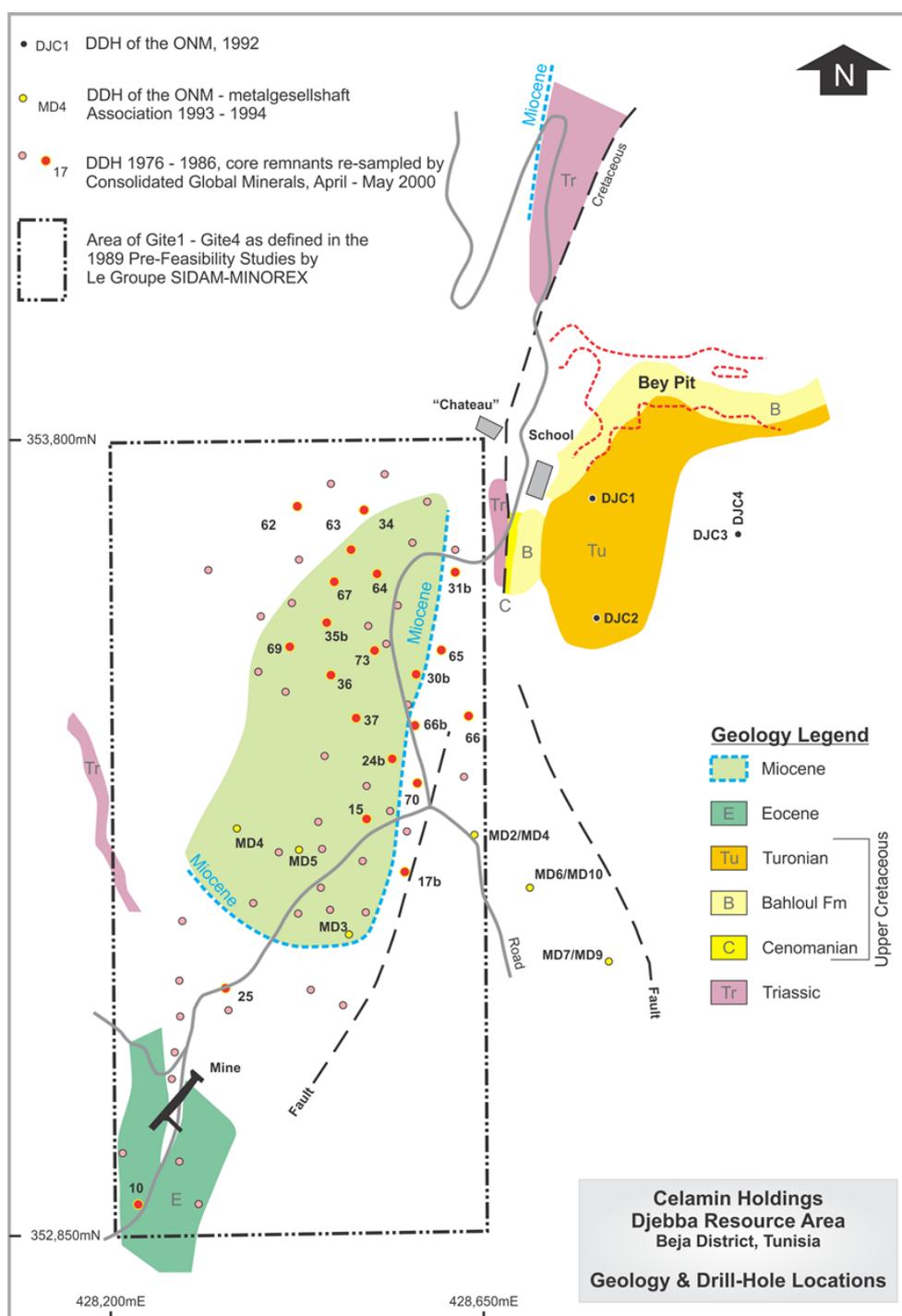


Figure 3. Location of historical drilling at Djebba showing the location of the mineralised zone. Redrawn from Maghreb Minerals AIM prospectus, 2004.

Subsequent Validation and Exploration Programs at Djebba 1992-2007

During the mining study in 1987-88, ONM completed five diamond drill holes for metallurgical testwork. It is not known if these were included in the final polygonal resource estimate.

In 1992, ONM drilled four exploration holes south of the main zone encountering low-grade mineralisation in Cretaceous limestone. In 1993-94, ONM and Metallgesellschaft drilled a further nine exploration holes in the southern target zone.

A licence over the property was acquired by Consolidated Global Minerals Ltd in 1991. Djebba formed part of the property portfolio of Maghreb Minerals for its listing on the London AIM market in 2004, with Consolidated Global Minerals as its largest shareholder. The Independent Expert Report by the CSA Group that was included in the 2004 Maghreb Minerals prospectus documents data acquisition and validation work completed since the 1989 study. In 2000, an attempt was made to resample some of the drill core used in the historical resource estimate. However, all core was in very poor condition with much of the drill core from the sampled intervals missing. All available core was resampled as 115 grab samples only and analysed by ALS Chemex, North Vancouver, by 32-element ICP-AES determinations and wet chemical methods for above-limit samples. Given the sampling limitations of the sampling, it cannot be considered as validation, however ONM-reported results from mineralised intervals showed good correspondence with grab samples analyses from these intervals.

Table 1. Check samples results from historic core reported in the 2004 Maghreb Minerals prospectus

Collar	Lithology	Grade in Resource calculation	Sample Number	From (m)	To (m)	Interval (m)	Zn%
S-30bis	Miocene Shale	61.60m @ 8.36% Zn, 1.84% Pb	211377	66.10	67.5	1.40	10.25
S-30bis	Miocene Shale	61.60m @ 8.36% Zn, 1.84% Pb	211378	67.50	68.2	0.70	7.25
S-30bis	Miocene Shale	61.60m @ 8.36% Zn, 1.84% Pb	211379	68.20	70.2	2.00	10.95
S-30bis	Miocene Shale	61.60m @ 8.36% Zn, 1.84% Pb	211380	70.20	72.6	2.40	8.94
S-30bis	Miocene Shale	61.60m @ 8.36% Zn, 1.84% Pb	211381	72.60	74.6	2.00	9.67
S-30bis	Miocene Shale	61.60m @ 8.36% Zn, 1.84% Pb	211382	74.60	79.8	5.20	9.04
S-31bis	Miocene carbonate	4.4m @ 7.30% Zn, 1.00% Pb	56872	37.00	38	1.00	7.36
S-31bis	Miocene carbonate	4.4m @ 7.30% Zn, 1.00% Pb	56873	38.00	39	1.00	6.73
S-31bis	Miocene carbonate	4.4m @ 7.30% Zn, 1.00% Pb	56874	39.00	40	1.00	9.37
S-34	Dolomite	10.2m @ 9.57% Zn, 2.05% Pb	199529	106.80	107.8	1.00	8.42
S-62	Breccia	2.0m @ 11.76% Zn, 1.65% Pb	56760	81.75	82.9	1.15	9.33
S-64	Miocene dolomite breccia	5.00m @ 5.40% Zn, 2.44% Pb	199539	109.35	111.7	2.35	12.15
S-67	Shale	7.00m @ 6.83% Zn, 0.61% Pb	56880	69.10	69.8	0.70	9.06
S-68	Shale	7.00m @ 6.83% Zn, 0.61% Pb	56882	71.00	72.1	1.10	13.35
S-69	Shale	7.00m @ 6.83% Zn, 0.61% Pb	56884	74.80	75.8	1.00	29.6

In 2005 (MMS AIM release dated 25 October 2005), Maghreb Minerals reported results from drilling of four shallow diamond holes to test the previously drilled mineralisation and reported significant mineralisation in four drill holes. Data for the location of drill holes in this program, including down-hole assays and lithology, have not yet been obtained by Celamin.

Maghreb Minerals also completed a magnetic and gravity survey at Djebba in 2005.

Table 2. Drilling results as reported by Maghreb Minerals in 2005 (MMS AIM release dated 25 October 2005)

Collar		From	To	Interval	Zn	Pb	Combined Zn%+Pb%
MDJ1		23.05	28.25	5.20	5.91	13.24	19.15
	<i>including</i>			2.05	6.63	25.86	32.49
MDJ2		21.85	32.30	10.45	17.52	1.57	19.09
	<i>including</i>			6.80	24.58	1.04	25.62
MDJ7		32.85	41.40	8.55	9.55	0.81	10.36
	<i>including</i>	34.00	38.55	4.55	14.25	1.11	15.36
		44.44	64.44	20.00	2.67	0.42	3.09
	<i>including</i>	47.40	49.50	2.00	6.25	1.46	7.71
		96.80	100.15	3.50	5.22	0.21	5.43
	<i>including</i>	97.95	100.15	2.20	6.08	0.20	6.28
MDJ9		63.40	82.65	19.25	3.54	0.56	4.10
	<i>including</i>	65.40	69.15	3.70	5.13	0.76	5.89
	<i>including</i>	79.60	80.00	3.10	4.52	1.54	6.06

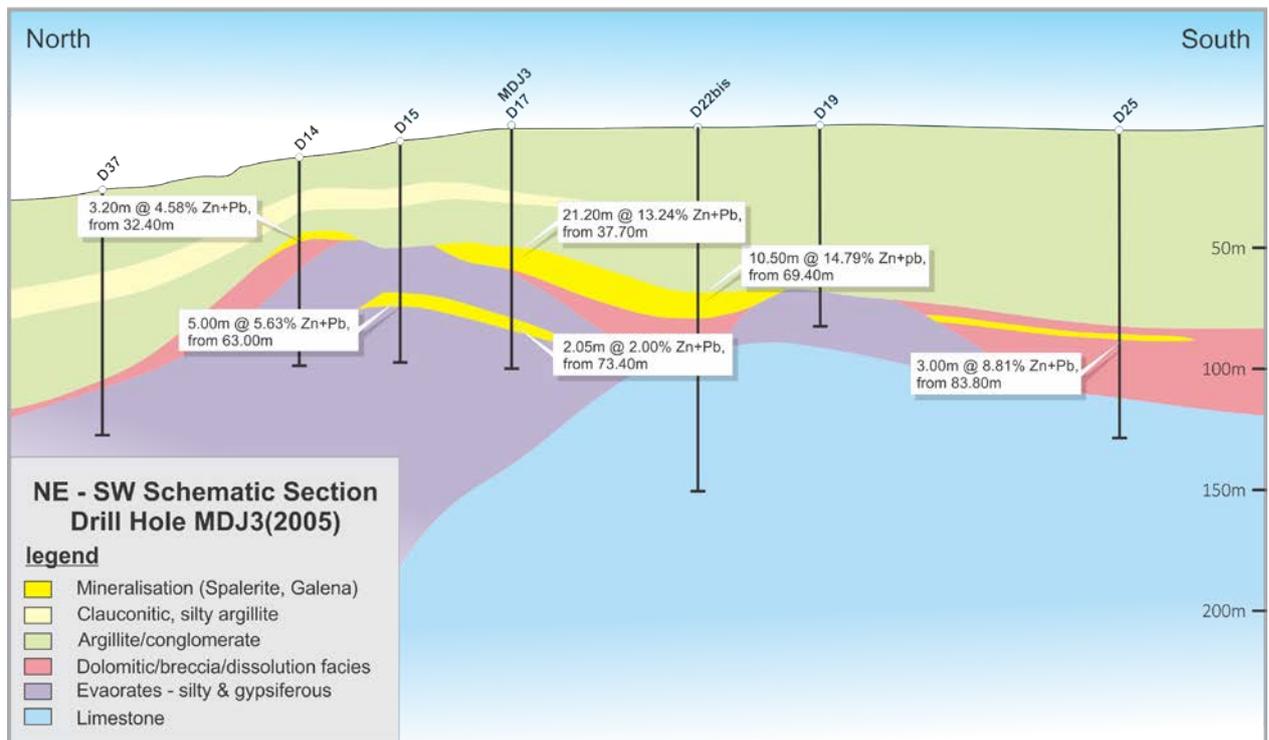


Figure 4. Cross section through the mineralised zone at Djebba showing drill intersections. Redrawn from Maghreb Minerals AIM release dated 25 October 2005

In 2007, Maghreb Minerals completed an additional fifteen diamond drill holes (MDJ14 - MDJ28) at Djebba for a total of 2,451m, aimed at verification of, and extensions to, the known mineralised zone. Maghreb Minerals reported that validation results were positive but that extension results were poor. A resource estimate was proposed to be completed but this was never reported.

Planned Work Programme

Celamin is in the process of acquiring, compiling, and assessing all the available historical data. A full assessment will not be possible until all data has been obtained, and a detailed planned work program will be formulated at that time.

Celamin is focused on exploration of the Djebba trend, not just the historical resource area. Celamin will bring an exploration model to bear that is based on work completed in Tunisia in the 2000s by CSA Global Ltd based

on targeting deposits in Neogene basins in northern Tunisia. This setting has many analogies with the Himalayan foreland in Yunnan that hosts the giant Jinding deposit.

The Djebba work program is therefore expected to be two-pronged, with validation of the historical resource based on confirmatory drilling, and target generation work to define new targets for drill testing. The latter is expected to include geological mapping, geochemical and geophysical surveys.

The extent of the actual work programs and the amount of drilling completed will be subject to market conditions and funding for the proposed programs.

As noted in figure 2, Celamin has lodged applications for larger permits covering the geological trends of both the Djebba and Zeflana permits. The applications areas are expected to improve the possibility of delineating extensions to the mineralisation at both locations.

References

Goodman, 2007, Technical Review Report, Djebba and Fej Lahdoum Projects, unpublished CSA Group Report No. 3625/06 to Maghreb mineral plc and High Marsh Holdings Ltd., 12 pp.

Le Groupe SIDAM-Minorex, 1989, Étude de faisabilité préliminaire de l'exploitation du gîte plomb-zincifère de Djebba, Unpublished CIDA report to ONM, 70 pp.

Madeisky, H., 2001, Geological Report, Djebba exploration permit, HEMAC Explorataion Ltd unpublished report, 26 pp.

Reynolds, N.A., and Mackay, W., 2007, The Atlas zinc-lead province and analogies within the Tethyan zinc belt, in Andrew, C.J., et al., eds., Digging Deeper: Proceedings of the Ninth Biennial SGA Meeting, Dublin, Ireland, August 20–23, 2007, p. 101–103.

Reynolds, N.A. and Large, D., 2010. Tethyan Zinc-Lead Metallogeny in Europe, North Africa, and Asia. Society of Economic Geologists, Special Publications, v. 15

Schmidt, S.C., 1999, Re-activation of the Bougrine mine, Tunisia, in Mining: catalyst for economic growth: 101st AGM of the Canadian Institute of Mining and Metallurgy, Major Canadian overseas projects, paper 1.

Wadjinny, A., 1998, Le Plomb au Maroc: cas des districts de Touissit et Jbel Aouam, Chronique de la Recherche Minière, 531-532, p. 9-28.

For further information or enquiries, please contact:

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Competent Person

The information in this announcement that relates to (i) exploration results and (ii) the reporting of historical mineral resource estimates for the Djebba Project under ASX Listing Rule 5.12, is an accurate representation of the available data and studies for the Djebba Zinc-Lead deposit and is based on information reviewed by Dr Neal Reynolds who is an employee of CSA Global and a consultant to the Company.

Dr Reynolds is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Dr Reynolds has sufficient experience that is relevant to the style of mineralisation under consideration as a Competent Person as defined in the 2012 Edition of the "Australasian Code for the Reporting on Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Dr Neal Reynolds consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

Any forward-looking information contained in this news release is made as of the date of this news release. Except as required under applicable securities legislation, Celamin does not intend, and does not assume any obligation, to update this forward-looking information.

Any forward-looking information contained in this news release is based on numerous assumptions and is subject to all of the risks and uncertainties inherent in the Company's business, including risks inherent in resource exploration and development. As a result, actual results may vary materially from those described in the forward-looking information. Readers are cautioned not to place undue reliance on forward-looking information due to the inherent uncertainty thereof.

ANNEXURE – ACCOMPANYING NOTES TO HISTORIC MINERAL RESOURCE ESTIMATE

ASX Listing Rule 5.12 sets out the parameters whereby historic mineral resource estimates can be reported on the ASX. The Company provides the following information in accordance with Listing Rule 5.12:

5.12.1 The source and date of the historical estimates or foreign estimates

The historical estimate is documented in the following report:

Le Groupe SIDAM-Minorex, 1989, Étude de faisabilité préliminaire de l'exploitation du gîte plomb-zincifère de Djebba, Unpublished CIDA report to ONM, 70 pp.

This document is referred to in the following report:

Madeisky, H., 2001, Geological Report, Djebba exploration permit, HEMAC Explortaion Ltd unpublished report, 26 pp.

Madeisky (2001) also refers to other source documents that describe the work completed in the 1970s to early 1990s, including reference to drill logs and assays, plans and sections which have not yet been obtained by Celamin.

Both the above documents are referred to in the following report:

Maghreb Minerals Plc – AIM Admission Document 2004, Appendix II – CSA Group Independent Expert Report dated 4 November 2004

The CSA Group Independent Expert Report also documents limited check sampling of the drill core that was utilised for the estimate.

5.12.2 Whether the historical estimates or foreign estimates use categories of mineralisation other than those defined in Appendix 5A (JORC Code) and if so, an explanation of the differences

The historical reporting of the historical estimate does not provide any classification of mineralisation category and is therefore incompatible with the requirements for classification under the JORC Code.

5.12.3 The relevance and materiality of the historical estimates or foreign estimates to the entity

The Directors of Celamin consider that the reporting of the historical estimate is material as it provides an indication of the presence of potentially economic mineralisation on the Djebba property and potentially high-grade zinc and lead mineralisation in drill intersections. Although it can only be considered qualitative at this time, it provides an important indication of the prospectivity of the area and supports investment by the Company in further exploration of the Property.

The historical estimate and drill results provide an immediate focus for the Company to undertake additional drilling, including twinning of historical holes which may result in a JORC Code compliant Mineral Resource estimate.

5.12.4 The reliability of the historical estimates or foreign estimates, including by reference to any of the criteria in Table 1 of Appendix 5A (JORC Code) which are relevant to understanding the reliability of the historical estimates or foreign estimates

The historical estimate employed a polygonal planimetric method which is inherently less reliable than an estimate based on geostatistical methods. However the geometry of the mineralisation appears simple and well-constrained by drilling.

The drill hole data used in the estimate are not available at this time and there is no information on sampling and analytical methods, QAQC protocols (if any) collar and down-holes surveys etc. All these factors introduce additional uncertainty into the reliability of the estimate. However, check sampling of historical core and subsequent drill results reported by Maghreb Minerals provide support for the general extent and tenor of mineralisation.

5.12.5 To the extent known, a summary of the work programs on which the historical estimates or foreign estimates are based and a summary of the key assumptions, mining and processing parameters and methods used to prepare the historical estimates or foreign estimates

The historical resource was based on 39 diamond core drill holes totalling 4,573 m, incorporating drilling from three phases of drilling:

1970s Société Tunisienne d'Expansion Minière (SOTEM) contracted BulgarGeomin to drill eight shallow drill holes that intersected mineralisation in the Neogene dolomite breccia units.

1981-1986 Office National des Mines drilled more than 30 additional diamond drill holes from that outlined the main stratabound mineralised zone.

1987-88 ONM drilled five diamond core holes for 594m to obtain additional material for metallurgical testing.

5.12.6 Any more recent estimates or data relevant to the reported mineralisation available to the entity

The Company is not aware of any more recent estimates. Validation of the location and tenor of the mineralisation in the historical estimate is provided by:

1. The Independent Expert Report included in the 2004 Maghreb Minerals prospectus (CSA Group, 2004) documents 115 grab samples analysed by ALS Chemex, North Vancouver from intervals of mineralisation in the ONM drill core. The grab samples analyses showed similar grade range to the results reported by ONM for the same intervals.
2. In 2005, Maghreb Minerals drilled four shallow diamond holes to test the previously drilled mineralisation and reported significant mineralisation in four drill holes.
3. In 2007, Maghreb Minerals completed additional validation drilling and reported that results broadly conformed with historically reported results.

5.12.7 The evaluation and/or exploration work that needs to be completed to verify the historical estimates or foreign estimates as mineral resources or ore reserves in accordance with Appendix 5A (JORC Code)

The Company believes that the area of the historical estimate needs to be re-drilled with diamond core drilling to collect sufficient material to provide confidence on grade and tonnage estimation in accordance with Appendix 5A (JORC Code).

The Company is focused on the larger-scale exploration potential of the Djebba area and intends to explore for additional mineralisation in addition to validating the historical estimate.

5.12.8 The proposed timing of any evaluation and/or exploration work that the entity intends to undertake and a comment on how the entity intends to fund that work

The Company is currently in the process of acquiring all available historical data which will then be compiled and evaluated before a detailed work program is formulated. It is anticipated that it will be possible to complete significant exploration on the ground during 2019.

5.12.9 A cautionary statement proximate to, and with equal prominence as, the reported historical estimates or foreign estimates.

Cautionary statements have been provided proximate and with equal prominence as the reported historical estimate in the body of this release.

Celamin cautions that a Competent Person has not done sufficient work to classify this historical estimate as a Mineral Resource in accordance with the JORC Code 2012 Edition. It is uncertain that, following evaluation, it will be possible to report a Mineral Resource in accordance with the JORC Code 2012 Edition.

5.12.10 A statement by a named competent person or persons that the information in the market announcement provided under rules 5.12.2 to 5.12.7 is an accurate representation of the available data and studies for the material mining project. The statement must include the information referred to in rule 5.22(b) and (c)

The information described under rules 5.12.2 to 5.12.7 was compiled by Dr Neal Reynolds, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Dr Reynolds is employed by CSA Global Pty Ltd, independent mining industry consultants. Dr Reynolds has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Dr Reynolds confirms that the information provided is an accurate representation of all available information and data and consents to its inclusion in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1 report template

In Table 1 below, any foreign and historical data has been adopted at face value for indicative purposes only. Verification of the data as best as can be accomplished has indicated to the Competent Person that the data are fit for the purpose of supporting the Company's decision to proceed further with exploration towards a goal of being able to report Exploration Results, and other outcomes in accordance with the JORC Code. The company proposed exploration programme and time line are as outlined in responses to ASX LR 5.12.7 and 5.12.8.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> • All data presented herein are from past exploration activities prior to Celamin Holdings NL's (Celamin) involvement and have been obtained from records available at the time. • The Le Groupe SIDAM-Minorex report that describes the historic resource estimate does not describe sampling or analytical method, the later Madeiskey report confirms that the drilling method was diamond drilling but does not describe the previous sampling and analytical methods. • Based on information on standard past practice by the Office National des Mines, it is expected that half core was analysed at the ONM laboratory in Tunis by Atomic Absorption spectroscopy. • Celamin is endeavouring to obtain all relevant historical data and reports and, to the extent possible, plans to undertake a validation of the nature and quality.
Drilling techniques	<ul style="list-style-type: none"> • <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is</i> 	<ul style="list-style-type: none"> • Information available indicates diamond core drilling. The size of core is unknown at this time.

Criteria	JORC Code explanation	Commentary
	<i>oriented and if so, by what method, etc).</i>	
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i> 	<ul style="list-style-type: none"> • There is no documentation currently available on drill recovery.
Logging	<ul style="list-style-type: none"> • <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • There is no documentation currently available on drill logging.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • There is no documentation currently available on sub-sampling, but standard practice by ONM was to split half core samples for analysis

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> • There is no documentation currently available on analytical method or QAQC.
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • Maghreb Minerals attempted to resample the drill core from the SIDAM-Minorex and ONM drilling but the core was found to be in a very poor condition with most of the drill core missing. A total of 115 grab samples were taken from the available core and assayed by ALS Chemex North Vancouver for 32-element ICP-AES determinations. The 61 samples that assayed above the 50,000ppm detection limit for Zn or Pb were re-assayed using wet chemical method. Results showed good correspondence with the tenor of previous reported results. • Maghreb Minerals completed validation drilling in the 2000s. Data for the Maghreb drilling have not yet been obtained, but results reported to the London AIM market indicate that mineralisation was intersected that is similar in thickness and tenor to that previously drilled by ONM.
Location of data points	<ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • There is no documentation currently available on location of survey of drill collars.
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and</i> 	<ul style="list-style-type: none"> • AIM releases by Maghreb Minerals include a map that shows drill collar positions for previous ONM drilling and indicate that it was mostly drilled at about 50-60 spacing with wider c. 100m spaced holes at the fringes.

Criteria	JORC Code explanation	Commentary
	<p><i>Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> • <i>Whether sample compositing has been applied.</i> 	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<ul style="list-style-type: none"> • Maps and sections included in Maghreb AIM releases indicate that drilling was vertical and that mineralisation is sub-horizontal.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • There is no documentation currently available on sample security.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • Maghreb Minerals attempted to resample the drill core from the SIDAM-Minorex and ONM drilling but the core was found to be in a very poor condition with most of the drill core missing. A total of 115 grab samples were taken from the available core and assayed by ALS Chemex North Vancouver for 32-element ICP-AES determinations. The 61 samples that assayed above the 50,000ppm detection limit for Zn or Pb were re-assayed using wet chemical method. Results showed good correspondence with the tenor of previous reported results. • Maghreb Minerals completed validation drilling in the 2000s. Data for the Maghreb drilling have not yet been obtained, but results reported to the London AIM market indicate that mineralisation was intersected that is similar in thickness and tenor to that previously drilled by ONM.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or</i> 	<ul style="list-style-type: none"> • The Djebba Projects comprises one exploration permit of 16km² in size. It was granted on 3 July 2018 and has an initial 3-year term and is renewable for a further two 3-year terms subject to meeting the conditions of the

Criteria	JORC Code explanation	Commentary
	<p><i>national park and environmental settings.</i></p> <ul style="list-style-type: none"> <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i> 	permits.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> A brief history of previous exploration is included with this announcement.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> Mineralisation is hosted shallowly dipping stratabound dolomitic conglomerate lenses. These lenses are interbedded with sandstones and argillites in a secondary Miocene basin adjacent to a fault controlled diapiric structure.
Drill hole Information	<ul style="list-style-type: none"> <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i> 	<ul style="list-style-type: none"> There is no documentation currently available on the drilling information provided in this release.
Data aggregation methods	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>Where aggregate intercepts incorporate short lengths of high grade results</i> 	<ul style="list-style-type: none"> There is no documentation currently available on the data aggregation.

Criteria	JORC Code explanation	Commentary
	<p><i>and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	
<p>Relationship between mineralisation widths and intercept lengths</p>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> Available information indicates that mineralisation is sub-horizontal whereas drill holes are vertical, so intersections are expected to approximate true width.
<p>Diagrams</p>	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Summary plans are provided in this announcement.
<p>Balanced reporting</p>	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> Drill results are included in the release to provide support for the validity of the earlier drilling on which the historical resource is based; the results presented are as reported by Maghreb Minerals to AIM and are included in the Absence of original results from drilling by Maghreb Minerals.
<p>Other substantive exploration data</p>	<ul style="list-style-type: none"> <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> N/A
<p>Further work</p>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> 	<ul style="list-style-type: none"> A suitable work program will be developed following acquisition of additional data and a more comprehensive review, compilation and interpretation of all

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	available data.

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	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> There is no documentation currently available on the database integrity.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> No site visit has been completed by the Competent Person because this would not provide any validation of the historical resource estimate.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The historical estimate used a planimetric polygonal method. Based on available information, the mineralisation appears sub-horizontal and relatively simple to interpret and extrapolate between drill holes.
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> The mineralisation occurs in a zone that is about 600 m x 300 m in extent and at depths of 40 to 70 m based on plans and sections released by Maghreb Minerals No information is available on variability within this zone.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> • <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> • <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlation between variables.</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> • The historical resource used a planimetric polygonal estimation method where the average Zn and Pb grade of each intersection was applied to the polygon volume around that drill hole.
Moisture	<ul style="list-style-type: none"> • <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<ul style="list-style-type: none"> • The estimate utilised a density value of 2.6 which is expected to represent bulk dry density. No information is available regarding the basis for the density used but it is expected to be a conservative value for dolomite conglomerate-hosted mineralisation.
Cut-off parameters	<ul style="list-style-type: none"> • <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> • No information is available regarding the cut-off grade applied to the estimation

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> No information is available regarding the application of mining factors to estimation of the historical resource, however the report by Le Groupe SIDAM-Minorex report includes an assessment of mining the deposit by a combination of open-pit and underground methods
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> No information is available regarding the cut-off grade applied to the estimation. Metallurgical testwork documented in the Le Groupe SIDAM-Minorex report suggests that conventional flotation can be applied to the mineralisation to produce Zn and Pb concentrates.
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> No information is available regarding environmental factors, however the mineralisation is relatively low pyrite and occurs in carbonate rocks so acid generation is not expected to be an issue.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the 	<ul style="list-style-type: none"> No information is available regarding determination of bulk density. However the density value of 2.6 used in the historical estimate is

Criteria	JORC Code explanation	Commentary
	<p><i>frequency of the measurements, the nature, size and representativeness of the samples.</i></p> <ul style="list-style-type: none"> <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i> <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> 	<p>likely to be conservative for dolomite conglomerate-hosted mineralisation.</p>
Classification	<ul style="list-style-type: none"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<ul style="list-style-type: none"> The estimate is a historical estimate and has not been classified by a Competent Person
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> No audits or reviews are documented
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i> <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation</i> 	<ul style="list-style-type: none"> The estimate is a historical estimate using a polygonal method and is likely to provide only an approximation of an estimate using geostatistical methods.

Criteria	JORC Code explanation	Commentary
	<p><i>should include assumptions made and the procedures used.</i></p> <ul style="list-style-type: none">• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	