

BHP BILLITON LTD  
Form 6-K  
January 18, 2018

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**  
**Form 6-K**  
**REPORT OF FOREIGN PRIVATE ISSUER**  
**PURSUANT TO RULE 13a-16 OR 15d-16**  
**UNDER THE SECURITIES EXCHANGE ACT OF 1934**  
**January 18, 2018**

**BHP BILLITON LIMITED**

**(ABN 49 004 028 077)**

**(Exact name of Registrant as specified in its charter)**

**VICTORIA, AUSTRALIA**

**(Jurisdiction of incorporation or organisation)**

**171 COLLINS STREET, MELBOURNE,**

**VICTORIA 3000 AUSTRALIA**

**(Address of principal executive offices)**

**BHP BILLITON PLC**

**(REG. NO. 3196209)**

**(Exact name of Registrant as specified in its  
charter)**

**ENGLAND AND WALES**

**(Jurisdiction of incorporation or organisation)**

**NOVA SOUTH, 160 VICTORIA STREET**

**LONDON, SW1E 5LB**

**UNITED KINGDOM**

**(Address of principal executive offices)**

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## NEWS RELEASE

**Release Time** IMMEDIATE  
**Date** 18 January 2018  
**Release Number** 01/18

**BHP OPERATIONAL REVIEW FOR THE HALF YEAR ENDED 31 DECEMBER 2017**

Full year production and unit cost guidance<sup>(1)</sup> maintained for Petroleum, Copper, Iron Ore and Energy Coal. At Western Australia Iron Ore (WAIO), a record annualised production rate of 284 Mt (100 per cent basis) was achieved for the December 2017 quarter.

Production guidance for Metallurgical Coal reduced to between 41 and 43 Mt as a result of challenging roof conditions at Broadmeadow, which are expected to continue through the March 2018 quarter, and geotechnical issues triggered by wet weather impacts at Blackwater. Unit cost guidance is also expected to be negatively impacted and is currently under review.

We continue to release latent capacity across our portfolio, with the Los Colorados Extension project successfully ramped up during the December 2017 quarter.

In Onshore US, our operated rig count remained at nine during the December 2017 quarter but is expected to fall as we tailor plans to maximise value in the exit process. We continue to progress a number of alternatives to divest our Onshore US assets for value.

All major projects under development are tracking to plan.

Underlying EBIT<sup>(2)</sup> in the December 2017 half year is expected to include impairment charges, predominately related to conveyors at Escondida, in a range of US\$250 million to US\$350 million.

<b>Production</b>	<b>Dec H17</b>	<b>vs Dec H16</b>	
Petroleum (MMboe)	99	(7%)	Lower volumes reflect the impact of Hurricane Harvey and Hurricane Nate on US petroleum assets and natural field decline.
Copper (kt)	833	17%	Increased volumes at Escondida supported by the ramp-up of the Los Colorados Extension project.
Iron ore <sup>(3)</sup> (Mt)	117	0%	Record production at Jimblebar and Mining Area C offset by planned maintenance and lower opening stockpile levels following the Mt Whaleback fire in June 2017.
Metallurgical coal <sup>(3)</sup> (Mt)	20	(4%)	Record production at four Queensland Coal mines offset by the lower volumes at Broadmeadow (roof conditions) and

			Blackwater (geotechnical issues).
Energy coal <sup>(3)</sup> (Mt)	14	4%	Strong performance at New South Wales Energy Coal offset by the impacts of unfavourable wet weather at Cerrejón.

BHP Chief Executive Officer, Andrew Mackenzie, said: A strong operating performance in the first half allowed us to capture the benefit of higher prices. The successful Los Colorados Extension project ramp-up contributed to a 17 per cent increase in copper output and production records were achieved at a number of Western Australia Iron Ore and Queensland Coal mines. We have revised down our metallurgical coal production forecast for the full year as a result of geotechnical issues at both Broadmeadow and Blackwater. The momentum we've built across the wider portfolio during the second quarter will flow through to an expected stronger second half operating performance. Together with incremental production from latent capacity projects in iron ore and copper, we expect volume growth of six per cent for the full year.

## Summary

### *Operational performance*

Production for the December 2017 half year and guidance for the 2018 financial year are summarised in the table below.

			Dec H17 vs	Dec Q17 vs	Dec Q17 vs	Previous FY18 guidance	Current FY18 guidance
Production	Dec H17	Dec Q17	Dec H16	Dec Q16	Sep Q17		
Petroleum (MMboe)	99	48	(7%)	(6%)	(4%)	180 - 190	180 - 190
Onshore US (MMboe)	35	18	(13%)	(10%)	1%	61 - 67	61 - 67
Conventional (MMboe)	64	31	(3%)	(3%)	(6%)	119 - 123	119 - 123
Copper (kt)	833	429	17%	20%	6%	1,655 - 1,790	1,655 - 1,790
Escondida (kt)	583	315	29%	34%	17%	1,130 - 1,230	1,130 - 1,230
Other copper <sup>(i)</sup> (kt)	250	114	(4%)	(7%)	(16%)	525 - 560	525 - 560
Iron ore <sup>(ii)</sup> (Mt)	117	62	0%	3%	11%	239 - 243	239 - 243
WAO (100% basis) (Mt)	136	72	0%	3%	11%	275 - 280 <sup>(iii)</sup>	275 - 280 <sup>(iii)</sup>
Metallurgical coal <sup>(ii)</sup> (Mt)	20	10	(4%)	(9%)	(8%)	44 - 46	41 - 43
Energy coal <sup>(ii)</sup> (Mt)	14	7	4%	10%	8%	29 - 30	29 - 30

(i) Other copper comprises Pampa Norte, Olympic Dam and Antamina.

(ii) Excludes production from Samarco, Haju (IndoMet Coal) and New Mexico Coal.

(iii) Subject to regulatory approvals to increase capacity above 270 Mt.

### *Major development projects*

During the December 2017 half year, the BHP Board approved an investment of US\$2.5 billion for the development of the Spence Growth Option.

BHP has four major projects under development in Petroleum, Copper and Potash, with a combined budget of US\$7.5 billion over the life of the projects. All projects remain on time and on budget.

### *Corporate update*

BHP expects Underlying EBIT in the December 2017 half year to include impairment charges (predominately related to conveyors at Escondida that are no longer planned to be utilised due to the successful completion of the Los Colorados Extension project) in a range of US\$250 million to US\$350 million.

The Group's adjusted effective tax rate<sup>(4)</sup> for the December 2017 half year is currently being finalised and is expected to be below the full year guidance range of 32 to 37 per cent.

As previously highlighted, during the December 2017 half year we made final corporate income tax cash payments in Australia of approximately US\$1.3 billion relating to the prior year. We also successfully concluded a US\$2.9 billion multi-currency bond repurchase plan, with total costs in relation to the repurchase program of approximately US\$100 million to be reported in net finance costs in the December 2017 half year financial results.

On 16 November 2017, Samarco and its shareholders, Vale S.A. and BHP Billiton Brasil, entered into an agreement with the Federal Prosecutors' Office in Brazil and the Minas Gerais State Prosecutors Office (Amendment Agreement). The Amendment Agreement, subject to ratification by the 12th Federal Court of Minas Gerais, amends the Preliminary Agreement<sup>(5)</sup> entered into on 18 January 2017 in relation to the Samarco dam failure (Preliminary Agreement). The Amendment Agreement provides for the State Prosecutors to become a party to the Preliminary Agreement and provides for additional community consultation.

Samarco, Vale S.A., BHP Billiton Brasil and the Federal Prosecutors also jointly requested, and the 12th Federal Court has approved, an additional 150 days, ending on 20 April 2018, for the parties to continue negotiations for the settlement of the Public Civil Claims.

On 22 December 2017, BHP announced a total of US\$181 million in further financial support for the Renova Foundation and Samarco until 30 June 2018. This comprises US\$133 million to fund the Renova Foundation which will be offset against the Group's provision for the Samarco dam failure, US\$6 million of fees payable to experts appointed in connection with remediation and compensation programs and a short-term facility of up to US\$42 million to be made available to Samarco.

As at the date of this Operational Review, we are not in a position to provide an update, for the purpose of the December 2017 half year financial results, on the ongoing potential financial impacts on BHP Billiton Brasil of the Samarco dam failure. Any financial impacts will continue to be classified as an exceptional item.

On 22 December 2017, the US President signed a new US tax law (H.R. 1). BHP is currently working through the financial impacts of the tax reform, which will include a non-cash revaluation of the Group's US net deferred tax assets. The financial impact is expected to give rise to an exceptional item in the December 2017 half year financial results. Longer term, we expect US attributable profits to be positively impacted by the lower US corporate income tax rate.

### *Marketing update*

The average realised prices achieved for our major commodities are summarised in the table below. The majority of iron ore shipments were linked to the index price for the month of shipment, with price differentials predominantly a reflection of product quality and market fundamentals. The majority of metallurgical coal and energy coal exports were linked to the index price for the month of shipment or sold on the spot market at fixed or index-linked prices, with price differentials reflecting product quality.

Average realised prices <sup>(i)</sup>	Dec H17	Dec H16	Jun H17	FY17	Dec H17	Dec H17	Dec H17
					vs Dec H16	vs Jun H17	vs FY17
Oil (crude and condensate) (US\$/bbl)	54	45	50	48	20%	8%	13%
Natural gas (US\$/Mscf) <sup>(ii)</sup>	3.54	3.21	3.48	3.34	10%	2%	6%
US natural gas (US\$/Mscf)	2.84	2.79	2.98	2.88	2%	(5%)	(1%)
LNG (US\$/Mscf)	7.48	6.35	7.37	6.84	18%	1%	9%
Copper (US\$/lb)	3.20	2.41	2.70	2.54	33%	19%	26%
Iron ore (US\$/wmt, FOB)	57	55	62	58	4%	(8%)	(2%)
Hard coking coal (US\$/t)	182	179	180	180	2%	1%	1%
Weak coking coal (US\$/t)	121	122	121	121	(1%)	0%	0%
Thermal coal (US\$/t) <sup>(iii)</sup>	87	74	75	75	18%	16%	16%
Nickel metal (US\$/t)	11,083	10,581	9,799	10,184	5%	13%	9%

(i) Based on provisional, unaudited estimates. Prices exclude sales from equity accounted investments, third party product and internal sales, and represent the weighted average of various sales terms (for example: FOB, CIF and CFR), unless otherwise noted. Includes the impact of provisional pricing and finalisation adjustments.

(ii) Includes internal sales.

(iii) Export sales only. Includes thermal coal sales from metallurgical coal mines.

At 31 December 2017, the Group had 348 kt of outstanding copper sales that were revalued at a weighted average price of US\$3.28 per pound. The final price of these sales will be determined over the remainder of the 2018 financial year. In addition, 254 kt of copper sales from the 2017 financial year were subject to a finalisation adjustment in the current period. The provisional pricing and finalisation adjustments will increase Underlying EBITDA<sup>(2)</sup> by US\$246 million in the December 2017 half year.





**Petroleum****Production**

	Dec H17	Dec Q17	Dec H17 vs Dec H16	Dec Q17 vs Dec Q16	Dec Q17 vs Sep Q17
Crude oil, condensate and natural gas liquids (MMboe)	45	22	(8%)	(7%)	1%
Natural gas (bcf)	325	157	(6%)	(5%)	(7%)
Total petroleum production (MMboe)	99	48	(7%)	(6%)	(4%)

**Petroleum** Total petroleum production for the December 2017 half year decreased by seven per cent to 99 MMboe. Guidance for the 2018 financial year remains unchanged at between 180 and 190 MMboe, comprising Conventional volumes between 119 and 123 MMboe and Onshore US volumes between 61 and 67 MMboe.

**Production breakdown Dec H17 vs Dec H16****Crude oil, condensate and natural gas liquids (MMboe)**

Conventional	30	(6%)	Decrease due to the impact of Hurricane Harvey and Hurricane Nate in the Gulf of Mexico and natural field decline across the portfolio.
Onshore US	15	(12%)	Decrease due to the impact of Hurricane Harvey and natural field decline, which more than offset additional wells put online in the Black Hawk and Permian.
Total	45	(8%)	

**Natural gas (bcf)**

Conventional	203	(1%)	Production broadly unchanged.
Onshore US	122	(14%)	Decrease due to the impact of Hurricane Harvey and natural field decline, partially offset by additional wells put online in the Eagle Ford, Permian and Haynesville.
Total	325	(6%)	

Completion of the agreement with Chevron and ExxonMobil to withdraw from our 4.95 per cent interest in the Genesis deepwater asset in the Gulf of Mexico occurred in December 2017, with an effective date of 1 January 2017.

**Projects**

Project and ownership	Capital expenditure (US\$m)	Initial production target date	Capacity	Progress
North West Shelf Greater Western Flank-B (Australia)	314	CY19	To maintain LNG plant throughput from the North West Shelf operations.	On schedule and budget. The overall project is 66% complete.

**16.67% (non-operator)**

Mad Dog Phase 2	2,154	CY22	New floating production facility with the capacity to produce up to 140,000 gross barrels of crude oil per day.	On schedule and budget. The overall project is 10% complete.
(US Gulf of Mexico)				

**23.9% (non-operator)**

Petroleum capital expenditure of approximately US\$1.9 billion is now planned in the 2018 financial year, a reduction from our previous guidance of US\$2.0 billion. Onshore US capital expenditure is expected to be lower at US\$1.1 billion, reflecting development activity tailored to support value in the exit process and meet Hold by Production obligations. Conventional capital expenditure of US\$0.8 billion remains unchanged, focused on high-return infill drilling opportunities in the Gulf of Mexico, a life extension project at North West Shelf and investment in the Mad Dog Phase 2 project.

***Onshore US development activity***

Onshore US drilling and development expenditure for the December 2017 half year was US\$336 million (US\$511 million on an activity basis). Our operated rig count remained at nine during the December 2017 quarter.

We have adjusted our Onshore US capital plans to optimise value for our planned exit.

In the Permian, sub-surface trials have confirmed first year production improvements associated with larger completions. We reduced our rig count from three to two (in December 2017 quarter) as we focused on meeting Hold by Production obligations and progressing sub-surface trials.

In the Eagle Ford, we increased our rig count from two to three in the December 2017 quarter to test the Austin Chalk horizon and trial larger completions in Hawkville. We anticipate a return to two rigs during the March 2018 quarter.

In the Haynesville, we recently incorporated larger completions and have been operating new wells with larger chokes, both of which have improved results. We will continue to implement these changes in future wells, but expect to lower our rig count during the second half of the 2018 financial year as rig contracts expire and we optimise future investments ahead of our planned exit.

In the Fayetteville, our plans remain unchanged at this time. We continue to assess the potential of the Moorefield horizon based on data from the new non-operated wells.

December 2017 half year		Liquids focused areas			Gas focused areas	
(December 2016 half year)		Eagle Ford	Permian	Haynesville	Fayetteville	Total
Capital expenditure <sup>(i)</sup>	US\$ billion	0.1 (0.1)	0.1 (0.1)	0.1 (0.0)	0.0 (0.0)	0.3 (0.3)
Rig allocation	At period end	3 (1)	2 (1)	4 (1)	0 (0)	9 (3)
Net wells drilled and completed <sup>(ii)</sup>	Period total	9 (43)	10 (15)	10 (0)	0 (2)	29 (60)
Net productive wells	At period end	931 (942)	136 (118)	405 (394)	1,043 (1,042)	2,515 (2,496)

(i) Includes land acquisition, site preparation, drilling, completions, well site facilities, mid-stream infrastructure and pipelines.

(ii) Can vary between periods based on changes in rig activity and the inventory of wells drilled but not yet completed at period end.

We continue to progress a number of alternatives to exit our Onshore US assets for value. We are preparing all appropriate documentation ahead of data rooms being opened to potential trade sale buyers by the end of the March 2018 quarter. In parallel, we continue to explore a potential exit via demerger or Initial Public Offering.

### *Petroleum exploration*

Exploration and appraisal wells drilled during the December 2017 quarter are summarised below.

Well	Location	Target	BHP equity	Spud date	Water depth	Total well depth	Status
Scimitar	US Gulf of Mexico GC392	Oil	65%	1 October 2017	1,289 m	9,386 m	Drilling ahead

In the US Gulf of Mexico, the Scimitar well was spud on 1 October 2017, with results expected in the March 2018 quarter. BHP holds a 65 per cent working interest and is the operator of the Scimitar prospect, with partner Repsol (20 per cent working interest) and Statoil (15 per cent working interest).

In Mexico, an Exploration and Appraisal plan for the Trion contractual area licence number CNH-A1-Trion/2016 (formerly referred to as blocks AE-0092 and AE-0093) was submitted to the Comisión Nacional de Hidrocarburos of

Mexico by BHP and Pemex on 29 August 2017, in line with regulatory requirements. We have received positive feedback and planning continues for the exploration and appraisal wells which are expected to be drilled in the 2019 financial year.

In Trinidad and Tobago, we continued appraisal work to assess the potential commercialisation of the gas discovery at LeClerc. Preparations continued for Phase 2 deepwater exploration which is expected to commence in the second half of the 2018 financial year.

Petroleum exploration expenditure for the December 2017 half year was US\$378 million, of which US\$137 million was expensed. A US\$715 million exploration program is planned for the 2018 financial year. This program comprises the Wildling-2 side track and Scimitar exploration well in the US Gulf of Mexico and two wells in Trinidad and Tobago, with the third well now expected to be drilled at the beginning of the 2019 financial year.

**Copper****Production**

			Dec H17 vs Dec H16	Dec Q17 vs Dec Q16	Dec Q17 vs Sep Q17
	Dec H17	Dec Q17			
Copper (kt)	833	429	17%	20%	6%
Zinc (t)	58,255	29,054	54%	30%	(1%)
Uranium oxide concentrate (t)	1,123	243	(43%)	(77%)	(72%)

**Copper** Total copper production for the December 2017 half year increased by 17 per cent to 833 kt. Guidance for the 2018 financial year remains unchanged at between 1,655 and 1,790 kt.

Escondida copper production for the December 2017 half year increased by 29 per cent to 583 kt, supported by the start-up of the Los Colorados Extension (LCE) project on 10 September 2017. LCE successfully ramped up during the December 2017 quarter, enabling utilisation of the three concentrators. Production guidance for the 2018 financial year remains unchanged at between 1,130 and 1,230 kt. Escondida and Union N°2 of Supervisors and Staff signed a new Collective Agreement, valid from 1 October 2017, which has a duration of 36 months. The existing agreement with Union N°1 will expire on 1 August 2018, with planning underway for early negotiations.

Pampa Norte copper production for the December 2017 half year increased by nine per cent to 126 kt, supported by record material mined at Cerro Colorado and rapid ramp-up at the Spence tank house post unplanned maintenance during the September 2017 quarter. Pampa Norte production guidance for the 2018 financial year remains unchanged and is expected to be higher than the prior year.

Olympic Dam copper production for the December 2017 half year decreased by 31 per cent to 54 kt as a result of the planned major smelter maintenance campaign recently completed. Smelting operations have now resumed with the first anode cast from the flash furnace on 23 December 2017. Operations will continue to ramp-up to full capacity in the March 2018 quarter, with production guidance unchanged at 150 kt for the 2018 financial year. We expect production to increase to approximately 215 kt in the 2019 financial year, underpinned by improved operating performance and higher ore grades from the Southern Mine Area.

Antamina copper production for the December 2017 half year increased by five per cent to 70 kt and zinc production increased 54 per cent to 58 kt due to higher head grades and mining progressing through a zinc-rich ore zone consistent with the mine plan. Guidance for the 2018 financial year remains unchanged, with copper production of approximately 125 kt and zinc production of approximately 100 kt.

**Projects**

Project and ownership	Capital expenditure (US\$m)	Initial production target date	Capacity	Progress
Spence Growth Option (Chile) 100%	2,460	FY21	New 95 ktpd concentrator is expected to increase	On schedule and budget. The overall project is 4%

Spence's payable copper in concentrate production by approximately 185 ktpa in the first 10 years of operation and extend the mining operations by more than 50 years. complete.

**Iron Ore****Production**

			Dec H17 vs Dec H16	Dec Q17 vs Dec Q16	Dec Q17 vs Sep Q17
	Dec H17	Dec Q17			
Iron ore <sup>(i)</sup> (kt)	117,144	61,557	0%	3%	11%

(i) Represents Western Australia Iron Ore (WAIO). Excludes production from Samarco.

**Iron ore** Total iron ore production for the December 2017 half year was in line with the same period last year at 117 Mt, or 136 Mt on a 100 per cent basis. Guidance for the 2018 financial year remains unchanged at between 239 and 243 Mt, or between 275 and 280 Mt on a 100 per cent basis, with volumes weighted to the second half of the financial year as expected.

At WAIO, record production at Jimblebar and Mining Area C was offset by the impact of lower opening stockpile levels following the fire at the Mt Whaleback screening plant in June 2017, and planned maintenance in the previous quarter. Volumes increased by 11 per cent from the September 2017 quarter with a record annualised rate of 284 Mt (100 per cent basis) achieved for the December 2017 quarter. The higher volumes reflect increased plant availability and improved rail performance. Port debottlenecking activities were completed in the December 2017 quarter and will support higher volumes in the second half of the financial year.

BHP continues to work with the relevant authorities in relation to the necessary approvals to increase system capacity to 290 Mtpa (100 per cent basis).

Mining and processing operations at Samarco remain suspended following the failure of the Fundão tailings dam and Santarém water dam on 5 November 2015.

**Coal****Production**

			Dec H17 vs Dec H16	Dec Q17 vs Dec Q16	Dec Q17 vs Sep Q17
	Dec H17	Dec Q17			
Metallurgical coal (kt)	20,252	9,685	(4%)	(9%)	(8%)
Energy coal (kt)	14,029	7,297	4%	10%	8%

**Metallurgical coal** Metallurgical coal production for the December 2017 half year decreased by four per cent to 20 Mt. Guidance for the 2018 financial year has been reduced to between 41 and 43 Mt and reflects lower volumes now expected at Broadmeadow and Blackwater. As a result of the reduced Broadmeadow and Blackwater volumes and compensatory increased production from higher cost pits, unit cost guidance is also expected to be negatively impacted and is currently under review.

At Queensland Coal, production for the December 2017 half year was lower due to the impacts of ongoing challenging roof conditions at Broadmeadow and geotechnical issues brought on by wet weather at Blackwater. This

was partially offset by record production at South Walker Creek, Saraji, Caval Ridge and Daunia, underpinned by improved truck and shovel performance, utilisation of latent dragline capacity at Caval Ridge and increased wash-plant feed rates.

The Caval Ridge Southern Circuit project is progressing according to plan, with production expected to ramp-up early in the 2019 financial year.

**Energy coal** Energy coal production for the December 2017 half year increased by four per cent to 14 Mt. Guidance for the 2018 financial year remains unchanged at 29 to 30 Mt.

New South Wales Energy Coal production increased by 10 per cent as it benefitted from improved stripping performance, higher truck utilisation and additional bypass coal. This was partially offset by a six per cent decline in Cerrejón production, which was impacted by wet weather conditions during the September 2017 quarter.



**Other*****Nickel production***

			Dec H17 vs Dec H16	Dec Q17 vs Dec Q16	Dec Q17 vs Sep Q17
	Dec H17	Dec Q17			
Nickel (kt)	45.2	22.4	11%	1%	(2%)

**Nickel** Nickel West production for the December 2017 half year increased by 11 per cent to 45 kt of nickel primarily due to improved performance at the Kalgoorlie smelter. Nickel production guidance for the 2018 financial year remains unchanged and is expected to be broadly in line with the 2017 financial year.

***Potash project***

Project and ownership	Investment (US\$m)	Scope	Progress
Jansen Potash (Canada)	2,600	Investment to finish the excavation and lining of the production and service shafts, and to continue the installation of essential surface infrastructure and utilities.	The project is 75% complete and within the approved budget. Shaft excavation is progressing.
100%			

**Minerals exploration**

Minerals exploration expenditure for the December 2017 half year was US\$86 million, of which US\$55 million was expensed. Greenfield minerals exploration is predominantly focused on advancing copper targets within Chile, Ecuador, Peru, Canada, South Australia and the South-West United States.

Variance analysis relates to the relative performance of BHP and/or its operations during the December 2017 half year compared with the December 2016 half year, unless otherwise noted. Production volumes, sales volumes and capital and exploration expenditure from subsidiaries are reported on a 100 per cent basis; production and sales volumes from equity accounted investments and other operations are reported on a proportionate consolidation basis. Copper equivalent production based on 2017 financial year average realised prices.

The following footnotes apply to this Operational Review:

- (1) 2018 financial year unit cost guidance is based on exchange rates of AUD/USD 0.75 and USD/CLP 663.
- (2) Underlying EBIT and Underlying EBITDA are used to reflect the underlying performance of BHP. Underlying EBIT is earnings before net finance costs, taxation and any exceptional items. Underlying EBITDA is Underlying EBIT before depreciation, amortisation and impairment.

- (3) Excludes production from Samarco, Haju (IndoMet Coal) and New Mexico Coal.
- (4) Adjusted effective tax rate comprises Total taxation (expense)/benefit excluding exceptional items and exchange rate movements included in taxation (expense)/benefit divided by Profit/(loss) before taxation and exceptional items.
- (5) The Preliminary Agreement outlines the process and timeline for negotiation of a settlement of the BRL 155 billion (approximately US\$47 billion) and BRL 20 billion (approximately US\$6 billion) Public Civil Claims relating to the dam failure.

The following abbreviations may have been used throughout this report: barrels (bbl); billion cubic feet (bcf); cost and freight (CFR); cost, insurance and freight (CIF); dry metric tonne unit (dmtu); free on board (FOB); grams per tonne (g/t); kilograms per tonne (kg/t); kilometre (km); metre (m); million barrels of oil equivalent (MMboe); million cubic feet per day (MMcf/d); million tonnes (Mt); million tonnes per annum (Mtpa); ounces (oz); pounds (lb); thousand barrels of oil equivalent (Mboe); thousand ounces (koz); thousand standard cubic feet (Mscf); thousand tonnes (kt); thousand tonnes per annum (ktpa); thousand tonnes per day (ktpd); tonnes (t); and wet metric tonnes (wmt).

Further information on BHP can be found at: [bhp.com](http://bhp.com)

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**Production summary**

	BHP interest	Dec 2016	Mar 2017	Quarter ended Jun 2017	Sep 2017	Dec 2017	Year to date Dec 2017	Dec 2016
<b>Petroleum <sup>(1)</sup></b>								
<b>Petroleum</b>								
<b>Crude oil, condensate and NGL (Mboe)</b>								
Onshore US		8,143	9,439	8,501	7,079	<b>7,423</b>	<b>14,502</b>	16,431
Conventional		15,768	15,369	15,612	15,090	<b>14,869</b>	<b>29,959</b>	31,727
Total		23,911	24,808	24,113	22,169	<b>22,292</b>	<b>44,461</b>	48,158
<b>Natural gas (bcf)</b>								
Onshore US		67.8	66.1	67.2	61.4	<b>60.5</b>	<b>121.9</b>	141.7
Conventional		97.1	88.4	99.5	107.3	<b>96.1</b>	<b>203.4</b>	204.9
Total		164.9	154.5	166.7	168.7	<b>156.6</b>	<b>325.3</b>	346.6
<b>Total petroleum production (MMboe)</b>								
		51.4	50.6	51.9	50.3	<b>48.4</b>	<b>98.7</b>	105.9
<b>Copper <sup>(2)</sup></b>								
<b>Copper</b>								
<b>Payable metal in concentrate (kt)</b>								
Escondida <sup>(3)</sup>	57.5%	162.6	67.6	162.4	196.3	<b>238.5</b>	<b>434.8</b>	309.6
Antamina	33.8%	32.0	29.2	38.5	35.9	<b>33.8</b>	<b>69.7</b>	66.1
Total		194.6	96.8	200.9	232.2	<b>272.3</b>	<b>504.5</b>	375.7
<b>Cathode (kt)</b>								
Escondida <sup>(3)</sup>	57.5%	71.5	27.2	62.8	71.9	<b>76.1</b>	<b>148.0</b>	142.0
Pampa Norte <sup>(4)</sup>	100%	53.8	66.1	72.3	58.0	<b>68.4</b>	<b>126.4</b>	115.9
Olympic Dam	100%	37.2	36.8	51.4	42.0	<b>12.2</b>	<b>54.2</b>	78.1
Total		162.5	130.1	186.5	171.9	<b>156.7</b>	<b>328.6</b>	336.0
<b>Total copper (kt)</b>								
		357.1	226.9	387.4	404.1	<b>429.0</b>	<b>833.1</b>	711.7
<b>Lead</b>								
<b>Payable metal in concentrate (t)</b>								
Antamina	33.8%	1,220	1,308	1,799	1,415	<b>1,009</b>	<b>2,424</b>	2,366

Total		1,220	1,308	1,799	1,415	<b>1,009</b>	<b>2,424</b>	2,366
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**Zinc**

<b>Payable metal in concentrate (t)</b>								
Antamina	33.8%	22,406	20,653	29,076	29,201	<b>29,054</b>	<b>58,255</b>	37,773
Total		22,406	20,653	29,076	29,201	<b>29,054</b>	<b>58,255</b>	37,773

**Gold**

<b>Payable metal in concentrate (troy oz)</b>								
Escondida <sup>(3)</sup>	57.5%	37,784	11,572	33,941	50,525	<b>50,279</b>	<b>100,804</b>	65,345
Olympic Dam (refined gold)	100%	29,651	21,941	28,188	13,101	<b>15,969</b>	<b>29,070</b>	54,017
Total		67,435	33,513	62,129	63,626	<b>66,248</b>	<b>129,874</b>	119,362

**Silver**

<b>Payable metal in concentrate (troy koz)</b>								
Escondida <sup>(3)</sup>	57.5%	1,323	540	1,234	1,737	<b>2,193</b>	<b>3,930</b>	2,552
Antamina	33.8%	1,446	1,301	1,691	1,596	<b>1,331</b>	<b>2,927</b>	2,791
Olympic Dam (refined silver)	100%	188	174	243	131	<b>135</b>	<b>266</b>	351
Total		2,957	2,015	3,168	3,464	<b>3,659</b>	<b>7,123</b>	5,694

**Uranium**

<b>Payable metal in concentrate (t)</b>								
Olympic Dam	100%	1,060	948	737	880	<b>243</b>	<b>1,123</b>	1,976
Total		1,060	948	737	880	<b>243</b>	<b>1,123</b>	1,976

**Molybdenum**

<b>Payable metal in concentrate (t)</b>								
Antamina	33.8%	225	30	328	402	<b>579</b>	<b>981</b>	786
Total		225	30	328	402	<b>579</b>	<b>981</b>	786

**Production summary**

		Quarter ended					Year to date	
	BHP interest	Dec 2016	Mar 2017	Jun 2017	Sep 2017	Dec 2017	Dec 2017	Dec 2016
<b>Iron Ore</b>								
<b>Iron Ore</b>								
<b>Production (kt) <sup>(5)</sup></b>								
Newman	85%	17,751	16,283	16,241	13,842	<b>18,317</b>	<b>32,159</b>	35,759
Area C Joint Venture	85%	12,179	11,165	13,016	13,099	<b>13,575</b>	<b>26,674</b>	24,563
Yandi Joint Venture	85%	17,555	14,656	17,415	14,559	<b>16,348</b>	<b>30,907</b>	33,284
Jimblebar <sup>(6)</sup>	85%	5,178	4,824	5,891	6,283	<b>4,583</b>	<b>10,866</b>	11,235
Wheelarra	85%	7,386	6,647	7,578	7,804	<b>8,734</b>	<b>16,538</b>	12,795
Samarco	50%							
Total		60,049	53,575	60,141	55,587	<b>61,557</b>	<b>117,144</b>	117,636
<b>Coal</b>								
<b>Metallurgical coal</b>								
<b>Production (kt) <sup>(7)</sup></b>								
BMA	50%	8,684	7,996	6,394	8,296	<b>7,394</b>	<b>15,690</b>	17,068
BHP Mitsui Coal <sup>(8)</sup>	80%	1,929	2,138	2,100	2,271	<b>2,291</b>	<b>4,562</b>	4,074
Haju <sup>(9)</sup>	75%	27						129
Total		10,640	10,134	8,494	10,567	<b>9,685</b>	<b>20,252</b>	21,271
<b>Energy coal</b>								
<b>Production (kt)</b>								
USA	100%							451
Australia	100%	3,851	4,662	5,711	4,235	<b>4,383</b>	<b>8,618</b>	7,803
Colombia	33.3%	2,800	2,756	2,475	2,497	<b>2,914</b>	<b>5,411</b>	5,728
Total		6,651	7,418	8,186	6,732	<b>7,297</b>	<b>14,029</b>	13,982
<b>Other</b>								
<b>Nickel</b>								
<b>Saleable production (kt)</b>								
Nickel West	100%	22.1	19.0	25.2	22.8	<b>22.4</b>	<b>45.2</b>	40.9
Total		22.1	19.0	25.2	22.8	<b>22.4</b>	<b>45.2</b>	40.9

(1) LPG and ethane are reported as natural gas liquids (NGL). Product-specific conversions are made and NGL is reported in barrels of oil equivalent (boe). Total boe conversions are based on 6 bcf of natural gas equals 1 MMboe.

- (2) Metal production is reported on the basis of payable metal.
  - (3) Shown on a 100% basis. BHP interest in saleable production is 57.5%.
  - (4) Includes Cerro Colorado and Spence.
  - (5) Iron ore production is reported on a wet tonnes basis.
  - (6) Shown on a 100% basis. BHP interest in saleable production is 85%.
  - (7) Metallurgical coal production is reported on the basis of saleable product. Production figures include some thermal coal.
  - (8) Shown on a 100% basis. BHP interest in saleable production is 80%.
  - (9) Shown on a 100% basis. BHP interest in saleable production is 75%.
- Throughout this report figures in italics indicate that this figure has been adjusted since it was previously reported.

**Production and sales report**

		Quarter ended				Year to date		
		Dec 2016	Mar 2017	Jun 2017	Sep 2017	Dec 2017	Dec 2017	Dec 2016
<b>Petroleum <sup>(1)</sup></b>								
<b>Bass Strait</b>								
Crude oil and condensate	(Mboe)	1,770	1,355	1,552	1,815	<b>1,513</b>	<b>3,328</b>	3,692
NGL	(Mboe)	1,460	1,236	1,661	1,950	<b>1,584</b>	<b>3,534</b>	3,562
Natural gas	(bcf)	31.3	28.7	37.4	42.6	<b>32.9</b>	<b>75.5</b>	73.2
Total petroleum products	(MMboe)	8.4	7.4	9.4	10.9	<b>8.6</b>	<b>19.4</b>	19.5
<b>North West Shelf</b>								
Crude oil and condensate	(Mboe)	1,468	1,239	1,314	1,474	<b>1,442</b>	<b>2,916</b>	2,954
NGL	(Mboe)	263	200	209	227	<b>200</b>	<b>427</b>	555
Natural gas	(bcf)	36.9	32.2	32.5	36.2	<b>36.2</b>	<b>72.4</b>	75.6
Total petroleum products	(MMboe)	7.9	6.8	6.9	7.7	<b>7.7</b>	<b>15.4</b>	16.1
<b>Pyrenees</b>								
Crude oil and condensate	(Mboe)	1,726	1,509	1,606	1,510	<b>1,210</b>	<b>2,720</b>	3,402
Total petroleum products	(MMboe)	1.7	1.5	1.6	1.5	<b>1.2</b>	<b>2.7</b>	3.4
<b>Other Australia <sup>(2)</sup></b>								
Crude oil and condensate	(Mboe)	8	8	9	9	<b>8</b>	<b>17</b>	18
Natural gas	(bcf)	17.1	15.2	16.3	16.1	<b>13.3</b>	<b>29.4</b>	34.6
Total petroleum products	(MMboe)	2.9	2.5	2.7	2.7	<b>2.2</b>	<b>4.9</b>	5.8
<b>Atlantis <sup>(3)</sup></b>								
Crude oil and condensate	(Mboe)	3,263	3,881	3,637	3,022	<b>3,377</b>	<b>6,399</b>	6,317
NGL	(Mboe)	207	295	213	218	<b>195</b>	<b>413</b>	415
Natural gas	(bcf)	1.6	2.1	1.9	1.6	<b>1.8</b>	<b>3.4</b>	3.1
Total petroleum products	(MMboe)	3.7	4.5	4.2	3.5	<b>3.9</b>	<b>7.4</b>	7.2
<b>Mad Dog <sup>(3)</sup></b>								
Crude oil and condensate	(Mboe)	1,170	1,185	1,167	1,020	<b>1,231</b>	<b>2,251</b>	2,120
NGL	(Mboe)	52	59	68	44	<b>72</b>	<b>116</b>	88
Natural gas	(bcf)	0.2	0.2	0.2	0.1	<b>0.2</b>	<b>0.3</b>	0.3
Total petroleum products	(MMboe)	1.3	1.3	1.3	1.1	<b>1.3</b>	<b>2.4</b>	2.3
<b>Shenzi <sup>(3)</sup></b>								
Crude oil and condensate	(Mboe)	2,692	2,675	2,588	2,291	<b>2,513</b>	<b>4,804</b>	5,324



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NGL	(Mboe)	131	161	179	141	<b>184</b>	<b>325</b>	225
Natural gas	(bcf)	0.5	0.5	0.6	0.4	<b>0.5</b>	<b>0.9</b>	1.0
Total petroleum products	(MMboe)	2.9	2.9	2.9	2.5	<b>2.8</b>	<b>5.3</b>	5.7

**Eagle Ford** <sup>(4)</sup>

Crude oil and condensate	(Mboe)	4,008	5,451	4,278	3,457	<b>3,720</b>	<b>7,177</b>	7,879
NGL	(Mboe)	2,159	2,354	2,240	1,856	<b>2,100</b>	<b>3,956</b>	4,427
Natural gas	(bcf)	15.2	17.0	15.1	13.8	<b>14.4</b>	<b>28.2</b>	31.7
Total petroleum products	(MMboe)	8.7	10.6	9.0	7.6	<b>8.2</b>	<b>15.8</b>	17.6

**Permian** <sup>(4)</sup>

Crude oil and condensate	(Mboe)	1,378	1,202	1,336	1,179	<b>1,142</b>	<b>2,321</b>	2,793
NGL	(Mboe)	580	428	646	587	<b>460</b>	<b>1,047</b>	1,314
Natural gas	(bcf)	4.4	4.0	6.2	4.5	<b>3.6</b>	<b>8.1</b>	8.8
Total petroleum products	(MMboe)	2.7	2.3	3.0	2.5	<b>2.2</b>	<b>4.7</b>	5.6

**Haynesville** <sup>(4)</sup>

Crude oil and condensate	(Mboe)	3	1	1		<b>1</b>	<b>1</b>	3
NGL	(Mboe)	15	3					15
Natural gas	(bcf)	24.0	22.0	21.4	21.5	<b>22.0</b>	<b>43.5</b>	52.2
Total petroleum products	(MMboe)	4.0	3.7	3.6	3.6	<b>3.7</b>	<b>7.3</b>	8.7

**Fayetteville** <sup>(4)</sup>

Natural gas	(bcf)	24.2	23.1	24.5	21.6	<b>20.5</b>	<b>42.1</b>	49.0
Total petroleum products	(MMboe)	4.0	3.9	4.1	3.6	<b>3.4</b>	<b>7.0</b>	8.2

**Production and sales report**

		Quarter ended				Year to date		
		Dec 2016	Mar 2017	Jun 2017	Sep 2017	Dec 2017	Dec 2017	Dec 2016
<b>Petroleum <sup>(1)</sup> (continued)</b>								
<b>Trinidad/Tobago</b>								
Crude oil and condensate	(Mboe)	156	127	139	118	135	253	296
Natural gas	(bcf)	8.4	8.4	9.4	9.7	10.5	20.2	14.8
Total petroleum products	(MMboe)	1.6	1.5	1.7	1.7	1.9	3.6	2.8
<b>Other Americas <sup>(3)</sup> <sup>(5)</sup></b>								
Crude oil and condensate	(Mboe)	269	257	238	229	207	436	544
NGL	(Mboe)	5	6	10	5	3	8	6
Natural gas	(bcf)	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Total petroleum products	(MMboe)	0.3	0.3	0.3	0.3	0.2	0.5	0.6
<b>UK</b>								
Crude oil and condensate	(Mboe)	63	72	64	40	22	62	132
NGL	(Mboe)	49	32	16	39	13	52	71
Natural gas	(bcf)	1.0	1.0	1.1	0.5	0.6	1.1	2.1
Total petroleum products	(MMboe)	0.3	0.3	0.3	0.2	0.1	0.3	0.6
<b>Algeria</b>								
Crude oil and condensate	(Mboe)	1,016	1,072	942	938	960	1,898	2,006
Total petroleum products	(MMboe)	1.0	1.1	0.9	0.9	1.0	1.9	2.0
<b>BHP Petroleum</b>								
<b>Crude oil and condensate</b>								
Onshore US	(Mboe)	5,389	6,654	5,615	4,636	4,863	9,499	10,675
Conventional	(Mboe)	13,601	13,380	13,256	12,466	12,618	25,084	26,805
Total	(Mboe)	18,990	20,034	18,871	17,102	17,481	34,583	37,480
<b>NGL</b>								
Onshore US	(Mboe)	2,754	2,785	2,886	2,443	2,560	5,003	5,756
Conventional	(Mboe)	2,167	1,989	2,356	2,624	2,251	4,875	4,922
Total	(Mboe)	4,921	4,774	5,242	5,067	4,811	9,878	10,678
<b>Natural gas</b>								
Onshore US	(bcf)	67.8	66.1	67.2	61.4	60.5	121.9	141.7

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Conventional	(bcf)	97.1	88.4	99.5	107.3	<b>96.1</b>	<b>203.4</b>	204.9
<b>Total</b>	<b>(bcf)</b>	<b>164.9</b>	<b>154.5</b>	<b>166.7</b>	<b>168.7</b>	<b>156.6</b>	<b>325.3</b>	346.6

**Total petroleum products**

Onshore US	(Mboe)	19,443	20,456	19,701	17,312	<b>17,506</b>	<b>34,819</b>	40,048
Conventional	(Mboe)	31,951	30,102	32,195	32,973	<b>30,886</b>	<b>63,859</b>	65,877
<b>Total</b>	<b>(Mboe)</b>	<b>51,394</b>	<b>50,558</b>	<b>51,896</b>	<b>50,286</b>	<b>48,392</b>	<b>98,678</b>	105,925

(1) Total boe conversions are based on 6 bcf of natural gas equals 1 MMboe. Negative production figures represent finalisation adjustments.

(2) Other Australia includes Minerva and Macedon.

(3) Gulf of Mexico volumes are net of royalties.

(4) Onshore US volumes are net of mineral holder royalties.

(5) Other Americas includes Neptune, Genesis and Overriding Royalty Interest.

**Production and sales report**

		Quarter ended				Year to date		
		Dec 2016	Mar 2017	Jun 2017	Sep 2017	Dec 2017	Dec 2017	Dec 2016
<b>Copper</b>								
Metals production is payable metal unless otherwise stated.								
<b>Escondida, Chile <sup>(1)</sup></b>								
Material mined	(kt)	90,863	26,045	93,389	104,867	101,371	206,238	197,367
Sulphide ore milled	(kt)	19,866	8,054	18,777	24,080	30,260	54,340	40,653
Average copper grade	(%)	1.02%	1.01%	1.07%	1.06%	0.98%	1.02%	0.94%
Production ex mill	(kt)	168.6	68.7	167.0	204.2	245.7	449.9	321.8
<b>Production</b>								
Payable copper	(kt)	162.6	67.6	162.4	196.3	238.5	434.8	309.6
Copper cathode (EW)	(kt)	71.5	27.2	62.8	71.9	76.1	148.0	142.0
- Oxide leach	(kt)	24.4	8.9	20.3	22.4	27.4	49.8	51.2
- Sulphide leach	(kt)	47.1	18.3	42.5	49.5	48.7	98.2	90.8
Total copper	(kt)	234.1	94.8	225.2	268.2	314.6	582.8	451.6
Payable gold concentrate	(troy oz)	37,784	11,572	33,941	50,525	50,279	100,804	65,345
Payable silver concentrate	(troy koz)	1,323	540	1,234	1,737	2,193	3,930	2,552
<b>Sales</b>								
Payable copper	(kt)	172.7	63.7	163.3	195.1	236.7	431.8	307.6
Copper cathode (EW)	(kt)	71.8	39.4	56.0	61.6	84.1	145.7	137.4
Payable gold concentrate	(troy oz)	37,784	11,572	33,941	50,525	50,278	100,803	65,345
Payable silver concentrate	(troy koz)	1,323	540	1,234	1,737	2,193	3,930	2,552

(1) Shown on a 100% basis. BHP interest in saleable production is 57.5%.

**Pampa Norte,  
Chile****Cerro Colorado**

Material mined	(kt)	14,286	15,178	15,760	21,381	20,191	41,572	27,297
Ore milled	(kt)	3,342	4,179	4,411	3,951	4,611	8,562	6,583
Average copper grade	(%)	0.65%	0.57%	0.53%	0.62%	0.59%	0.60%	0.66%

**Production**

Copper cathode (EW)	(kt)	12.1	16.7	18.8	13.3	<b>17.4</b>	<b>30.7</b>	29.2
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**Sales**

Copper cathode (EW)	(kt)	13.7	15.6	19.8	12.3	<b>17.7</b>	<b>30.0</b>	30.1
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**Spence**

Material mined	(kt)	22,635	22,939	24,230	22,314	<b>23,457</b>	<b>45,771</b>	46,273
Ore milled	(kt)	5,187	5,225	4,968	5,375	<b>4,919</b>	<b>10,294</b>	9,900
Average copper grade	(%)	1.19%	1.09%	1.13%	1.21%	<b>0.95%</b>	<b>1.09%</b>	1.18%

**Production**

Copper cathode (EW)	(kt)	41.7	49.4	53.5	44.7	<b>51.0</b>	<b>95.7</b>	86.7
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**Sales**

Copper cathode (EW)	(kt)	41.5	49.0	55.7	43.0	<b>52.2</b>	<b>95.2</b>	82.7
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BHP Operational Review for the half year ended 31 December 2017

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**Production and sales report**

		Quarter ended				Year to date		
		Dec 2016	Mar 2017	Jun 2017	Sep 2017	Dec 2017	Dec 2017	Dec 2016
<b>Copper</b>								
<b>(continued)</b>								
Metals production is payable metal unless otherwise stated.								
<b>Antamina, Peru</b>								
Material mined (100%)	(kt)	61,355	55,771	62,254	59,216	<b>59,125</b>	<b>118,341</b>	126,466
Sulphide ore milled (100%)	(kt)	13,399	11,955	13,229	12,822	<b>13,098</b>	<b>25,920</b>	26,921
Average head grades								
- Copper	(%)	0.84%	0.88%	1.00%	0.94%	<b>0.89%</b>	<b>0.91%</b>	0.84%
- Zinc	(%)	0.83%	0.84%	0.95%	0.99%	<b>0.93%</b>	<b>0.96%</b>	0.71%
<b>Production</b>								
Payable copper	(kt)	32.0	29.2	38.5	35.9	<b>33.8</b>	<b>69.7</b>	66.1
Payable zinc	(t)	22,406	20,653	29,076	29,201	<b>29,054</b>	<b>58,255</b>	37,773
Payable silver	(troy koz)	1,446	1,301	1,691	1,596	<b>1,331</b>	<b>2,927</b>	2,791
Payable lead	(t)	1,220	1,308	1,799	1,415	<b>1,009</b>	<b>2,424</b>	2,366
Payable molybdenum	(t)	225	30	328	402	<b>579</b>	<b>981</b>	786
<b>Sales</b>								
Payable copper	(kt)	33.0	30.2	36.9	31.9	<b>37.0</b>	<b>68.9</b>	65.8
Payable zinc	(t)	22,334	23,669	27,936	25,224	<b>30,340</b>	<b>55,564</b>	38,377
Payable silver	(troy koz)	1,388	1,304	1,513	1,475	<b>1,470</b>	<b>2,945</b>	2,665
Payable lead	(t)	1,100	1,475	1,493	1,624	<b>972</b>	<b>2,596</b>	1,867
Payable molybdenum	(t)	476			168	<b>693</b>	<b>861</b>	1,124
<b>Olympic Dam, Australia</b>								
Material mined <sup>(1)</sup>	(kt)	1,887	1,943	1,974	1,851	<b>1,391</b>	<b>3,242</b>	4,091
Ore milled	(kt)	2,116	2,112	2,097	2,302	<b>554</b>	<b>2,856</b>	4,395
Average copper grade	(%)	2.00%	2.07%	2.30%	2.10%	<b>2.22%</b>	<b>2.12%</b>	1.98%
Average uranium grade	(kg/t)	0.68	0.61	0.58	0.55	<b>0.58</b>	<b>0.56</b>	0.64
<b>Production</b>								
Copper cathode (ER and EW)	(kt)	37.2	36.8	51.4	42.0	<b>12.2</b>	<b>54.2</b>	78.1
Uranium oxide concentrate	(t)	1,060	948	737	880	<b>243</b>	<b>1,123</b>	1,976
Refined gold	(troy oz)	29,651	21,941	28,188	13,101	<b>15,969</b>	<b>29,070</b>	54,017

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Refined silver	(troy koz)	188	174	243	131	<b>135</b>	<b>266</b>	351
<b>Sales</b>								
Copper cathode (ER and EW)	(kt)	41.2	33.5	51.5	31.6	<b>24.3</b>	<b>55.9</b>	78.7
Uranium oxide concentrate	(t)	883	839	1,298	680	<b>338</b>	<b>1,018</b>	1,968
Refined gold	(troy oz)	28,234	22,333	24,726	22,435	<b>17,999</b>	<b>40,434</b>	50,135
Refined silver	(troy koz)	203	108	251	219	<b>118</b>	<b>337</b>	387

(1) Material mined refers to run of mine ore mined and hoisted.

BHP Operational Review for the half year ended 31 December 2017

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**Production and sales report**

		Dec	Mar	Quarter ended	Sep	Dec	Year to date	
		2016	2017	Jun	2017	2017	Dec	Dec
				2017			2017	2016
Iron Ore								
Iron ore production and sales are reported on a wet tonnes basis.								
Pilbara, Australia								
Production								
Newman	(kt)	17,751	16,283	16,241	13,842	18,317	32,159	35,759
Area C Joint Venture	(kt)	12,179	11,165	13,016	13,099	13,575	26,674	24,563
Yandi Joint Venture	(kt)	17,555	14,656	17,415	14,559	16,348	30,907	33,284
Jimblebar <sup>(1)</sup>	(kt)	5,178	4,824	5,891	6,283	4,583	10,866	11,235
Wheelarra	(kt)	7,386	6,647	7,578	7,804	8,734	16,538	12,795
Total production	(kt)	60,049	53,575	60,141	55,587	61,557	117,144	117,636
Total production (100%)	(kt)	69,730	62,177	69,714	64,287	71,611	135,898	136,411
Sales								
Lump	(kt)	14,127	12,804	15,104	13,896	15,145	29,041	28,283
Fines	(kt)	45,447	41,043	46,249	40,733	45,769	86,502	87,725
Total	(kt)	59,574	53,847	61,353	54,629	60,914	115,543	116,008
Total sales (100%)	(kt)	69,196	62,513	71,149	63,322	70,733	134,055	134,564

(1) Shown on a 100% basis. BHP interest in saleable production is 85%.

**Samarco, Brazil <sup>(1)</sup>**

<b>Production</b>	(kt)							
<b>Sales</b>	(kt)		35			<b>14</b>	<b>14</b>	12

(1) Mining and processing operations remain suspended following the failure of the Fundão tailings dam and Santarém water dam on 5 November 2015.



**Production and sales report**

		Quarter ended				Year to date		
		Dec	Mar	Jun	Sep	Dec	Dec	Dec
		2016	2017	2017	2017	2017	2017	2016
<b>Coal</b>								
Coal production is reported on the basis of saleable product.								
<b>Queensland Coal</b>								
<b>Production <sup>(1)</sup></b>								
<b>BMA</b>								
Blackwater	(kt)	1,855	1,694	1,766	1,985	<b>1,470</b>	<b>3,455</b>	3,836
Goonyella	(kt)	2,204	1,871	1,157	1,639	<b>1,369</b>	<b>3,008</b>	4,327
Peak Downs	(kt)	1,715	1,582	1,238	1,602	<b>1,367</b>	<b>2,969</b>	3,235
Saraji	(kt)	1,307	1,276	913	1,414	<b>1,198</b>	<b>2,612</b>	2,545
Daunia	(kt)	680	674	560	662	<b>718</b>	<b>1,380</b>	1,326
Caval Ridge	(kt)	923	899	760	994	<b>1,272</b>	<b>2,266</b>	1,799
Total BMA	(kt)	8,684	7,996	6,394	8,296	<b>7,394</b>	<b>15,690</b>	17,068
<b>BHP Mitsui Coal <sup>(2)</sup></b>								
South Walker Creek	(kt)	1,080	1,354	1,348	1,400	<b>1,524</b>	<b>2,924</b>	2,421
Poitrel	(kt)	849	784	752	871	<b>767</b>	<b>1,638</b>	1,653
Total BHP Mitsui Coal	(kt)	1,929	2,138	2,100	2,271	<b>2,291</b>	<b>4,562</b>	4,074
Total Queensland Coal	(kt)	10,613	10,134	8,494	10,567	<b>9,685</b>	<b>20,252</b>	21,142
<b>Sales</b>								
Coking coal	(kt)	7,658	7,133	5,496	7,934	<b>6,341</b>	<b>14,275</b>	14,898
Weak coking coal	(kt)	2,659	2,761	2,502	3,150	<b>2,816</b>	<b>5,966</b>	5,458
Thermal coal	(kt)	154	96	142	102	<b>173</b>	<b>275</b>	360
Total	(kt)	10,471	9,990	8,140	11,186	<b>9,330</b>	<b>20,516</b>	20,716

(1) Production figures include some thermal coal.

(2) Shown on a 100% basis. BHP interest in saleable production is 80%.

**Haju, Indonesia <sup>(1)</sup>**

<b>Production</b>	(kt)	27	129
<b>Sales - export</b>	(kt)		

(1) Shown on 100% basis. BHP interest in saleable production is 75%. BHP completed the sale of IndoMet Coal on 14 October 2016.

**New Mexico, USA**  
**Production**

Navajo Coal <sup>(1)</sup>	(kt)	451
Total	(kt)	451

<b>Sales thermal coal - local utility</b>	105
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(1) The divestment of Navajo Coal was completed on 29 July 2016, with no further production reported by BHP. Management of Navajo Coal was transferred to Navajo Transitional Energy Company on 31 December 2016.

<b>NSW Energy Coal, Australia</b>
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<b>Production</b>	(kt)	3,851	4,662	5,711	4,235	<b>4,383</b>	<b>8,618</b>	7,803
<b>Sales</b>								
Export thermal coal	(kt)	3,539	4,407	4,913	3,622	<b>4,048</b>	<b>7,670</b>	7,179
Inland thermal coal	(kt)	311	431	327	405	<b>411</b>	<b>816</b>	642
Total	(kt)	3,850	4,838	5,240	4,027	<b>4,459</b>	<b>8,486</b>	7,821

<b>Cerrejón, Colombia</b>
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<b>Production</b>	(kt)	2,800	2,756	2,475	2,497	<b>2,914</b>	<b>5,411</b>	5,728
<b>Sales thermal coal - export</b>	(kt)	2,722	2,613	2,803	2,518	<b>2,619</b>	<b>5,137</b>	5,627

**Production and sales report**

		Quarter ended				Year to date		
	Dec	Mar	Jun	Sep	Dec	Dec	Dec	
	2016	2017	2017	2017	2017	2017	2017	2016

**Other**

Nickel production is reported on the basis of saleable product

**Nickel West, Australia****Production**

Nickel contained in concentrate	(kt)	0.2	0.2					0.5
Nickel contained in finished matte	(kt)	4.1	2.3	5.3	6.8	<b>4.6</b>	<b>11.4</b>	5.9
Nickel metal	(kt)	17.8	16.5	19.9	16.0	<b>17.8</b>	<b>33.8</b>	34.5
Total nickel production	(kt)	22.1	19.0	25.2	22.8	<b>22.4</b>	<b>45.2</b>	40.9

**Sales**

Nickel contained in concentrate	(kt)	0.2	0.2					0.5
Nickel contained in finished matte	(kt)	4.1	2.2	4.9	4.6	<b>6.4</b>	<b>11.0</b>	5.9
Nickel metal	(kt)	17.6	17.1	18.1	16.6	<b>17.9</b>	<b>34.5</b>	34.1
Total nickel sales	(kt)	21.9	19.5	23.0	21.2	<b>24.3</b>	<b>45.5</b>	40.5

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BHP Billiton Limited and BHP Billiton Plc

Date: January 18, 2018

By: /s/ Rachel Agnew  
Name: Rachel Agnew  
Title: Company Secretary