Pacifico Minerals Ltd

24 August 2018

Sorby Hills Resource Update to JORC 2012

CORPORATE DIRECTORY

Managing Director

Simon Noon

Directors

Richard Monti (Chairman)

Peter Harold (Non-exec.)

Andrew Parker (Non-exec.)

Company Secretary

Patrick Holywell

Registered office

Level 10, 553 Hay St

Perth WA 6000

Telephone:

+61 8 6266 8642

Facsimile:

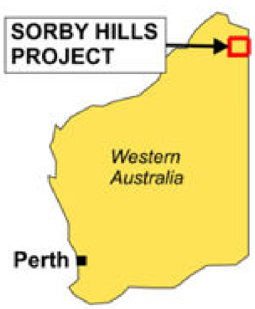
+61 8 9421 1008

Email:

info@pacificominerals.com.au

ASX Code: PMY

ABN 43 107 159 713



Pacifico Minerals Limited ("Pacifico" or "Company") is pleased to announce that it has upgraded the Mineral Resource estimate for the Sorby Hills Pb-Ag-Zn deposit near Kununurra, Western Australia to comply with the guidelines of JORC 2012. Pacifico recently entered into an agreement whereby the company is seeking to acquire a 75% interest in the Sorby Hills Project (Refer to 26 June and 30 July 2018 ASX Announcements for further details).

The Mineral Resource estimate previously reported under the JORC Code (2004 Edition) has been comprehensively review by resource specialists, CSA Global Pty Ltd (CSA) and Breakaway Mining Services Pty Ltd (BMS), for reporting in accordance with JORC 2012 guidelines. Pacifico has elected to upgrade its reporting to the new standard in preparation for the next phase of exploration at Sorby Hills and progressing the Project to development.

A key result of the review is that there has been no material change to the Mineral Resource Estimate previously reported by KBL Mining Limited (ASX: KBL) on 29 November 2013. Pacifico is pleased to provide further detailed information in the appendix of this announcement, prescribed by JORC Code (2012 Edition) "Table 1".

Mineral Resource Statement

Table 1 is a summary of the Sorby Hills JORC 2012 Global Mineral Resource Estimate at 14 August 2018. The global Indicated and Inferred Mineral Resource Estimate is **16.5 Mt grading 4.7% lead, 0.7% zinc and 53 g/t silver**. As Table 2 illustrates, the JORC 2012 estimate is not materially different from the JORC Code (2004 Edition) estimate. However, JORC 2012 is a more robust estimate as it includes additional drill holes within the DE Pod.

Table 1: New JORC 2012 Indicated and Inferred Global Resource Estimate for Sorby Hills at 2.5% Pb or Zn cut off[1]

Resource Category	Tonnes (kT)	Pb %	Zn %	Ag g/t	Pb+Zn %
Indicated	4,860	5.0	0.4	62	5.4
Inferred	11,640	4.6	0.8	49	5.4
Combined Total	**16,500**	**4.7**	**0.7**	**53**	**5.4**

[1] All pods reported against a Pb cut-off grade of 2.5% except Alpha Pod which is reported using a Zn>2.5% cut-off grade. Note that tonnes are rounded.

Table 2: Old JORC Code (2004 Edition) Indicated and Inferred Global Resource Estimate for Sorby Hills at 2.5% Pb or Zn cut off[1] (As Reported 22 December 2011)

Resource Category	Tonnes (kT)	Pb %	Zn %	Ag g/t	Pb+Zn %
Indicated	4,674	4.7	0.4	63	5.1
Inferred	11,988	4.5	0.9	48	5.3
Combined Total	**16,662**	**4.5**	**0.7**	**52.0**	**5.3**

[1] All pods reported against a Pb cut-off grade of 2.5% except Alpha Pod which is reported using a Zn>2.5% cut-off grade. Note that tonnes are presented as reported in 2011.

Table 3 provides a detailed break down of the new global Mineral Resource estimate at Sorby Hills by mineralised pod (see Figure 1), JORC 2012 classification and weathering profile.

Table 3: New Indicated and Inferred Mineral Resource Estimate for Sorby Hills by Pod and Weathering Profile

	Classification	Weathering Profile	Tonnes (kT)	Pb %	Zn %	Ag g/t
A Pod Pb	*Inferred*	Fresh	350	8.3	1.4	38
Alpha Pod Pb	*Inferred*	Oxide	180	4.0	0.2	46
	Inferred	Fresh	1,990	4.6	0.3	61
		Inferred Total	**2,170**	**4.5**	**0.3**	**59**
Alpha Pod Zn	*Inferred*	Fresh	1,320	0.5	4.0	31
B Pod Pb	*Inferred*	Fresh	790	5.7	0.3	33
Beta Pod	*Inferred*	Oxide	10	2.5	0.0	31
		Fresh	1,800	7.9	0.5	99
		Inferred Total	**1,810**	**8.0**	**0.5**	**98**
C Pod	*Indicated*	Oxide	140	3.3	0.2	22
		Fresh	540	3.4	0.5	18
		Indicated Total	**680**	**3.4**	**0.4**	**18**
	Inferred	Oxide	80	3.1	0.3	19
		Fresh	750	3.2	0.4	23
		Inferred Total	**840**	**3.2**	**0.4**	**22**
		Combined Total	**1,520**	**3.3**	**0.4**	**21**
DE Pod	*Indicated*	Oxide	371	5.0	0.2	54
		Fresh	2,020	6.0	0.5	63
		Indicated Total	**2,390**	**5.8**	**0.5**	**61**
	Inferred	Oxide	40	5.1	0.4	51
		Fresh	320	5.3	0.3	60
		Inferred Total	**360**	**5.3**	**0.3**	**59**
		Combined Total	**2,750**	**5.8**	**0.4**	**61**
F Pod	*Inferred*	Fresh	1,770	4.1	0.3	29
HI Pod	*Indicated*	Oxide	20	5.0	0.1	192
		Fresh	1,770	4.6	0.4	78
		Indicated Total	**1,790**	**4.6**	**0.3**	**79**
	Inferred	Oxide	60	3.3	0.1	140
		Fresh	2,170	4.1	0.4	40
		Inferred Total	**2,230**	**4.1**	**0.4**	**42**
		Combined Total	**4,020**	**4.3**	**0.4**	**59**
All Pods	*Indicated*	Oxide	530	4.5	0.2	51
		Fresh	4,330	5.1	0.4	63
		Indicated Total	**4,860**	**5.0**	**0.4**	**62**
	Inferred	Oxide	370	3.8	0.2	54
		Fresh	11,270	4.6	0.8	49
		Inferred Total	**11,640**	**4.6**	**0.8**	**49**
		Combined Total	**16,500**	**4.7**	**0.7**	**53**

[1] All pods reported against a Pb cut-off grade of 2.5% except Alpha Pod which is reported using a Zn>2.5% cut-off grade. Note that the tonnes are rounded.

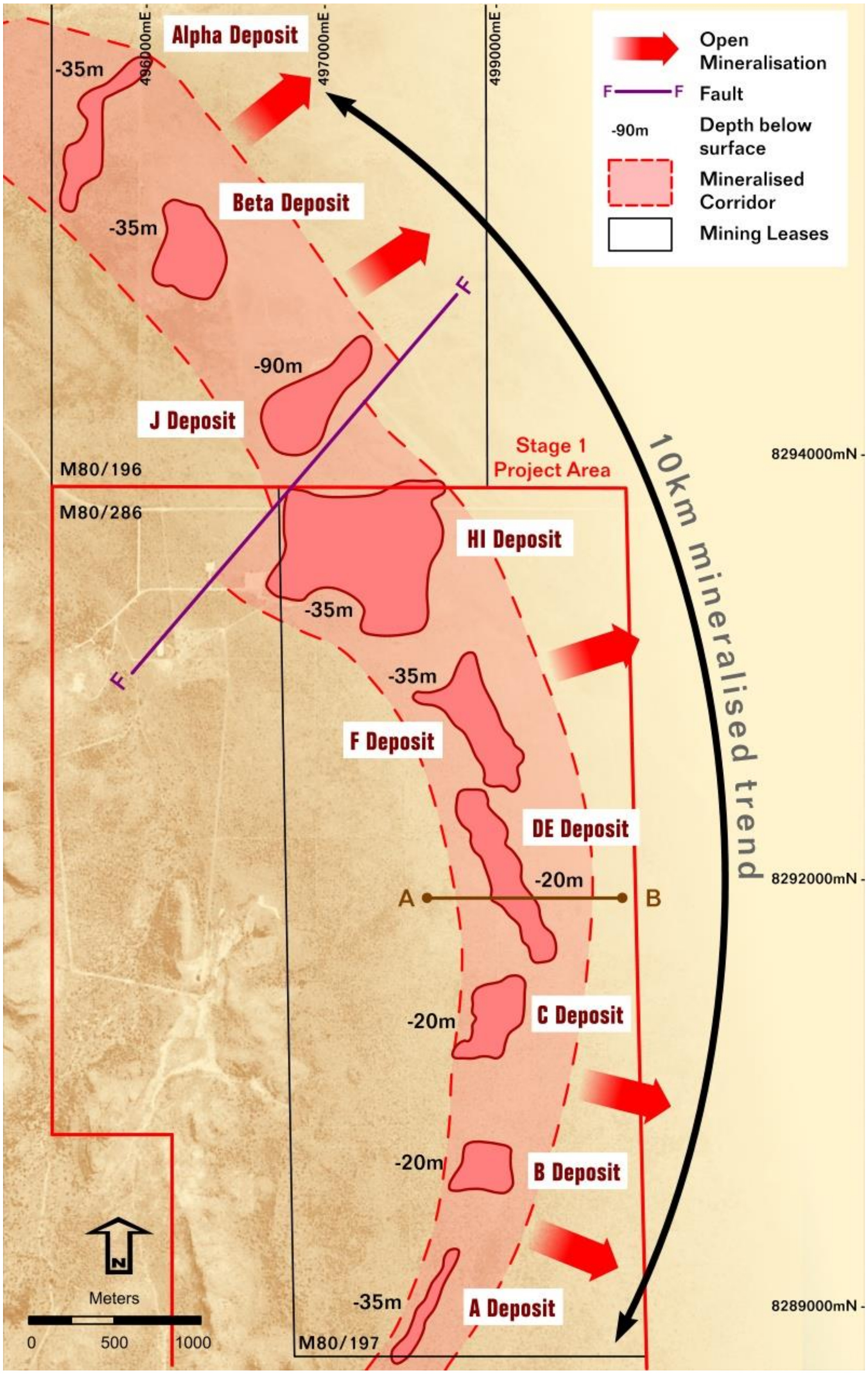


Figure 1: Location of Mineralised Pods at Sorby Hills

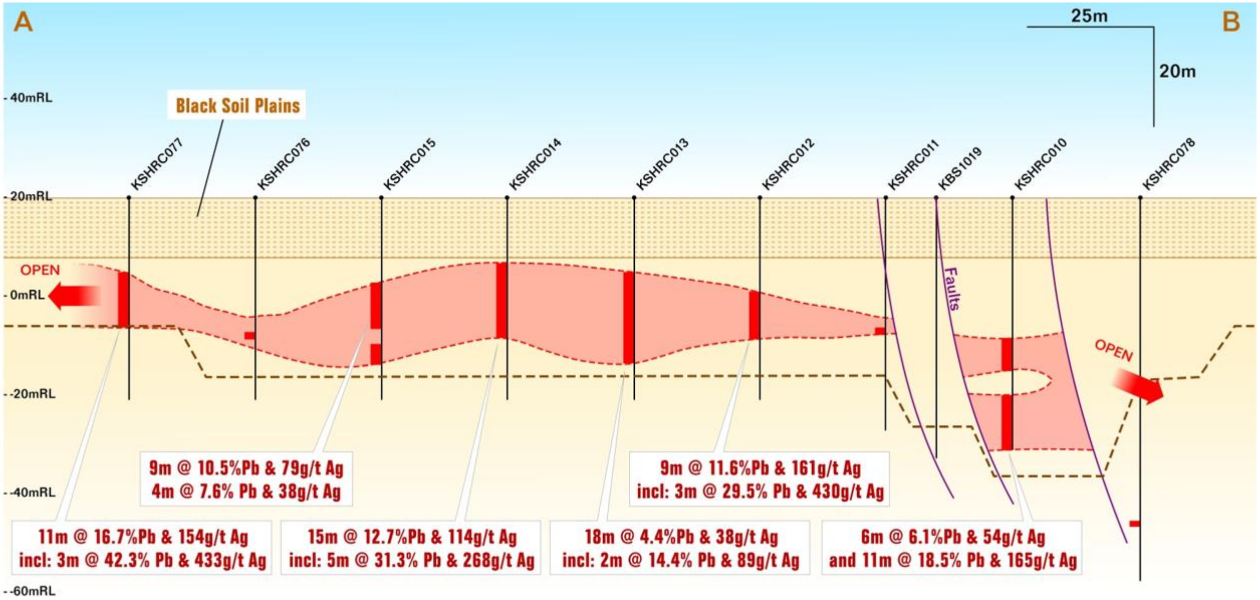


Figure 2: Cross Section Through the High-Grade Core of the DE Deposit Highlighting the Shallow Nature and Continuity of Mineralisation

Project Development Strategy

Assuming successful completion of the acquisition, Pacifico will commence an aggressive exploration program to test the significant upside potential identified within the Sorby Hills Project area, which could lead to an increase in the resource base, the Company will also re-evaluate the Project economics through a Scoping Study that could lead directly to a Bankable Feasibility Study and a new ore reserve estimate. As part of this process, the Company is currently undertaking a review of the modifying factors and assumptions made by KBL Mining Limited in relation to Sorby Hills Project (see ASX:KBL announcement dated 29 November 2013).

Planned Drilling Program

Planning is currently underway for the next phase of drilling at Sorby Hills. The main aims of the proposed 100+ hole RC and diamond drilling program (~6,000m) are, as follows:

- to increase the resources, in or near the current pit outlines;
- to test drill interpreted faults identified from geophysical surveys, and gravity anomalies, to better understand their relationship to suspected higher grade lead occurrence, and,
- to increase the zinc Mineral Resource estimate particularly in some northern pods where previous exploration by others has identified excellent potential.

Details of the planned drilling program will be reported to the ASX once finalised.

Material Information Summary

A summary of JORC 2012 Table 1 is provided below for compliance with the Mineral Resource estimate and in-line with the requirements of ASX listing rule 5.8.1.

Tenure

The Sorby Hills Pb-Ag-Zn deposits, contained within mineralised pods A, B, C, DE, F, HI, J, Alpha and Beta deposits, lie within five mining leases (M80/196-197 and M80/285-287), all of which are currently held jointly between KBL Sorby Hills Pty Ltd (75%) and Henan Yuguang Gold & Lead Co. Ltd (25%) (Table 4).

Table 4: Sorby Hills Tenements

Tenement	Area (km^2)	Granted	Expiry
M80/196	9.99	22/01/1988	21/01/2030
M80/197	9.95	22/01/1988	21/01/2030
M80/285	5.57	29/03/1989	28/03/2031
M80/286	7.89	29/03/1989	28/03/2031
M80/287	8.15	29/03/1989	28/03/2031

Geology & Geological Interpretation

The Sorby Hills Pb-Ag-Zn deposits are regarded as having many features typical of Mississippi Valley Type (MVT) deposits. The mineralisation occurs within 9 currently identified carbonate hosted deposits (pods). The pods form a linear north-south belt extending over 8 km, sub parallel to the eastern margin of the Precambrian Pincombe Inlier and within the Carboniferous Burt Range Formation of the Bonaparte Basin. The mineralisation is largely stratabound and hosted mainly in dolomitric breccia which is typically developed at the contact of a crystalline dolomite unit and overlying dolomitic siltstone which generally dips shallowly to the east.

The mineralised pods average 7-10m in thickness, are generally less than 1 km long and 100 to 500m wide. There is some structural control to the mineralisation, with higher grade zones associated with faulting. The deposits also appear to subparallel the two main fault trends. Mineralisation is often thicker and of higher grade in areas of strong brecciation.

The Sorby Hills primary mineralisation is typically silver and lead-rich (mainly in galena), with moderate to high pyrite (FeS_2) content and generally low amounts of sphalerite (ZnS). The galena (PbS) occurs as massive to semi massive crystalline lenses often found in the more argillaceous units, and as coarse to fine disseminations or as open-space fill in fractures, breccias and vugs. Sphalerite typically predates galena and occurs as colloform open-space fill. It is typically more abundant at the lateral fringes of and below the lead mineralisation. Silver values tend to increase as the lead content increases and is generally assumed to be closely associated with the galena. A discrete pyrite zone is seen to occur below the base-metal mineralisation.

There is reasonable confidence level in the geological interpretation of the mineral deposits, sufficient to assume geological and grade continuity in the Indicated volumes.

The geological interpretation involved dividing the deposits into mineralised zones, essentially based on assay data, and identifying the fresh, transition and oxide zones from geological logging and mineralogy.

There appears to be limited scope for alternative interpretations. The mineralised zones are quite clearly defined, while the oxidation zones are a little more subjective. It is considered unlikely that alternative interpretations would have a substantial impact on the Mineral Resource estimates due to the generally close spacing of the data points.

The mineralised zones were treated having hard boundaries during grade estimation, while the oxidation boundaries were treated as soft boundaries, due to their gradational nature.

The major factor affecting the continuity of both grade and geology is the distribution of host breccias which appear to be mainly developed along local unconformities between the dominant dolomite and siltstone lithologies present at Sorby Hills. Cross-cutting faults that truncate or displace mineralisation and geology, are also known from the deposit.

Drilling Information

The total number of drill holes at the Sorby Hills project area for A, B, C, DE, F, HI, J, Alpha and Beta deposits since its discovery in 1971 comprises 1128 surface drill holes for a total of 110,941.7m of drilling.

One thousand and eighteen (1018) RC drill holes, diamond drill holes and RAB drill holes for 108,123.3m have been drilled into the total Sorby Hills project area from the data provided by KBL.

The modelling domain within which the DE Deposit Mineral Resource was estimated is centred on the DE Deposit area, but also contains the C Deposit to the south and F Deposit to the north. Four hundred and seventy five (475) drill holes occur within the bounds of the modelling domain. Of these 169 diamond and RC drill holes intersect the mineralisation wireframes associated with C, D/E and F Deposits.

Drill hole collars to have been accurately surveyed in using a licensed surveyor. Drill hole collars co-ordinates have been recorded using a Real Time DGPS. Pre-2007 drilling was been converted from a local metric grid.

99.5% of all drill holes are vertical drill holes.

Hole spacing varies but drilling is mostly completed on a 20-30 (E-W) metre by 30-40 (N-S) metre drill pattern. lnfill drilling has achieved a closer spacing in many parts of the main DE deposit area. The likelihood that mineralisation is developed in an orientation other than that interpreted is low since the drilling is on an average 25 metre by 35 metre drill patterns.

Sampling/Sub-Sampling Techniques & Assay Database

The Sorby Hills Ag-Pb-Zn deposit has been explored over a period of almost 50 years by many companies including ELF Aquitaine (1973-1981) with various JV partners (SEREM, St Joe Bonaparte & BHP), BHP (1981-1988), in JV with Triako; and CBH/Kimberley Metals/KBL Mining. Variations in techniques or procedures applied by each exploration company are outlined in this report as appropriate.
The Sorby Hills deposit was sampled with drill chips from reverse circulation (RC) drilling, and with diamond drill hole (DD) core of PQ, HQ and NQ size.

A total of 26,859 samples from 1018 assayed drill holes were analysed in total at Sorby Hills for diamond, RC and RAB drill holes within the Sorby Hills database provided by KBL. Only the assays for the resource defined RC and diamond drill holes totalling one-hundred-sixty-nine (169) of C, D/E and F Pod deposits have been used by BMS.
The drilling procedures have been reviewed but not been investigated by BMS and QA/QC have been reviewed but not been investigated by BMS.

Some if the 2011 drilling samples which were not split off the drill rig because of the constant danger of water ingress clogging up the cyclone and core splitter when hitting a cavity. Drilling was suspended when water/wet samples were encountered, and the hole dewatered prior to recommencement of drilling. Instead, a PVC pipe spear was used to obtain approximately 2kg of sample from a representative cross section of the entire 1m sample. KBL considered this to be the best means of sample collection avoiding potential for contamination within a sample splitter. No duplicate samples or blanks were submitted in 2011 but were included in the 2010 drilling.

Metallurgical Test Work

Metallurgical test work undertaken to-date indicates that standard flotation circuitry will achieve high quality concentrates of 55% - 69% lead. Excellent Pb and Ag recoveries of 91% and 87% respectively, are achievable with a conventional crushing, grinding and flotation circuit. Test work also shows that the ore responds well to cyanide free reagents.

Ag-Pb recovery and concentrate grade assumptions are based mainly on test-work conducted on drill core samples from the Sorby Hills deposit carried out in the laboratories of the Technical Services Department of Mount Isa Mines Limited, Mount Isa in the late 1970s and early 1980s. Subsequently, CBH Resources commissioned AMML to carry out a test work program to confirm the results of the Mount Isa Mines work and investigate the replacement of sodium cyanide (NaCN), used as a depressant for iron pyrite and zinc sulphide, by alternative reagents. The results of this work appeared in AMML Report 0034-1 dated 8 August 2008. Further test work was carried out by AMML for Sorby Management, following the change in ownership of the Sorby Hills project. The results appeared in Report 0194-1 dated 24 Oct 2011.

Estimation Methodology

Wire-framed solid models of geological and mineralisation domains were created from cross-sections, geological maps and drill-hole data. Mineralised domains are generally stratabound and demonstrate reasonable sectional continuity given the style of mineralisation. The mineralised domain models are considered appropriate in the context of the Mineral Resource classifications applied to this estimate. Block models for the global Mineral Resource (all pods except DE) and the DE pod was constructed with block sizes 25 m (N) by 25 m (E) by 5 m (Z).
Mineralisation is present as mineralised domains defined by lithological boundaries, where possible, and Pb grades where Pb>1%. The Alpha Pod was interpreted based upon a Zn cut-off grade of Zn>1%. High grade cuts were determined by using the domain statistics for the CLBM and DIID domain. Percentile analysis as well as histogram and log probability plots were used to determine the high-grade cut required to remove high grade outliers that may have too much of a global influence on the global resource. The composites of the drill holes assayed were then generated with run lengths of 1m to reflect the majority of assay sample length of 1m.
Variogram models were calculated using top cut and composited data and the resultant nugget, sills and ranges used in the ordinary kriging algorithm. Composited data from the I and DE pods were used to model the variograms.

Ordinary Kriging (OK) with an oriented ellipsoid search was used to estimate Pb, Ag and Zn grades in the lead domains. Maximum samples per block estimate of 25 (DE pod) and 30 for the other pods were used per block estimate. A maximum of 3 samples were used per drill hole per block estimate. Parent cell discretisation of 4x4x1 were used.

The density equation used in the Mineral Resource estimate was derived from 119 density measurements taken from drill core samples of the various mineralised rock types at Sorby Hills deposits and takes into account an assumption of increasing porosity with increasing lead grade. Unique formulae were applied to the block model according to lithological domain (dolomitic siltstone, crystalline dolomite and dolomite breccia) and the weathering profile (oxide, transitional or fresh rock).

For DE Deposit the mineralisation body strikes approximately 340 degrees, and with average dips varying between 40 and 60 degrees to the East. The block model is not rotated. The grade variables populated in the block model were Pb, Ag, Zn, Fe and S. The OK weighting method was applied to Pb, Ag and Zn mineralised blocks. The inverse distance weighting method was applied to Fe and S. Block discretisation was set to 4 by 4 by 1. The block models were validated by swath plots, comparison with mean block and sample grades per domain, and stepping through cross sections of the model and comparing drill sample and block grades.

Classification

Inferred and Indicated Mineral Resources, reported above a 2.5% Pb cut-off, were classified according to the guidelines of the 2012 edition of the JORC Code. The classification included consideration of data quality and distribution, spatial continuity, confidence in the geological interpretation and estimation confidence. The Indicated Mineral Resource Estimate for DE deposit was classified within an area with approximately 25m x 35m drill density, whilst the Indicated Mineral Resource in the C and I deposits are based upon a drilling density of 50 m (N) by 25 m(E). The Inferred Mineral Resource is constrained within an area of drilling density of greater than 25 m by 35 m (D-E pods), and typically 50 m by 50 m for the other pods.

JORC 2012 Table 1

In accordance with section 5.8.2 of the ASX listing rules, Section 1 (Sampling Techniques and Data), Section 2 (Reporting of Exploration Results), and Section 3 (Estimation and Reporting of Mineral Resources) of Table 1 of Appendix 5A (JORC Code) is attached as Appendix A to this announcement.

For further information or to be added to our electronic mailing list please contact:

Simon Noon (Managing Director)
Phone: +61 (0)8 6266 8642
Email: info@pacificominerals.com.au

About Pacifico Minerals Ltd

Pacifico Minerals Ltd ("Pacifico") (ASX: PMY) is a Western Australian based exploration company with interests Australia, Mexico and Colombia. In Australia the company is currently focussed on evaluating the Sorby Hills project in WA. Pacifico is also advancing the Borroloola West project in the Northern Territory which covers an outstanding package of ground north-west of the McArthur River Mine (the world's largest producing zinc – lead mine) with high potential for the discovery of world class base metal deposits. Licences have been recently granted for ground prospective for cobalt and other 'battery metals' in South Australia. In Mexico Pacifico has acquired an option to purchase 100% interest in the Violin project which has high prospectivity for the development of a major gold-copper deposit. In Colombia the company is focussed on advancing its Berrio Gold Project which is situated in the southern part of the prolific Segovia Gold Belt.

Competent Person Statement

The information that relates to Mineral Resources for the DE pod is based on, and fairly represents, information compiled by Mr Geoff Reed, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Reed is employed by Breakaway Mining Services, an independent consulting company. Mr Reed has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity 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'. Mr Reed consents to the inclusion of the matters based on his information in the form and context in which it appears.

The information that relates to Mineral Resources for the A, B, C, F, H, I, Alpha and Beta pods is based on, and fairly represents, information compiled by Mr David Williams, a Competent Person, who is a Member of The Australian Institute of Geoscientists. Mr Williams is employed by CSA Global Pty Ltd, an independent consulting company. Mr Williams has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity 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'. Mr Williams consents to the inclusion of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• The Sorby Hills resource estimate is primarily based upon geological and assay data from reverse circulation (RC) and diamond drilling programs completed at Sorby Hills from 2007 until 2011. The total number of drill holes at the Sorby Hills project area for A, B, C, D, E, F, G, H, G, I, J, Alpha and Beta deposits comprises 1128 surface drill holes for a total of 110,941.7m of drilling. The total number of drill holes used in the resource estimate for C, D, E and F deposits comprises 169 surface diamond and RC drill holes for a total of 11817.5m of drilling. • Diamond core was typically sampled at regular 1m intervals. Some core was sampled at different intervals to reflect lithological boundaries. Various core diameters were used including BQ, NQ and HQ. • For RC sampling was conducted typically at 2m intervals for the entire length of the hole. Where RC was used for the precollar it was either sampled at 2m intervals or not sampled at all. • The sampling methodology is considered representative and appropriate for the style of mineralisation at Sorby Hills (MVT).

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr>
<td>Drilling techniques</td>
<td>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</td>
<td>
Drilling methods used during exploration at Sorby comprise a mix of mud rotary, conventional reverse circulation (RC), RAB and diamond drilling. Table1, below summarises drilling methods employed:
Table 1: Summary of Drilling at Sorby Hills
<table>
<tr><th>Drill Hole Series</th><th>Drilling Methods</th><th>Year</th></tr>
<tr><td>DDH1-DDH65</td><td>Diamond coring with unspecified precollar (mud rotary)</td><td>1972-1973</td></tr>
<tr><td>Rl -R29</td><td>Rotary Percussion (some open hole RC)</td><td>Unknown</td></tr>
<tr><td>FDH1 -FDH89</td><td>Conventional RC using VPRH rig</td><td>1974</td></tr>
<tr><td>WBS1001 -W8S1157</td><td>Mud rotary and RAB precollars with diamond tail</td><td>1975</td></tr>
<tr><td>WBS2000-WBS2159</td><td>Conventional RC using VPRH rig (possibly some open hole)</td><td>1975</td></tr>
<tr><td>WBS3000 -WBS3039</td><td>Rotary (probably open hole)</td><td>1975</td></tr>
<tr><td>WBS4000 -WBS4205</td><td>Rotary (Mostly open hole some conventional RC)</td><td>1976-1979</td></tr>
<tr><td>WBS5000 -WBS5095</td><td>Mud rotary precollars diamond tails</td><td>1978-1979</td></tr>
<tr><td>WBS6000 -WBS6057</td><td>Some RAB some mud rotary precollars with diamond tails</td><td>1980</td></tr>
<tr><td>WBS7000 -WBS7035</td><td>RAB and conventional RC</td><td>1980</td></tr>
<tr><td>CSHDD001-CSHDD029</td><td>Diamond coring with open precollar (mud rotary)</td><td>2007</td></tr>
<tr><td>ISHDD001-ISHDD006</td><td>Diamond coring with open precollar (RC)</td><td>2010</td></tr>
<tr><td>ISHRC001-ISHRC047</td><td>Conventional RC using T685WS Schramm rig</td><td>2010</td></tr>
<tr><td>DSHRC001-DSHRC024</td><td>Conventional RC using T685WS Schramm rig</td><td>2010</td></tr>
<tr><td>CSHRC001-CSHRC024</td><td>Conventional RC using T685WS Schramm rig</td><td>2010</td></tr>
<tr><td>IPRC001-IPRC004</td><td>Conventional RC using T685WS Schramm rig</td><td>2010</td></tr>
<tr><td>DSHDD001-DSHDD002</td><td>Diamond coring with open precollar (RC)</td><td>2010</td></tr>
<tr><td>CSHDD0030-CSHDD031</td><td>Diamond coring with open precollar (RC)</td><td>2010</td></tr>
<tr><td>KSHRC002-KSHRC100</td><td>Conventional RC</td><td>2011</td></tr>
</table>
Samples taken by open hole drilling are not used in the current resource calculation.
Work continues gathering further details on previous drilling and will be progressively added to the drilling database.
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<tr>
<td>Drill sample recovery</td>
<td>Method of recording and assessing core and chip sample recoveries and results assessed.
Measures taken to maximise sample recovery and ensure representative nature of the samples.</td>
<td>Core recovery for the recent diamond drilling (post-2007) averaged 91.3% with most core loss occurring in the regolith at <30m depth. Core recovery in the mineralised zone was variable due to local fracturing and weathering along discrete fault zones, however, most recoveries exceeded 95%. Diamond core through the mineralised zone is typically NQ diameter.
In 2007-2010, to maintain sample integrity each RC bag collected from the cyclone was weighed with the weight in kilograms and moisture content recorded. Bag weights were generally consistent with</td>
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Criteria	JORC Code Explanation	Commentary
	• *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.*	the average bag weighing 25kg however poor sample recoveries (<20kg) are noted in the initial 10m of alluvial cover.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Logging of lithology and confirmation of mineralisation in RC chips was carried out at the rig by a qualified geologist. Logging of diamond core typically occurred after transport of the core to the to the Sorby Hills core-yard where it is stored. Trays containing representative RC chip samples from each sampled interval have been stored in Kununurra from 2O07 onwards.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Core was cut in half at site using a diamond saw. Half core samples were collected and placed in pre-numbered calico bags. Samples were collected by the project geologist and geo-technician and placed into poly-weave bags for transport to the laboratory. • In 2O07-2010, RC samples were collected at 1m intervals using a trailer-mounted cone splitter attached to the drilling rig. 2-3kg of split material for each metre was collected in a calico bag to be submitted for assay. • In 2011 drilling samples were not split off the drill rig because of the possibility of water ingress clogging up the cyclone and cone splitter when hitting a cavity. Drilling was suspended when water/wet sample encountered, and the hole dewatered prior to recommencement of drilling. Instead, a PVC pipe spear was used to obtain approximately 2-3kg of sample from a representative cross section of the entire 1m sample. KBL considered this to be the best means of sample collection avoiding potential for contamination within a sample splitter. • In 2011, using an Olympus lnnov-X portable XRF analyser at the rig, readings over 1% lead, 1% zinc and/or 20ppm silver were regarded as anomalous and were sampled at 1m intervals with at least 2m either side (regardless of XRF reading) also collected as individual metre samples. Samples with lower, background, metal levels were amalgamated into 4m composite intervals.
Quality of assay data and	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered*	• Drill core and rock chip samples were assayed to accepted industry standards at nationally certified laboratories such as ALS, SGS and Genalysis. Multi-acid digestion of pulverised sample was followed by ICP-AES or equivalent assay technique. • Assays from additional Rotary Percussion and VPRH drill holes were not used in the BMS Resource

Criteria	JORC Code Explanation	Commentary
laboratory tests	*partial or total.* • *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.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	Estimate, owing to uncertainty in the sample integrity from these methods, in particular the potential for contamination associated with wet sample return. • During post-2007 drilling, standards were inserted at least every 30 samples in the stream, consisting of Certified Ore Grade Base Metal Reference Material provided by Geostats Pty Ltd. The standards selected covered a range of lead and silver concentrations and there is good agreement between the Pb and Ag assays, and the mean values provided with the reference standards. For the standards the assayed values were typically within one standard deviation and more commonly below the mean suggesting that grade overestimation is not a significant problem in the dataset. • Duplicates and Blanks were included in the 2010 drilling but not the 2011 drilling. • Check-samples sent to umpire laboratories in 2010 showed good agreement between ALS and Genalysis laboratories.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• In 2007 14 twin holes were drilled using HQ diamond core into Beta Pod, I Pod, D Pod and C Pod, to enable an assessment of the oxide and sulphide mineralisation within the deposit and also test the three historic drilling methods. The results from the twin holes display very poor grade and thickness correlation with the historic holes. The data suggested that a high degree of grade variability exists within the deposit and there is evidence of grade smearing in the open hole and RC assay data. To address the lack of confidence in the historic data (pre-2007), it will be necessary to undertake more drilling to verify that historic data is valid and gain greater confidence in the deposit model, particularly outside of the more intensely drilled DE Deposit. Two twinned holes were drilled in the 2010 drilling campaign at I pod, to test repeatability of drill results and compare drilling methods. The assay results showed close correlation of Pb, Zn and Ag grades in one of the twins (drilled 1.5m apart) but only close correlation for Ag and Zn in the second. Sporadic mineralisation of this nature comprising veins, pods and vugs is observed in drill core and demonstrates the need for further twinning of drill holes as the project advances as well as the need for close spaced drill patterns (e.g. 25m x 25m) and a detailed review of variography when conducting resource modelling. • Geological logs were recorded on A3 paper log sheets and digitally entered into data entry templates in MS Excel and entered into a relational SQL database. • Assay certificates were received from the analytical laboratories and imported into the drill database. • No adjustment was made to the data.
Location of data points	• *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.* • *Specification of the grid system used.*	• Pre-2007 drill hole collars have been accurately surveyed in local grid. Drill hole collar co-ordinates have also been converted to GDA94 Zone 52 grid as recorded in the KBL Mining Drilling database. • Post 2007 drill hole collars have been accurately surveyed by DGPS. Drill hole collar co- ordinates have been recorded in GDA 94 grid in the KBL Mining Drilling database. • Over 95% of drill holes are vertical with 90% having no down-hole surveys. • An analysis of the trajectory of vertical holes accompanied drilling in 2010. Down-hole surveying of

Criteria	JORC Code Explanation	Commentary
	• *Quality and adequacy of topographic control.*	dip and azimuth for diamond holes was conducted using a single shot, Eastman down-hole camera. Holes drilled from surface were surveyed at 15m to minimise interference from the rig and every 30m after that to the end of hole. RC hole orientations were surveyed using a single shot Pathfinder down-hole electronic camera. Holes were surveyed at 6m below surface and every 30m after that to the end of hole. As a result of this work, it was determined that most of the diamond drill holes remained relatively vertical with very little down-hole deviation with dip consistently between 88° and 90°. As expected there was a slight deviation with holes lifting towards the west, perpendicular to the plane of bedding which dips gently towards the east. Most RC holes remained close to vertical with little down-hole deviation, dipping consistently between 87° and 90°. There was a slight deviation with RC holes lifting towards the southwest. • As the drilling intersecting the DE Deposit is concentrated within 140m of surface (mostly <70m from surface), a small deviation in hole azimuth and dip of vertical holes would not introduce significant uncertainty as to the sample location.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The DE Deposit mineralisation has been intersected on 35 drilling sections and is so far known to extend to at least a depth of 140m below the surface. • Hole spacing varies but drilling is mostly completed on a 20-30 (E-W) metre by 30-40 (N-S) metre drill pattern. Infill drilling has achieved a closer spacing in many parts of the main DE deposit area. The likelihood that mineralisation is developed in an orientation other than that interpreted is considered to be low since the drilling is on an average 25 metre by 35 metre drill patterns. • The data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and classifications applied. • Sample compositing was not carried out.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• Approximately 95% of drill holes are vertical with 90% having no down hole surveys. The diamond drilling program conducted in 2007 was a mixture of vertical and inclined holes. • It is not considered that there is a significant sampling bias due to structure. • Future drilling programs will include holes aimed at known structure to gain a better understanding of the degree to which structure influences mineralisation.
Sample security	• *The measures taken to ensure sample security.*	• The various companies that drilled the deposit maintained their own sample security measures. All sampled core was transited to assay laboratories either by company personnel or by courier. All remaining core is securely stored on site.

Criteria	JORC Code Explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Reviews of historical drilling were undertaken in 2007 and 2010 by CSA Global consultants to determine what work was required to upgrade the Sorby Hills resources from Inferred to JORC (2004) compliant Indicated Resource category. It was determined that the historical non-diamond drilling results could only be used in general terms. There are serious unresolved questions about the quality and methods of sampling from the historical open hole rotary and percussion methods (e.g. VPRH). Essentially, this has meant that the main deposit areas have been subsequently drilled out with modern techniques to less than 50m spacing (with dry sampling) with approximately 25m spacing over the higher-grade areas (e.g. DE Deposit, I Deposit) to eliminate reliance on old drilling for resource estimation.

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	• *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 national park and environmental settings.* • *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.*	• Pacifico Minerals Ltd has a binding agreement to acquire 75% of the Sorby Hills lead-silver project in Western Australia with Henan Yuguang Gold & Lead Co. Ltd (HYG) owning the remaining 25%. The Sorby Hills Project comprises five mining leases (M80/196-197 and M80/285-287) (see Table 2 below), all of which are currently held jointly between KBL Sorby Hills Pty Ltd (75%) and Henan Yuguang Gold & Lead Co. Ltd (25%). ***Table 2: Sorby Hill Tenement Summary*** **Tenement** / **Area (km²)** / **Granted** / **Expiry** M80/196 / 9.99 / 22/01/1988 / 21/01/2030 M80/197 / 9.95 / 22/01/1988 / 21/01/2030 M80/285 / 5.57 / 29/03/1989 / 28/03/2031 M80/286 / 7.89 / 29/03/1989 / 28/03/2031 M80/287 / 8.15 / 29/03/1989 / 28/03/2031 • The Mining Leases are centred at coordinates 128°57’E, 15°27’N. • The project area is approximately 50 km north-northeast of the township of Kununurra and covers a total area of 12,612.40 hectares (ha). • Native title has not been granted over the area. • The project area lies adjacent to proposed Goomig Range Conservation Park. • Tenure is in good standing until 2030 (in some cases, out to 2031. M80/286 & M80/197

Criteria	JORC Code Explanation	Commentary
		have a current cultural clearance access agreement in place; for the remaining mining tenements normal cultural clearance plans would be required. No mining agreement has been negotiated.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Sorby Hills area has been systematically explored by numerous companies since 1971. Prominent amongst these were ELF Aquitaine (1973-1981) with various JV partners (SEREM, St Joe Bonaparte & BHP), BHP (1981-1988), in JV with Triako; and CBH/Kimberley Metals/KBL Mining. • Previous work included, geologic mapping, soil geochemistry, airborne and ground geophysics and extensive drilling campaigns.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Sorby Hills mineralisation is regarded as having many features typical of Mississippi Valley Type (MVT) deposits. • The Sorby Hills mineralisation consists of 13 discrete carbonate hosted Ag Pb Zn deposits (pods), Pods A – J, Beta Pod East, Beta Pod West and Alpha pod. The pods form a linear north-south belt extending over 8 km, sub parallel to the eastern margin of the Precambrian Pincombe Inlier and within the Carboniferous Burt Range Formation of the Bonaparte Basin. • The mineralisation is largely stratabound and hosted mainly in dolomitic breccia which is typically developed at the contact of a crystalline dolomite unit and overlying dolomitic siltstone which generally dips shallowly to the east. • The mineralised pods average 7-10m in thickness, are generally less than 1 km long and 100 to 500m wide. There is some structural control to the mineralisation, with higher grade zones associated with faulting. The deposits also appear to subparallel the two main fault trends. Mineralisation is often thicker and/or of higher grade in areas of strong brecciation. • The Sorby Hills primary mineralisation is typically silver and lead-rich with moderate to high pyrite ($FeS2$) content and generally low amounts of sphalerite (ZnS). Galena (PbS) occurs as massive to semi massive crystalline lenses often found in the more argillaceous units, and as coarse to fine disseminations or as open-space fill in fractures, breccias and vugs. Sphalerite typically predates galena and occurs as colloform open-space fill. It is typically more abundant at the lateral fringes of and below the lead mineralisation. Silver values tend to increase as the lead content increases and is generally assumed to be closely associated with the galena. A discrete pyrite zone is seen to occur below the base-metal mineralisation. • The upper potions of the deposits are often oxidised and composed of a variable mix of cerussite ($PbCO3$) and galena. Cerussite has also been observed deeper in the deposits where faults, fractures and or cavities have acted as conduits for meteoric waters. The extent to which secondary lead minerals exist through the deposit has not been systematically documented; however, it is likely that other lead-oxide minerals are

Criteria	JORC Code Explanation	Commentary
		present.
Drill hole Information	• *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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *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.*	• Not Applicable. This announcement refers to the Resource Estimation of the Sorby Hills Ag-Pb-Zn deposit and is not a report on Exploration Results. All drill intersections since 2007 have been previously released to the market and can be viewed on KBL Mining website for ASX reports on exploration results. • The total number of drill holes at the Sorby Hills project area for A, B, C, D, E, F, G, H, G, I, J, Alpha and Beta deposits since its discovery in 1971 comprises 1128 surface drill holes for a total of 110,941.7m of drilling. • The modelling domain within which the DE Deposit Mineral Resource was estimated is centred on the DE Deposit area, but also contains the C Deposit to the south and F Deposit to the north. 475 drill holes occur within the bounds of the modelling domain. Of these 169 diamond and RC drill holes intersect the mineralisation wireframes associated with C, D/E and F Deposits. Only Mineral Resources from the DE deposit are reported in this release. • A complete listing of all drill hole details and drill hole intercepts used in resource estimates is not appropriate for this document. All drill hole information has been previously reported and its exclusion does not detract from the understanding of this report. • In general, the exploration has been well documented in company annual reports.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results 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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No exploration results are reported in this document • No aggregated exploration data is reported here. • No metal equivalents are reported here.
Relationship between mineralisation widths and	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should*	• No exploration results are reported here. • The stratabound mineralisation at Sorby Hills is generally gently dipping and drilling intercepts are typically close to true width.

Criteria	JORC Code Explanation	Commentary
intercept lengths	*be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	
Diagrams	• *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.*	• No exploration results are reported here.
Balanced reporting	• *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.*	• No exploration results are reported here.
Other substantive exploration data	• *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.*	• Since the discovery of Sorby Hills base metal deposit in 1971 considerable geological information concerning the mineralisation and its host has been compiled. Similarly, numerous geochemical soil surveys and geophysical surveys have been conducted across the tenement package. This information is well documented in company annual reports and can be readily accessed via the WA Department of Mines and Petroleum website. • Extensive metallurgical test work on drill core samples from the Sorby Hills deposit was carried out in the laboratories of the Technical Services Department of Mount Isa Mines Limited, Mount Isa in the late 1970s and early 1980s. • Subsequently, CBH Resources commissioned AMML to carry out a test work program to confirm the results of the Mount Isa Mines work and investigate the replacement of sodium cyanide (NaCN), used as a depressant for iron pyrite and zinc sulphide, by alternative reagents. The results of this work appeared in Report 0034-1 dated 8 August 2008. Further test work was carried out by AMML for Sorby Management, following the change in ownership of the Sorby Hills project. The results appeared in Report 0194-1 dated 24 Oct 2011. • Based on the work undertaken by MIM and AMML, Pacifico anticipates that concentrates grading approximately 55%Pb at an overall recovery of 91% Pb and 87% Ag, will be obtained from the Sorby Hill base metal ores.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of*	• Additional drilling is planned to improve geological confidence, to upgrade the resource to higher confidence categories (i.e. from inferred to Indicated Resource, and from Indicated Resource to Measured Resource), to aid in future Reserve estimates, and to delineate additional areas of potentially economic mineralisation.

Criteria	JORC Code Explanation	Commentary
	possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• The resource estimate documented in this report will, together with new drilling planned, form the basis of scoping level studies. These studies will examine matters such as: ○ Mining methods ○ Geotechnical ○ Hydrology ○ Metallurgy ○ Plant and Infrastructure ○ Transport and shipping ○ Environmental studies ○ Social impact studies.

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	• *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.*	• Sorby Hills drill hole data is stored in MS Access database and hand drawn drill hole logs are stored in scanned digital form. • Data validation checks are routinely run when data is interpreted in 3D visualization and modelling software. • A cross-check of historical DE deposit area collar coordinates in the database against original drill hole plans in WA Department of Mines and Petroleum reports was performed in 2011.
Site visits	• *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.*	• CSA Global consultants have conducted site visits as part of 2007 and 2010 drilling campaigns and were involved with earlier resource estimates at Sorby Hills. Breakaway Mining Services consultants involved with the Mineral Resource estimate reported here for the DE deposit have not been to site. • The Competent Persons responsible for the Mineral Resource estimates are of the opinion that this work has all been completed in line with industry best practice and to an appropriate standard for the mineral resource reported. • It is the intention of Pacifico Minerals that the Competent Person will conduct a site visit to review all sampling practices and QA/QC protocols prior to the next Mineral Resource estimate.
Geological interpretation	• *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*	• There is a reasonable confidence level in the geological interpretation of the mineral deposits. • The geological interpretation involved dividing the deposits into mineralised zones, essentially based on assay data, and identifying the fresh, transitional and

Criteria	JORC Code Explanation	Commentary
	Mineral Resource estimation. • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	oxide zones from the geological logging of drill core and chips, as well as mineralogy. • Steeply dipping cross faults are interpreted to offset stratigraphic surfaces and apparently cause changes in the thickness and continuity of mineralisation. The small amount of inclined drilling at Sorby Hills is insufficient to directly identify any steeply dipping mineralised structures or feeder zones. • There appears to be limited scope for alternative interpretations. The mineralised zones are quite clearly defined, while the oxidation zones are a little more subjective. It is considered unlikely that alternative interpretations would have a substantial impact on the Mineral Resource estimates due to the generally close spacing of the data points. • The mineralised zones were treated having hard boundaries during grade estimation, while the oxidation boundaries were treated as soft boundaries, due to their gradational nature. • The major factor affecting the continuity of both grade and geology is the distribution of host breccias which appear to be mainly developed along local unconformities between the dominant dolomite and siltstone lithologies present at Sorby Hills. Cross-cutting faults that truncate or displace mineralisation and geology, are also known from the deposit.
Dimensions	• *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.*	• The modelling domain containing the Sorby Hills D/E deposit resource area extends over a strike length of 2400m from 498500mN to 500900mN, and the maximum vertical extent of the interpretation was over 220m ranging from -180mRL to 40mRL. Within this zone, the DE deposit itself has a N-S strike length of about 1 km. • The global Mineral Resource has a strike length of 5,000 m and plan widths of between 100 m and 500 m.
Estimation and modelling techniques	• *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.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-*	• A Mineral Resource for the DE "pods" or deposits were estimated in 2013 by Breakaway Mining Services. A Mineral Resource estimate for the other deposits was estimated by CSA Global in 2011. • Mineralisation is present as mineralised domains defined by lithological boundaries, where possible, and Pb grades of >1% Pb. The Alpha Pod is a Zn rich pod and the mineralisation domain was interpreted using Zn>1%. • Ordinary Kriging (OK) and inverse distance weighting (IDW) were used to interpolate the block models with an oriented ellipsoid search was used to estimate Pb, Ag and Zn grades in the domains. • The DE pod Mineral Resources were estimated within an area with approximately 25 m (N) x 35 m (E) drill density. The other pods were drilled with hole spacing of between 50 m (N) by 25 m (E) and 50 m by 50 m.

Criteria	JORC Code Explanation	Commentary
	products. • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• The majority of mineralised bodies strike approximately 340 degrees, and with average dips varying between 40 and 60 degrees to the East. The A and B blocks strike 030°. • Block models were constructed incorporating mineralisation and weathering domains. Block sizes of 25 m (N) by 25 m (E) by 5 m (Z) were used for all block models. • The block models are not rotated. • The grade variables populated in the block model were Pb, Zn, Ag, Fe and S. • Block discretisation was set to 4 by 4 by 1. • The ordinary kriging method was used to estimate Ag, Pb and Zn. The Inverse Distance weighting method was used to estimate Fe and S. • High grade cuts were determined by using the domain statistics. Percentile analysis as well as histogram and log probability plots were used to determine the high-grade cut required to remove high grade outliers that may have too much of a global influence on the local block estimates. • High grade top cuts of 375 g/t for silver, 38% for lead and 6% for zinc were applied to the 1m composite assay data used in the modelling. • The block models were validated by swath plots, comparison of mean block and sample grades per domain, and stepping through cross sections of the model and comparing drill sample and block grades.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages in the model are estimated on a dry in-situ basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Reporting cut-off grades are typical for other Pb-Zn deposits and are considered appropriate for the reporting of the Sorby Hills Mineral Resource.
Mining factors or assumptions	• *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.*	• No mining factors were assumed in the Mineral Resource Estimate.

Criteria	JORC Code Explanation	Commentary
Metallurgical factors or assumptions	• *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.*	• No Metallurgical factors were assumed in the Mineral Resource Estimate.
Environmental factors or assumptions	• *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.*	• No Environmental factors were assumed in the Mineral Resource Estimate.

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td>Bulk density</td><td>

Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
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.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.

</td><td>

The density equation used in the resource estimate was derived from 119 density measurements taken from drill core samples of the various mineralised rock types at Sorby Hills deposits and takes into account an assumption of increasing porosity with increasing lead grade. This equation was applied in 1980, 2007 and 2011 resource estimates:
bd = 2.64 + (lead grade *0.018)
For the DE deposit model, the default density value was then adjusted using the average density for each lithology, as per Table 3. The default density value for each lithology was determined using the same density measurements from Sorby Hills drill core as was used to determine the linear relationship.

Table 3: Summary of Domain, Oxidation and Density Defaults, DE deposit
<table>
<tr><th>Domain</th><th>Oxidation</th><th>Density formula</th></tr>
<tr><td rowspan="3">Dolomitic siltstone</td><td>Oxide</td><td>bd = 2.48 + (lead grade*0.018)</td></tr>
<tr><td>Transitional</td><td>bd = 2.55 + (lead grade*0.018)</td></tr>
<tr><td>Fresh</td><td>bd = 2.59 + (lead grade*0.018)</td></tr>
<tr><td rowspan="3">Crystalline dolomite</td><td>Oxide</td><td>bd = 2.48 + (lead grade*0.018)</td></tr>
<tr><td>Transitional</td><td>bd = 2.58 + (lead grade*0.018)</td></tr>
<tr><td>Fresh</td><td>bd = 2.68 + (lead grade*0.018)</td></tr>
<tr><td rowspan="3">Dolomite breccia</td><td>Oxide</td><td>bd = 2.48 + (lead grade*0.018)</td></tr>
<tr><td>Transitional</td><td>bd = 2.51 + (lead grade*0.018)</td></tr>
<tr><td>Fresh</td><td>bd = 2.74 + (lead grade*0.018)</td></tr>
</table>
</td></tr>
<tr><td>Classification</td><td>

The basis for the classification of the Mineral Resources into varying confidence categories.
Whether appropriate account has been taken of all relevant factors (i.e. 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).
Whether the result appropriately reflects the Competent Person’s view of the deposit.

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The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’ by the Joint Ore Reserves Committee (JORC)
The classification of blocks was a three-stage process. The first stage was to categorise blocks based on some appropriate criteria, e.g. the number of samples plus the number of drill holes. The second stage was to use the categorised blocks to construct smoothed, realistic 3D solids that define regions of high, medium and low confidence in grade, geology, structure and continuity. The third stage was to use these 3D solids to classify blocks into Indicated and Inferred categories.
The Mineral Resource Estimate for DE deposit was classified within an area with approximately 25m x 35m drill density. The Inferred Mineral Resource is constrained within an area of drilling density of greater than 25 m by 35 m.
The Indicated Mineral Resource estimate for the C and I pods are based upon a

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Criteria	JORC Code Explanation	Commentary
		drilling density of 50 m (N) by 25 m(E). • The remaining Mineral Resources for the other pods are based upon a drilling density of 50 m (N) by 50 m(E). • The resource classification appropriately reflects the views of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• BMS contracted Dr Chris Gee of Mining Plus (25 June 2013) to review the Sorby Hills Resource Model, results and draft resource. The findings of this review were addressed in the final resource model and report. No external audit or review has been carried out for the other pods.
Discussion of relative accuracy/ confidence	• *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.* • *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 should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Resource estimations reported here were developed using the Vulcan mine planning software system (DE deposit) and Datamine (for all other pods). • No mining has taken place to date at the project. • No other estimation method or geostatistical analysis has been performed. • Relevant tonnages and grade above nominated cut-off grades for Pb and Zn are provided in this report. Tonnages were calculated by filtering all blocks above the cut-off grade and sub-setting the resultant data into bins by mineralisation domain. The volumes of all the collated blocks were multiplied by the dry density value to derive the tonnages. • The Mineral Resource is a local estimate, whereby the drill hole data was geologically domained above nominated cut-off grades.