

21 April 2017

ASX ANNOUNCEMENT

By Electronic Lodgement

MRV METALS PTY LTD RE-RELEASE OF HEAP LEACH STOCK PILES DATA

- ❖ Assays results released from heap leach auger sampling program at the Granite Belt Project
- ❖ Results confirm leach pads contain an Inferred Mineral Resource of 1.94Mt of crushed ore averaging a grade of **38.0g/t silver for 2.37Moz of contained silver**
- ❖ **Reprocessing of heaps will be low cost**, only requiring minor rehandling to promote cyanide leachate process
- ❖ **Expected release of restart strategy within the next week**

Moreton Resources Limited (ASX:MRV) ("Moreton", "the Company") is pleased to announce the above results from Assay's and reconciliation data regarding the Granite Belt Project, which has formed the basis of an Inferred Resource as defined by the JORC Code (2012).

As the market is aware the Company did attempt to release this data upon the 7th of April 2017.

In doing so, the ASX raised what is purports to be compliance issues. The ASX has taken the view that the JORC Code applies to these processing heaps which are at the tail end of the production process. As such in an effort to release this information and keep the market informed, the Company has declared an inferred JORC Compliant resource upon the Heaps, although given the heap leaches are akin to a CIL plant or other processing stage of a Mining operation, we do not agree that this is the appropriate mechanism.

We welcome investors to review the attached table 1, which outlines the data and rigour that the Company has gone to in this release, and we look forward to the release of our restart plan within the coming one to two weeks.

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Further Information:

Jason Elks
Executive Chairman
Moreton Resources Limited
+61 411 808 759

Luke Forrestal
Account Director
Media + Capital Partners
+61 411 479 144

This announcement is the results of an auger drilling program on heap leach pads at the former Twin Hills Mining Operation, near the township of Texas in south-western Queensland.

The sampling program was completed as part of the due diligence process undertaken by Moreton for the potential purchase of the asset in early 2015. The samples were submitted to ALS Global in February 2015 and whilst the information was utilised previously in a commercial in confidence basis for our attempted purchase in 2015, with further verification work, now form a major part of the MRV Metals restart strategy.

The data below is derived from the Ore Reserves quoted by Alcyone Resources, the most recent former owner of Twin Hills, in its ASX announcement 29 March 2012 and prior announcements of Ore Reserves by Alcyone and MacMin Limited. MacMin owned and operated Twin Hills before Alcyone.

Moreton's wholly owned subsidiary MRV Metals Pty Ltd has recently reviewed the results from the auger sampling program on heap leach dumps 1 to 4 (Figure 1) (a total of 225 m). A total of 75 holes were drilled and collected (24 samples from heap 1; 26 samples from heap 2; 15 samples from heap 3 and 10 samples from heap 4) (See Figure 2 below).

Geology and Mineralisation Interpretation

The deposit is a homogenous crushed ore, that has been previously extracted by mining operations, crushed and screened through the production process between 2006 and 2014, and now sits upon established cyanidation heap leach pads, which are number 1 to 4 by the Company, which is located within the processing area of the Granite Belt Project.

Silver mineralisation is generally argentite and/or polybasite that has been crushed to 4mm. The entire heaps are extraction grade materials as all waste has been excluded by the mining process.

Drill Information and Sampling

Traditional drilling information is not warranted in this report, as the ore is not an in-ground resource. Four heap leach pads are on the surface and ore has already been extracted, processes and stacked for metal extraction and as such recent sampling that has been undertake and as outlined in Table 1, consists of heaps drilled by auger and sampling in 2010 and in 2015, which have made up the basis for this resource calculation upon the ore, which is currently in the process and leaching area of the mine site.

An auger was used to drill and recover ore material, taking composite samples of up to 3m in depth. Holes were vertical nature and dispersed throughout a grid pattern as describe within this announcement. The composite samples were dried, bagged and transported to ALS laboratories for Assay analysis. Analysis was undertaken by ALS Brisbane. Samples submitted were prepared for analysis by drying, crushing, riffing and pulverising. Ag, Pb, Zn and Cu content was determined using grade range related methods by using ME-OG62 Ore Grade Element – Four Acid Digest and ICP-AES detection methods.

Tables 1 and 2 summarise the drill hole position, sample and Laboratory ID numbers, and assay results.

Estimation Methodology

Grade is estimated by ordinary kriging with the estimation constrained by the fact these are established processing heaps in-situ above ground and sitting on leaching pads. The quantity and estimation of tonnage is not only supported by independent surveys but also tonnes and grade derived from daily, weekly and monthly mining and crushing logs accounting for tonnes and assay grades of all stacked ore for treatment. A proven density of 1.9 is applied relative to the crushing of the materials and stacking process.

Extracted silver recoveries were also used to verify the recent information to reconcile prior stacked records, data and assays and total reconciliation was achieved within several percent of error.

Validation and Classification

The homogenous heaps, which are well reconciled, surveyed and subject to significant daily, weekly and monthly assays, tonnage reporting and stacking logs, has allowed for an inferred resource. An Inferred Mineral Resource for the combined Heap Leach dumps 1 to 4 has been determined, although with further drilling down to the base of the dumps will provide a higher level of confidence on the grade. Table 3 summarises the resource status of the crushed material on the Heap Leach dumps 1 to 4.

Reporting

Reporting cut-off has been determined from the results of ore reserve determinations relating to open cut mining, fine crushing and cyanide heap leach extraction that has been applied to the Twin Hills JORC and Mt Gunyan JORC announcements by the Company.

Regarding the economical cut off, the heaps are already formed, stacked and in situ and modifying factors such as cut off grades due to mining, crushing, screening and stacking costs are not relevant and therefore a viable grade of above 15g/t has been determined however all ore reported far exceeds this cut off and hence this is only a hypothetical cut-off grade with no relevance to the heaps reported.

Mining and Metallurgy

Metallurgical test work indicated that finely crushed material returned an Ag recovery of +60% in heaps using cyanide.

Ownership and Approvals

The exploration tenure was acquired by MRV Metals Pty Ltd (a wholly owned subsidiary of Moreton) in 2016 from the Administrator appointed by Alcyone.

Tenement applications are in place for a mining license and an overlapping mineral development license which cover the Deposit and the location of previous/existing infrastructure. Government Approvals including an environmental authority to re-commence a mining, crushing and extraction process are well under way and the Company reports it is expecting an imminent decision upon these approvals.

Reference is made to Table 4 of this document, which is Table 1 of the 2012 Edition of the JORC Code.

Table 1: Summary of sample number, drilling position and assay results for HEAPS 1 and 2							
Easting (m E)	Northing (m S)	ALS ID	Sample ID	ME-OG62			
				Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
330599	6808362	BR15026119-001	HEAP 1 - 1A	0.003	0.023	0.013	36
330565	6808348	BR15026119-002	HEAP 1 - 1B	0.002	0.016	0.006	33
330523	6808320	BR15026119-003	HEAP 1 - 1C	0.004	0.016	0.022	46
330617	6808323	BR15026119-004	HEAP 1 - 2A	0.003	0.024	0.038	40
330584	6808304	BR15026119-005	HEAP 1 - 2B	0.005	0.036	0.086	66
330540	6808280	BR15026119-006	HEAP 1 - 2C	0.004	0.019	0.043	40
330600	6808264	BR15026119-007	HEAP 1 - 3B	0.004	0.035	0.051	49
330562	6808246	BR15026119-008	HEAP 1 - 3C	0.001	0.028	0.012	36
330616	6808229	BR15026119-009	HEAP 1 - 4B	0.003	0.02	0.022	34
330583	6808200	BR15026119-010	HEAP 1 - 4C	0.002	0.02	0.028	29
330659	6808190	BR15026119-011	HEAP 1 - 5A	0.003	0.014	0.03	26
330631	6808181	BR15026119-012	HEAP 1 - 5B	0.003	0.026	0.064	52
330599	6808172	BR15026119-013	HEAP 1 - 5C	0.002	0.016	0.049	28
330592	6808381	BR15026119-014	HEAP 1 - Toe A	0.001	0.016	0.026	18
330558	6808364	BR15026119-015	HEAP 1 - Toe B	0.002	0.017	0.021	25
330527	6808342	BR15026119-016	HEAP 1 - Toe C	0.004	0.017	0.032	42
330609	6808368	BR15026119-017	HEAP 1 - Toe 1A	0.003	0.015	0.024	21
330627	6808324	BR15026119-018	HEAP 1 - Toe 2A	0.003	0.021	0.044	43
330651	6808253	BR15026119-019	HEAP 1 - Toe 3A	0.001	0.029	0.007	29
330511	6808303	BR15026119-020	HEAP 1 - Toe 1C	0.003	0.022	0.029	58
330522	6808271	BR15026119-021	HEAP 1 - Toe 2C	0.005	0.024	0.091	44
330534	6808227	BR15026119-022	HEAP 1 - Toe 3C	0.003	0.022	0.028	37
330616	6808229	BR15026119-024	HEAP 1 - Toe 4B	0.003	0.027	0.047	45
330592	6808199	BR15026119-025	HEAP 1 - Toe 4C	0.004	0.025	0.058	52
			HEAP 1				38.7
330314	6808491	BR15026119-026	HEAP 2 - 1A	0.001	0.018	0.019	22
330290	6808475	BR15026119-027	HEAP 2 - 1B	0.002	0.041	0.023	39
330271	6808447	BR15026119-028	HEAP 2 - 1C	0.001	0.021	0.019	23
330344	6808456	BR15026119-029	HEAP 2 - 2A	0.001	0.017	0.006	48
330322	6808442	BR15026119-030	HEAP 2 - 2B	<0.001	0.008	0.006	13
330291	6808421	BR15026119-031	HEAP 2 - 2C	0.001	0.018	0.01	22
330366	6808428	BR15026119-032	HEAP 2 - 3A	0.003	0.015	0.014	15
330342	6808416	BR15026119-033	HEAP 2 - 3B	0.001	0.018	0.03	18
330311	6808397	BR15026119-034	HEAP 2 - 3C	0.001	0.016	0.006	24
330388	6808404	BR15026119-035	HEAP 2 - 4A	0.002	0.014	0.029	17
330363	6808393	BR15026119-036	HEAP 2 - 4B	0.001	0.018	0.016	17
330327	6808378	BR15026119-037	HEAP 2 - 4C	0.001	0.016	0.026	16
330413	6808376	BR15026119-038	HEAP 2 - 5A	0.001	0.022	0.018	28
330385	6808362	BR15026119-039	HEAP 2 - 5B	0.002	0.016	0.032	19
330432	6808355	BR15026119-040	HEAP 2 - 6A	0.001	0.026	0.01	29
330405	6808343	BR15026119-041	HEAP 2 - 6B	0.001	0.021	0.017	21
330379	6808326	BR15026119-042	HEAP 2 - 6C	0.001	0.019	0.014	13
330449	6808341	BR15026119-043	HEAP 2 - 7A	0.002	0.026	0.02	26
330430	6808230	BR15026119-044	HEAP 2 - 7B	0.002	0.028	0.024	29
330411	6808305	BR15026119-045	HEAP 2 - 7C	0.002	0.026	0.021	27
330463	6808325	BR15026119-046	HEAP 2 - 8A	0.001	0.022	0.011	25
330447	6808303	BR15026119-047	HEAP 2 - 8B	0.003	0.043	0.04	50
330419	6808285	BR15026119-048	HEAP 2 - 8C	0.003	0.046	0.057	51
330437	6808345	BR15026119-049	HEAP 2 - Toe 6A	0.002	0.021	0.012	27
330423	6808332	BR15026119-050	HEAP 2 - Toe 6B	0.003	0.032	0.025	37
330400	6808316	BR15026119-051	HEAP 2 - Toe 6C	0.001	0.027	0.01	27
			HEAP 2				26.3

Table 2: Summary of sample number, drilling position and assay results for HEAPS 3 and 4

Easting (m E)	Northing (m S)	ALS ID	Sample ID	ME-OG62			
				Cu (%)	Pb (%)	Zn (%)	Ag (g/t)
330496	6808309	BR15026119-052	HEAP 3 - 1A	0.002	0.017	0.016	15
330462	6808286	BR15026119-053	HEAP 3 - 1B	0.002	0.023	0.011	31
330428	6808269	BR15026119-054	HEAP 3 - 1C	0.001	0.029	0.004	34
330509	6808261	BR15026119-055	HEAP 3 - 2A	0.001	0.015	0.016	15
330479	6808251	BR15026119-056	HEAP 3 - 2B	0.001	0.016	0.008	14
330445	6808242	BR15026119-057	HEAP 3 - 2C	0.003	0.028	0.017	27
330523	6808228	BR15026119-058	HEAP 3 - 3A	0.001	0.016	0.02	13
330499	6808218	BR15026119-059	HEAP 3 - 3B	0.003	0.014	0.034	24
330465	6808209	BR15026119-060	HEAP 3 - 3C	0.004	0.036	0.052	39
330552	6808200	BR15026119-061	HEAP 3 - 4A	0.002	0.032	0.037	44
330519	6808189	BR15026119-062	HEAP 3 - 4B	0.002	0.027	0.025	31
330486	6808176	BR15026119-063	HEAP 3 - 4C	0.002	0.017	0.017	18
330572	6808169	BR15026119-064	HEAP 3 - 5A	0.003	0.037	0.041	43
330537	6808161	BR15026119-065	HEAP 3 - 5B	0.003	0.032	0.043	35
330505	6808149	BR15026119-066	HEAP 3 - 5C	0.003	0.048	0.035	54
			HEAP 3				29.1
330708	6808542	BR15026119-067	HEAP 4 - 1A	0.003	0.028	0.118	42
330674	6808531	BR15026119-068	HEAP 4 - 1B	0.003	0.041	0.055	48
330644	6808517	BR15026119-069	HEAP 4 - 1C	0.007	0.029	0.043	38
330701	6808556	BR15026119-070	HEAP 4 - Toe A	0.011	0.028	0.066	47
330668	6808541	BR15026119-071	HEAP 4 - Toe B	0.003	0.028	0.043	41
330638	6808529	BR15026119-072	HEAP 4 - Toe C	0.009	0.031	0.064	71
330720	6808356	BR15026119-073	HEAP 4 - Toe 1	0.004	0.034	0.051	67
330772	6808449	BR15026119-074	HEAP 4 - Toe 2	0.007	0.028	0.075	52
330752	6808374	BR15026119-075	HEAP 4 - Toe 3	0.004	0.034	0.059	63
330813	6808327	BR15026119-076	HEAP 4 - Toe 4	0.003	0.024	0.043	31
			HEAP 4				50.0

Table 3: Summary of Crushed Material on the Twin Hills Heap Leach Pads 1 to 4

HEAP LEECH PAD	Indicated Mineral Resource			Inferred Mineral Resource			Total Leach Heap Resource		
	t	Ag (g/t)	Ag (oz)	t	Ag (g/t)	Ag (oz)	Mt	Ag (g/t)	Ag (oz)
1				668,000	38.7	831,161	668,000	38.7	831,161
2				371,309	26.3	313,971	371,309	26.3	313,971
3				335,114	29.1	313,533	335,114	29.0	313,533
4				569,782	50.0	915,956	569,782	50.0	915,956
Heap leach / Feed				1,944,205	38.0	2,374,621	1,944,205	38.0	2,374,621

- 1 *The Mineral Resources in Table 3 imply that they are economically viability. The estimate of mineral resources as part of an operational extraction process is not deemed to be affected by environmental, permitting, legal, title, taxation, socio-political, marketing or other relevant issues.*
- 2 *The quantity and grade of reported resources in this estimation are uncertain to the degree that there has been insufficient exploration (i.e. depth of drilling) to verify Alcyone results to define these inferred resources as a Measured Resource.*
- 3 *Technical and economic studies have shown that economic extraction is justified under realistic conditions.*
- 4 *Totals in the Table 3 may not sum due to rounding.*

Competent Persons Statement

The information in this report, insofar as it relates to Mineral Exploration Results and Mineral Resources is based on information compiled or reviewed by Dr Louis W. Schurmann, who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM), and has more than 5 years' experience that is relevant to the style of mineralisation and associated process dumps under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC code). Dr Schurmann is currently employed by Moreton Resources Pty Limited as Lead Geologist.

Table 4: Heap Leach Dumps on Twin Hills Mine

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	<ul style="list-style-type: none"> 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. 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 (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. 	<ul style="list-style-type: none"> A total of 75 auger drill holes were drilled to a total of 225 m. Auger holes were drilled at spacings of 30m x 30m, 20m x 30m, 30m x 30m and 40m x 20m for Heaps 1, 2, 3 and 4 were deemed adequate. Auger holes were near-vertical. Samples were recovered every 50 cm to provide a composite over 3 metres. As the crushed material on the Heap Leach Piles ("HLP") are homogenous, no boundaries were anticipated. Samples were dried and quartered to a sample size which varied between 1.79kg and 4. 70kg. Standard Operating Procedures (SOP) were followed to ensure samples are representative.
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> A mobile auger (auger bit being 30 cm in diameter) with 3 1-metre rod extensions. Total of 75 drill holes to a total of 225 m.

Criteria	JORC Code explanation	Commentary
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"> • Drilling was completed at a slow rotation (rotation speed = penetration rate). Sampling every 50 cm to clear hole. • Material (crushed ore) recovery was easy to drill and better than 95% recovery, based on weighing the samples and auger drill recoveries average > 95% (of expected weight).
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"> • Logging was undertaken on all holes in the Exploration Update using modified Alcyone logging codes which describe material drilled, texture, grain size and colour. • Sampling and sample photography was undertaken. • All samples taken from the total 225 m auger drilling program were logged.
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"> • Auger sampling was undertaken at every 50-cm interval. This material was half-split using a riffle splitter to collect a 1.79 to 4.70 kg sample that would be sent for analysis. Samples were collected in sampling bags which were labelled on site. Samples are weighed. • It was recommended that the lab split and insert coarse duplicates from the coarse sample material. • The sample sizes are appropriate given the grain size (<4 mm to >0.5 mm) of the material.

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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> 75 samples were sent ALS in Brisbane Ag, Pb, Zn and Cu analysis using ME-OG62 Ore Grade Element – Four Acid Digest and ICP-AES detection methods. Re-assayed QAQC results were acceptable and database was overwritten with the re-assayed results.
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"> No twinned holes were drilled. Site were visit were made including a review of samples and visual confirmation of significant material matching assay results. Assay certificates for significant intersections have been verified by MRV Metal's geologist. No other physical external verification has taken place. Data is captured in excel spreadsheets. No adjustments have been made to the assay data.
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"> A surveyed topography of the HLP in the immediate mine area was provided by DataGeo Geological Services in a Report dated January 2010, titled "Alcyone Resource Ltd Heap Leach Pad Sampling Test Work Program, Twin Hills". An up-to-date topographical survey of the heaps was done on 1/2/2014, and reported a total of 1,944,208 tonnes of material on the four heaps. The auger hole collars are located according to the UTM 56J Eastings and Northings setting on GPS with the exploration holes being picked up using PGS Map 62. The holes are reported to have an accuracy of +/- 3m in 3D position. Downhole surveys were not completed.

Criteria	JORC Code explanation	Commentary
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 Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Auger holes were drilled at spacings of 30m x 30m, 20m x 30m, 30m x 30m and 40m x 20m for Heaps 1, 2, 3 and 4 were deemed adequate. • Minor variation from the planned grid was due to accessibility and ground conditions. • Sub-samples (i.e. 50 cm samples due to drilling) were composited to make up one sample per hole (drilled down to 3 m).
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"> • All auger holes were drilled near-vertical, including the holes planned on the toe area on the lifts.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • All samples and sample pulps are stored in a locked shed on-site, where there is controlled access and security on the mine site.
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"> • QAQC reports were produced and reviewed. • Data was imported into an MS ACCESS database and validated. • Site visit completed which included a review of SOPs and sampling procedures.

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 national park and environmental settings.</i> • <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> 	<ul style="list-style-type: none"> • The sampling was conducted on EPM8854, which is active and is 100% controlled by MRV Metals PTY LTD. • Other adjacent EPM's (EPM11455, EPM12858, EPM18950, EPM26275) of the Granite Belt Project are 100% held by MRV Metals.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Previous exploration and mining was conducted by various companies: MacMin Silver Limited and Alcyone Resources Limited. Mining Solutions Pty Ltd (Mining Solutions) was engaged by Alcyone Resources Ltd (Alcyone) to review the Ore Reserve Estimate (dated 2011), the mining engineering and other studies completed on the Twin Hills silver mine. As a result, the 2012 Mining Reserve Estimation (which included a Mining Reserve Statement) and the examination of risks to the project were completed, and included recommendations as to future work to assess and ameliorate any such risks. Before and after 2012, various other consultants completed reports and provided data and information regarding the exploration, mining and metallurgical activities of the Twin Hills Mine. Several reports referred to below provide sufficient information of high confidence in support of the status of the Heap Leach Pads on Twin Hills Mine: Alcyone Resources Pty Ltd: Twin Hills Silver Mine, Texas: Heap leach Stability Assessment (2010); AMMTEC Limited Metallurgical Report 12358, dated October 2010; Twin Hills LOM Production Update, dated 23 January 2014; Ore Processing Review Twin Hills Heap Leach Operations, Texas Silver Project, dated January 2015; ALS Metallurgical Test Work Report A16476, dated April 2015; Heap Leach 4 Leaching Model 171212; Survey_EOM_Report_2013_2014 by Alcyone; Production Model of Alcyone Resources Pty Ltd; DataGeo Geological Report dated January 2010, titled "Alcyone Resource Ltd Heap Leach Pad Sampling Test Work Program, Twin Hills". In this program, 68 locations were RC drilled and 211 samples were collected. Samples (up to 3 kg in size) were prepared and analysed by ALS, Brisbane. The assay results were summarised as follows: 155 samples plotted in a range of 17 g/t (a minimum) and 149 g/t (a maximum) (with an average of 47.1 g/t). The other 66 samples had a Ag range of between 19 and 158 g/t, with an average of 38.8 g/t.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Further, in support of the current volume of HLP's 1 to 4, reference is made to Alcyone Monthly reports (March 2011 to March 2014). Their findings and data were supported by Guy Butcher's report on the Ore Recoveries and End of Month Survey (2014). Alcyone commenced leaching on the existing Macmin Ore on 19th May 2011, with the first crushed ore placed on HLP 2 in August 2011. From changes to the HLP volumes, it can be derived which HLP received ore in any month and at what average grade. It is shown that MacMin heaps at the start of the Alcyone Process was 397,746 t at an average of 45 g/t Ag. During the period August 2011 to February 2014, Alcyone placed a total of 1.623 Mt of crushed ore on the four heaps. The last survey of the heaps on 1 February 2014 reported a total of 1,944,208 tonnes of ore. By reconciling the ore placed on the heaps, the total is 1,967,892 tonnes or within 0.12%. By the end of this period, Alcyone was reporting 1,276,664t of ore at an average grade of 58 g/t to deliver 870,108 Recoverable ounces of Ag.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The Twin Hills deposit is a low-sulphidation epithermal precious metal deposit formed at shallow crustal levels where abrupt changes in physical and chemical conditions resulted in metal deposition. Mineralisation occurred because of several factors, the change from lithostatic to hydrodynamic pressure which resulted in boiling, interaction of fluids derived at depth with near surface waters, permeability changes and reaction between fluids and host rocks. Structurally it appears that the mineralisation is likely localized along faults and within shear zones within the deposit. Strong structural control is almost universally recognized in epithermal deposits due to the permeability enhancement caused by fractures in the near surface. Many epithermal deposits are regionally associated with felsic and andesitic volcanic-related structures. The economic silver mineralisation is generally disseminated within suitable porous host rocks and where local conditions were favourable, minor brittle breccia zones developed. En-echelon quartz veins as tension gashes accompanied by mineralisation are

Criteria	JORC Code explanation	Commentary
		<p>also observed.</p> <ul style="list-style-type: none"> The deposit (in this case) is a homogenous crushed ore, that has been previously extracted by mining operations, crushed and screened through the production process between 2006 and 2014, and now sits upon established cyanidation heap leach pads, which are number 1 to 4 by the Company, which is located within the processing area of the Granite Belt Project. Silver mineralisation is generally argentite and/or polybasite that has been crushed to $\leq 4\text{mm}$. The entire heaps are extraction grade materials as all waste has been excluded by the mining process.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Tables 1 and 2 in this announcement summarises the relevant positional and assay information of the 75 auger holes. Azimuths and Dips were planned and determined at 0° and -90° respectively. Hole lengths were limited to 3 metres. All collars were located on HLP 1 to 4 and captured using UTM UTM 56J Eastings and Northings Average RL being 501 m.
Data aggregation methods	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> No Intercepts were calculated on a minimum of a 3 m drill holes. No waste intercepts were applied. Weighted averages were used for Ag in Tables 1 and 2 based on the percentage of the volumes of HLP 1 to 4 to provide the average Ag grade.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • 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 be reported. • 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'). 	<ul style="list-style-type: none"> • The crushed ore (≤ 4 mm in size) was agglomerated and mixed with lime/ cement) and stacked, thus deemed to be homogenous except for minor deviations in grade. • The heaps are not deemed to be a geological ore zone or structure. No true thickness widths were obtained, except for the length of the drill hole.
Diagrams	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Diagram summarizing the general drill hole collar locations and Tables 1 and 2 summarising the actual positions are included in the press release.
Balanced reporting	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Comprehensive table of results in press release.
Other substantive exploration data	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Specific gravity is analysed by the laboratory using the Archimedes principle (dry weight / (dry weight – wet weight)). • Based on metallurgical studies, agglomerated and mixed ore samples provided to ALS Brisbane depict a SG of 1.90.
Further work	<ul style="list-style-type: none"> • The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> • MRV Metals are currently continuing Start-up activities to restart the Twin Hills Mine. an underground drill program in both

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. 	<ul style="list-style-type: none"> • The database is a MS Access database. • Data is logged directly into an Excel spread sheet logging and assay system with dropdown field lists.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>Data validation procedures used.</i> 	<ul style="list-style-type: none"> Validation checks are written into the importing program which ensures data integrity. Digital assay data is obtained from ALS Laboratory, QAQC checked and imported. From MS Access the data is transferred to Vulcan Software. Data was validated prior to resource estimation by the reporting of basic statistics for grade fields, including the examination of maximum values, and visual checks of drill hole traces and grades on sections and plans.
Site visits	<ul style="list-style-type: none"> <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> The Competent Person has spent most of 6 weeks on site and actively busy with a desktop study on historical information and data. Several inspections of sampling sites, stored samples and MRV Metals' sampling procedures have taken place. Several discussions of geology, mining, metallurgy pertaining to the project and operation have taken place.
Geological interpretation	<ul style="list-style-type: none"> <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> <i>Nature of the data used and of any assumptions made.</i> <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> <i>The factors affecting continuity both of grade and geology.</i> 	<ul style="list-style-type: none"> The deposit is a homogenous crushed ore, that has been previously extracted by mining operations, crushed and screened through the production process between 2006 and 2014. The ore now sits upon established cyanidation heap leach pads, which are number 1 to 4 by MRV Metals, which is located within the processing area of the Granite Belt Project. The principal ore minerals are argentite and/or polybasite that is held in ore material that has been crushed to $\leq 4\text{mm}$. The entire heaps are extraction grade material as all waste has been excluded by the selective mining process.
Dimensions	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Heap leach dump dimensions are: HLP1: 190 m x 68 m (three formal lifts: 24 m high). HLP2: 220 m x 85 m (two lifts, 16 m at rear and 20 m near ponds). HLP3: 160 m x 95 m (two lifts: 15 m high). HLP4: 350 m x 105 m (two lifts: 14 m high and 12 m high closest to the silver room).

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"> Grade is estimated by ordinary kriging with the estimation constrained by the fact these are established processing heaps in-situ above ground and sitting on leaching pads. The quantity and estimation of tonnage is not only supported by independent surveys but also tonnes and grade derived from daily, weekly and monthly mining and crushing logs accounting for tonnes and assay grades of all stacked ore for treatment. Issues like extreme grade variation and domaining were not applicable due to the collective mining and crushing processes applied to prepare and stack ore for a heap leach process. negligible. As the HLP 1 to 4 are already mines and semi-processed, issues like SMU's, geological interpretation, grade capping or cutting, the recovery of by-products, the estimation of deleterious elements (i.e. Sulphur) are not applicable for this report.
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"> All tonnages are reported on a dry basis.
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"> A cut-off grade applied is 15 g/t Ag. Mining, crushing, screening and stacking activities and costs are not relevant.
Mining factors or assumptions	<ul style="list-style-type: none"> <i>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</i> 	<ul style="list-style-type: none"> No mining factors have been applied to the HLP1 to 4 grade estimates for mining has already occurred and has no further effect. The HLP 1 to 4 have been and in future will be amenable to large scale Heap Leach processing.

Criteria	JORC Code explanation	Commentary
	<i>reported with an explanation of the basis of the mining assumptions made.</i>	
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 metallurgical factors have been applied to the HLP grade estimates.
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"> The Twin Hills Mine Environmental Management Plan was completed in late 2016 following public consultation with most submissions received. The draft EA Permit was issued on 10th of April 2017. All significant environmental risks are authorized subject to the permit and implementation and management of life of mine.
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 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. 	<ul style="list-style-type: none"> Several density determinations projects have been conducted by MacMin Silver Limited and Alcyone Resources Limited. Several metallurgical programs and projects were completed by MacMin Silver Limited, Alcyone Resources Limited and MRV Metals Pty Ltd. An SG of 1.9 is of high confidence.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. 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, 	<ul style="list-style-type: none"> The mineral resource classification protocols, for drilling and sampling, database integrity, interpolation and estimation parameters are met and described. The Mineral Resource statement relates to the HLP 1 to 4 only. The Mineral Resource estimate has been classified in accordance

Criteria	JORC Code explanation	Commentary
	<p>quantity and distribution of the data).</p> <ul style="list-style-type: none"> • Whether the result appropriately reflects the Competent Person's view of the deposit. 	with the JORC Code, 2012 Edition.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> • MRV Metals' internal review and audit of the Mineral Resource Estimate consisted of data analysis and interpretation of cross-sections, comparing drill-hole data with the resource estimate block model.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • An approach to the resource classification was used which combined both confidence in material continuity and statistical analysis. • The level of accuracy and risk is therefore reflected in the allocation of the measured, indicated and inferred categories. • Resource categories were constrained by geological ore understanding, data density and quality, and estimation parameters. • Resource estimation has been made on a local (HLP1 to 4) basis. An Inferred Mineral Resource for the combined Heap Leach dumps 1 to 4 has been determined, although with further drilling down to the base of the dumps will provide a higher level of confidence on the grade.