

ABN 86 009 153 119

31 January 2017

Manager Companies Australian Securities Exchange Level 6, 20 Bridge Street Sydney NSW 2000

By E-Lodgement

#### REPORT FOR THE QUARTER ENDED 31 DECEMBER 2016

Merlin Diamonds Limited ABN 86 009 153 119

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Telephone: +61 3 8532 2858

www.merlindiamonds.com.au

Directors

**Mr Mordechai Gutnick** Chairman & Managing Director

Mr Henry Herzog Non-Executive Director

**Dr David S Tyrwhitt** Non-Executive Director

Senior Management

Mr Peter Lee CFO & Company Secretary **HIGHLIGHTS** 

#### Merlin Mine - Operations

- Successfully recommenced initial phase of operations
- Australia's 5<sup>th</sup> largest diamond 35.5 carats recovered
- Discovery of rare blue diamond
- Successful mining campaign delivered circa 70,000 tonnes of ore for wet season treatment
- \$44.6m royalty credits preserved
- Experienced diamond team appointed
- Initial processing phase up-scaled with the introduction of scrubber

#### **Merlin Mine Exploration**

- No exploration conducted during the quarter
- Previous work identified seven drill ready targets and seventy four new exploration target areas which remain to be investigated

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#### **MERLIN DIAMOND MINE PROJECT**

Some highlights of the mining operations at the Merlin diamond mine since 1 October 2016 include:

#### **Merlin Diamond Mine Operations**

#### Successfully recommenced initial phase of operations

The processing plant was rapidly refurbished and production commenced with steady ramping up of the production process

#### Australia's 5<sup>th</sup> largest diamond 35.5 carats recovered

Merlin previously produced Australia's largest diamond at 104 carats. This 35.3 carat diamond reflects merlin's history of recovering large diamonds.

#### Discovery of rare blue diamond

The recovery of the blue diamond demonstrates the potential for valuable coloured diamonds at Merlin.

#### Successful mining campaign delivered circa 70,000 tonnes of ore for wet season treatment

Northern Territory based contractor successfully commenced mining in Kaye pit

#### \$44.6m royalty credits preserved

Through the successful commencing of operations, Merlin satisfied the requirement of the NT department of Treasury and Finance

#### Experienced diamond team appointed

Merlin has assembled an exceptionally experienced diamond mining executive team. This team also includes high level experienced security surrounding the finished product of rough diamonds.

#### Initial processing phase up-scaled with the introduction of scrubber

The commissioning of the scrubber in January 2017 significantly improves the preparation of the ore and throughput



Merlin is known for its high quality white diamonds, and Australia's largest diamond. Note that clarity and whiteness of diamonds are not visible on this photo. Professional photos will be released in the future. Photo released due to the relevance of the discovery of the large diamond.





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During July and August 2016, project planning was undertaken to recommence operations in 2016 as soon as possible after approval of the Mining Management Plan (MMP) by the Department of Minerals and Energy (DME).

Following a detailed review of the existing 60 tph plant it was decided to simplify the plant flowsheet as well as introduce contract crushing and screening ahead of the existing DMS plant. The impact of this includes:

- Significant reduction of the capital requirement and timeline to get the operation into production
- Allowing existing oversize stockpiles to be treated for several months
- Allowing for treating +40mm ore from the open pits, which previously would have been added to the oversize stockpiles
- Reducing the risk of crushing large diamonds, which have been proven to exist at the Merlin diamond mine
- Positioning the Merlin diamond mine to scale up production of the process plant

A modular final recovery unit incorporating X ray Flowsort recovery units purchased from Ellendale was transported to the Merlin diamond mine and installed and commissionedin October 2016. This together with the planned installation of a grease table for treating the Flowsort tailings is a significant improvement over the previous DMS concentrate hand-sorting methodology.

The MMP, which incorporates the environmental management plan and commitments for the project, was approved by the DME on 9 September 2016. Work immediately commenced to recommission the plant and prepare for conventional mining in the Kaye pit.

The mobile plant for the contract crushing and screening was mobilised, commissioned and began processing stockpiled material on 1 October 2016. The water from the Kaye open pit was transferred into the Gareth pit in preparation for mining of Kaye.

Following a review of the mining methodology and mine planning, initial mining in 2016/17 year will be by conventional open pit mining from Kaye and Ector. The opportunity to mine ore from the other kimberlite pipes, in particular the small but high grade Ywain and Gwain pipes, by dry clamshell mining will be evaluated over the wet season.

#### **EXPLORATION OVERVIEW**

#### Merlin Mining Lease (ML1154) and near Mine

No exploration work was undertaken this quarter.

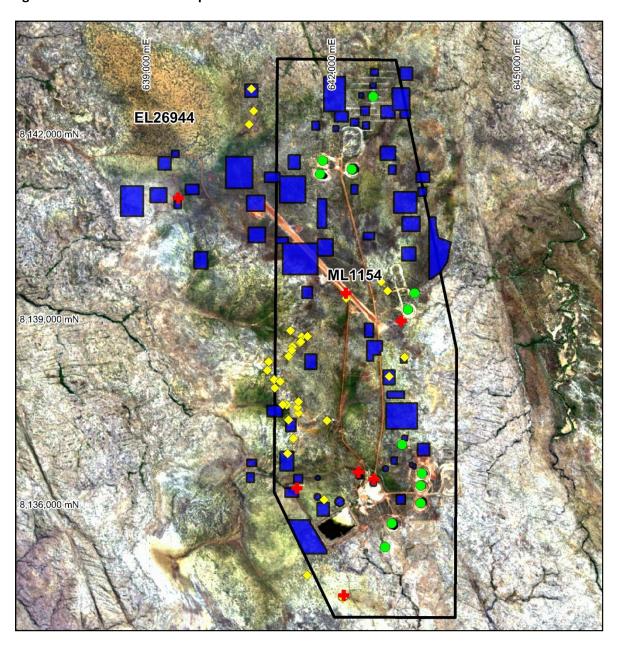
#### Summary of Previous Work

Review of all available historical data was completed in early 2014 with the identification of seventy-four new target areas that require further investigation. Seven of these targets are ready for immediate drilling (Figure 1). During 2013 the Company's field personnel completed an extensive heavy mineral sampling program on ML1154 and EL26944 targeting areas where sampling density was considered insufficient. Kimberlitic chromites have been recovered from a number of these samples in an area where no known kimberlites occur (Figure 1). This area has been poorly explored in the past relative to other parts of the mining lease and these results are highly encouraging. High resolution ground electromagnetic surveying will be undertaken to define drilling targets.



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Figure 1: Merlin Mine Lease Exploration



- ♦ Chromite recovered in 2013

New exploration target area

Kimberlite pipe

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Drilling target



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#### **Borroloola Alluvial Diamond Project**

The Company has decided to focus resources on development of the primary mining project at the Merlin Diamond Mine and high priority exploration targets within and immediately surrounding the Mine Lease and will therefore reduce its current exploration portfolio. The Borroloola Project was reviewed during the quarter and was assessed as being a non-core exploration asset and therefore this project, consisting of EL24512 and EL24082, has been relinquished.

#### **Arnhem Land Exploration**

The Company's Arnhem Land project consists of 1 granted exploration licence (EL26206). Numerous exploration licences are currently at the application stage and are held by Merlin Diamonds either outright or under joint venture agreements with other parties.

The licences are located on the North Australian Craton (NAC), which is a geologically stable block favourable for kimberlite emplacement. The NAC hosts the Merlin kimberlite field, the Abner Range kimberlite and breccia pipes, and the Roper River and Timber Creek kimberlites.

The majority of the licence applications fall on land controlled by the Arnhem Land Aboriginal Land Trust. Merlin has farmed out the non-diamond rights for the majority of the licence applications to Top End Minerals Limited (Top End). Top End is responsible for negotiations with the Northern Land Council and progress of the licences to grant and to obtain early ground access, Top End has submitted Preliminary Exploration Permit applications to the Northern Land Council, which allow activities such as geological mapping, surface sampling and ground geophysics. These activities will enable Top End to make an early assessment of the prospectivity of some applications and whether to prioritise these for negotiations with the Northern Land Council.

#### **WESTERN AUSTRALIAN PROJECTS**

#### **Kimberley Diamond Projects**

The Company holds three mining licences (M80/492, M80/26 and M80/532) in the Kimberley region of Western Australia. The licences host a number of diamondiferous kimberlite pipes, which the Company has previously evaluated to identify a JORC Compliant Inferred Resource of 869,000 carats. The Company continues to hold the mining licences as they retain commercial potential. The information in the table below was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

	Inferred Infill	Inferred Kimberlite	Total Inferred	Grade	Carats
	Resource	Resource	Resource	(cpht)	(Mcts)
Kimberley Projects	tonnes	tonnes	tonnes		
Ashmore 1	305,000	868,000	1,173,000	3.67	43,000
Ashmore 2	262,000	771,000	1,033,000	6.00	62,000
Ashmore 3	108,000	243,000	351,000	3.42	12,000
Ashmore 4	58,000	100,000	158,000	13.29	21,000
Seppelt 1	214,000	1,101,000	1,315,000	25.9	341,000
Seppelt 2	27,000	146,000	173,000	225	390,000
TOTAL	975,000	3,232,000	4,207,000	21	869,000

 $<sup>^{1}</sup>$ Resource grade based recovery using a +0.75 mm square mesh bottom screen and a +0.95mm cut-off.



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**Table 1: Merlin Diamonds Limited Tenement Interests** 

Tenement	Project	State	Holder	Status	% Interest (Start of Quarter)	% Interest (End of Quarter)
EL26944	Merlin Orbit	NT	Merlin Operations Pty Ltd	Granted	100%	100%
EL28914	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28915	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28916	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28917	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28918	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28919	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28920	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28921	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28922	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28923	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28924	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28925	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28926	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28927	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28928	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28929	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28930	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28931	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
EL28932	Merlin	NT	Merlin Diamonds Limited	Application	100%	0%
M80/526	Seppelt	WA	Merlin Diamonds Limited	Granted	100%	100%
M80/532	Seppelt	WA	Merlin Diamonds Limited	Granted	100%	100%
M80/492	Ashmore	WA	Striker Diamonds P/L	Granted	100%	100%
MLN1154	Merlin	NT	Merlin Operations Pty Ltd	Granted	100%	100%
EL10189	Merlin Orbit	NT	Merlin Operations Pty Ltd	Granted	100% Diamond rights only	100% Diamond rights only
EL10230	Arnhem Land	NT	Merlin Diamonds Limited	Application	100% Diamond rights only	100% Diamond rights only



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Tenement	Project	State	Holder	Status	% Interest (Start of	% Interest (End of
EL 26206	A l l l	NIT	Mandin Diagram de Lincite d	Constant	Quarter)	Quarter)
EL26206	Arnhem Land	NT	Merlin Diamonds Limited	Granted	100%	100%
					Diamond	Diamond
EL 200CC	A made a mail a mad	NIT	Manin Diamanda Limitad	A maliantina	rights only	rights only
EL28066	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	100%
					Diamond	Diamond
EL 20067	A mala ana I ana d	NIT	Manin Diamanda Limitad	A musticanticus	rights only	rights only
EL28067	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	100%
					Diamond	Diamond
EL 200C0	A made a mail a mad	NIT	Martin Diamanda Limitad	A madiantina	rights only	rights only
EL28068	Arnhem Land	NT	Merlin Diamonds Limited	Application	100% Diamond	100% Diamond
EL 200C0	A made a mail a mad	NIT	Martin Diamanda Limitad	A madiantina	rights only	rights only
EL28069	Arnhem Land	NT	Merlin Diamonds Limited	Application	100% Diamond	100% Diamond
EL 20070	Arnhem Land	NIT	Merlin Diamonds Limited	Application	rights only	rights only
EL28070	Armem Land	NT	ivieriiri Diamonus Limited	Application	100%	100%
					Diamond	Diamond
EL28071	Arnhem Land	NIT	Martin Diamanda Limitad	A madiantina	rights only	rights only 100%
EL280/1	Arnnem Land	NT	Merlin Diamonds Limited	Application	100%	
					Diamond	Diamond
FI 20200	A l l	NIT	Marilia Diagram da Lincita d	A	rights only	rights only
EL29398	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	100%
					Diamond	Diamond
FI 20200	A l l	NIT	Marilia Diagram da Lincita d	A	rights only	rights only
EL29399	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	100%
					Diamond	Diamond
F1 20 400	A l l	NIT	Marilia Diagram da Linciba d	A	rights only	rights only
EL29400	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	100%
					Diamond	Diamond
EL29401	A made a mail a mad	NIT	Merlin Diamonds Limited	A madiantina	rights only	rights only
EL29401	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	100% Diamond
					Diamond	
EL29402	Arnhem Land	NT	Merlin Diamonds Limited	Application	rights only 100%	rights only 100%
EL29402	Affilletti Latiu	INI	Meriiii Diamonus Liiniteu	Application	Diamond	Diamond
					rights only	
EL29403	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	rights only 100%
LL23403	Ammem Land	INI	Werlin Diamonds Limited	Application	Diamond	Diamond
					rights only	rights only
EL29407	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	0%
LL23407	Ammem Land	INI	Werlin Diamonds Limited	Application	Diamond	076
					rights only	
EL29408	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	0%
LL25406	Ammem Land	INI	Werlin Diamonds Limited	Application	Diamond	076
					rights only	
EL29409	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	0%
LL2J4UJ	Anniem Lanu	141	Wernin Diamonus Limiteu	Application	Diamond	070
					rights only	
EL29410	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	0%
LL2341U	Allineili Land	141	Werlin Diamonus Limited	Application	Diamond	U70
EL20/11	Arnhomiand	NIT	Marlin Diamonda Limitad	Application	rights only	00/
EL29411	Arnhem Land	NT	Merlin Diamonds Limited	Application	100%	0%
					Diamond	
					rights only	



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Tenement	Project	State	Holder	Status	% Interest (Start of Quarter)	% Interest (End of Quarter)
EL29412	Arnhem Land	NT	Merlin Diamonds Limited	Application	100% Diamond rights only	0%
EL29413	Arnhem Land	NT	Merlin Diamonds Limited	Application	100% Diamond rights only	0%
EL29414	Arnhem Land	NT	Merlin Diamonds Limited	Application	100% Diamond rights only	0%
EL29567	Arnhem Land	NT	Merlin Diamonds Limited	Application	100% Diamond rights only	100% Diamond rights only
EL6532	Arnhem Land	NT	Rio Tinto Pty Ltd	Application	100% Diamond rights only	100% Diamond rights only
EL8681	Arnhem Land	NT	Rio Tinto Pty Ltd	Application	100% Diamond rights only	100% Diamond rights only
EL8682	Arnhem Land	NT	Rio Tinto Pty Ltd	Application	100% Diamond rights only	100% Diamond rights only

+Rule 5.5

### Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

#### Name of entity

MERLIN DIAMONDS LIMITED	
ABN	Quarter ended ("current quarter")
86 009 153 119	31 December 2016

Cor	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(111)	(170)
	(b) development	(2,317)	(3,274)
	(c) production	-	-
	(d) staff costs	(103)	(111)
	(e) administration and corporate costs	(1,081)	(1,593)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	(10)	(19)
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (GST Refund, Fuel Rebate Refund)	323	418
1.9	Net cash from / (used in) operating activities	(3,299)	(4,749)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(109)	(155)
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-

<sup>+</sup> See chapter 19 for defined terms

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Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	(1,403)	(1,945)
2.4	Dividends received (see note 3)	-	-
2.5	Other (Environmental Bond)	-	(319)
2.6	Net cash from / (used in) investing activities	(1,512)	(2,419)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	1,613	1,613
3.2	Proceeds from issue of convertible notes	1,721	3,246
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	745	780
3.6	Repayment of borrowings	(95)	(95)
3.7	Transaction costs related to loans and borrowings	(76)	(76)
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	3,908	5,468

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,110	1,907
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,299)	(4,749)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,512)	(2,419)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	3,908	5,468
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	207	207

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	207	1,110
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	207	1,110

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	5
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	
6.3	Include below any explanation necessary to understand the transaction items 6.1 and 6.2	ns included in
7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
<b>7.</b> 7.1		-
	associates	-
7.1	associates  Aggregate amount of payments to these parties included in item 1.2  Aggregate amount of cash flow from loans to these parties included	\$A'000

+ See chapter 19 for defined terms 1 September 2016 Page 3

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000		
8.1	Loan facilities	-	-		
8.2	Credit standby arrangements	-	-		
8.3	Other (please specify)	-	-		
8.4	Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.				

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	50
9.2	Development	2,400 inc production
9.3	Production	-
9.4	Staff costs	400
9.5	Administration and corporate costs	400
9.6	Other (provide details if material)	
9.7	Total estimated cash outflows	3,250

The Company has announced a pro-rata rights issue which will raise approximately \$5.8 million.

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-	Refer table 1 of quarterly report.	-	-
10.2	Interests in mining tenements and petroleum tenements acquired or increased	-	-	-	-

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<sup>+</sup> See chapter 19 for defined terms

#### **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

	/ /	
Sign here:		Date: 31 January 2016
	(Company Secretary)	

Print name: Peter Lee

#### **Notes**

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

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<sup>+</sup> See chapter 19 for defined terms