

BHP BILLITON LTD  
Form 6-K  
January 25, 2017

**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 25, 2017**

**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)**

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:    Form 20-F    Form 40-F

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Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

**BHP BILLITON PLC**

**(REG. NO. 3196209)**

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

**ENGLAND AND WALES**

**(Jurisdiction of incorporation or organisation)**

**NEATHOUSE PLACE, LONDON,**

**UNITED KINGDOM**

**(Address of principal executive offices)**

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If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): n/a

## NEWS RELEASE

**Release Time** IMMEDIATE  
**Date** 25 January 2017  
**Release Number** 2/17

**BHP BILLITON OPERATIONAL REVIEW**  
**FOR THE HALF YEAR ENDED 31 DECEMBER 2016**

**Record production for the half year was achieved at Western Australia Iron Ore (WAIO).**

**Full year production guidance maintained for Petroleum, Iron Ore and Coal.**

**Production guidance for Copper reduced to approximately 1.62 Mt, two per cent below prior guidance, reflecting lower volumes now expected at Olympic Dam.**

**In Petroleum, following the successful bid for Trion in Mexico and positive drilling results at LeClerc and Caicos, an US\$820 million exploration program is now planned for the current financial year.**

**All major projects under development are tracking to plan. The Bass Strait Longford Gas Conditioning Plant project achieved initial gas sales in the December 2016 quarter. Mechanical completion was achieved at the Escondida Water Supply project with first water expected in the March 2017 quarter.**

**Underlying attributable profit<sup>(1)</sup> in the December 2016 half year is expected to include gains related to asset divestments in a range of approximately US\$150 million to US\$200 million (details on page 2).**

<b>Production</b>	<b>Dec H16</b>	<b>vs Dec H15</b>	
Petroleum (MMboe)	106	(15%)	Deferral of development activity in Onshore US for value and natural field decline in Conventional assets.
Copper (kt)	712	(7%)	Reduced volumes at Olympic Dam, maintenance at Pampa Norte and lower copper grades as expected at Antamina.
Iron ore <sup>(2)</sup> (Mt)	118	4%	Record WAIO volumes for the half year due to the continued ramp-up of additional capacity at Jimblebar.
Metallurgical coal <sup>(2)</sup> (Mt)	21	1%	Strong performance at four Queensland Coal mines more than offset the cessation of production at Crinum.
Energy coal <sup>(2)</sup> (Mt)	14	(4%)	Lower production at NSWEC partially offset by strong performance at Cerrejón.

BHP Billiton Chief Executive Officer, Andrew Mackenzie, said: We have performed well during a period of higher prices, with record iron ore volumes achieved at WAIO. Our simpler organisational structure has freed our assets to focus on what matters most and to deliver safer and more productive operations. Our consistent delivery of operating

and capital productivity, and strict adherence to our capital allocation framework have positioned us to maximise shareholder value.

In Petroleum, we will accelerate our counter-cyclical oil exploration efforts this year. Our successful Trion bid leaves us in a leading position to develop the newly opened Mexican acreage in the Gulf of Mexico, where we can leverage our core expertise. We are encouraged by recent positive drilling results at the LeClerc well in Trinidad and Tobago and the Caicos well in the Gulf of Mexico. After the first successful rig, our Onshore US gas hedging program will also be expanded to secure attractive returns.

## Summary

### *Operational performance*

Production for the December 2016 half year and quarter and guidance for the 2017 financial year are summarised in the table below.

Production	Dec H16	Dec Q16	Dec H16	Dec Q16	Dec Q16	Previous FY17 guidance	Current FY17 guidance
			vs Dec H15	vs Dec Q15	vs Sep Q16		
Petroleum (MMboe)	105.9	51.4	(15%)	(15%)	(6%)	200 - 210	200 - 210
Onshore US (MMboe)	40.0	19.4	(31%)	(32%)	(6%)	77 - 83	77 - 83
Conventional (MMboe)	65.9	32.0	(1%)	1%	(6%)	123 - 127	123 - 127
Copper (kt)	712	357	(7%)	(7%)	1%	1,660	1,620
Escondida (kt)	452	234	0%	6%	8%	1,070	1,070
Other copper <sup>(i)</sup> (kt)	260	123	(16%)	(25%)	(10%)	590	550
Iron ore <sup>(ii)</sup> (Mt)	118	60	4%	9%	4%	228 - 237	228 - 237
WAIO (100% basis) (Mt)	136	70	4%	9%	4%	265 - 275	265 - 275
Metallurgical coal <sup>(ii)</sup> (Mt)	21	11	1%	2%	1%	44	44
Energy coal <sup>(ii)</sup> (Mt)	14	7	(4%)	(4%)	(3%)	30	30

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

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

### *Major development projects*

During the December 2016 quarter, the Bass Strait Longford Gas Conditioning Plant project achieved initial gas sales, under budget, and production is ramping up to full rate. In December 2016, mechanical completion was achieved at the Escondida Water Supply project with first water expected to be delivered in the March 2017 quarter, on schedule and budget. These two projects will not be reported in future Operational Reviews.

BHP Billiton has two major projects under development in Petroleum and Potash, with a combined budget of US\$2.9 billion over the life of the projects. Both projects remain on time and on budget.

### *Corporate update*

BHP Billiton expects Underlying attributable profit(1) in the December 2016 half year to include gains related to asset divestments in a range of approximately US\$150 million to US\$200 million (Underlying EBITDA(1) impact of US\$175 million to US\$225 million).

In addition, the Group expects to record an exceptional item of US\$164 million (US\$115 million post-tax) related to the cancellation of the Carooa exploration licence and subsequent reimbursement received during the December 2016 half year.

On 20 December 2016, Samarco, Vale and BHP Billiton Brasil agreed a non-binding term sheet outlining the general terms and conditions for the use of Vale's Timbopeba pit by Samarco to deposit its tailings, should Samarco restart. A definitive agreement remains subject to a successful commercial negotiation, due diligence and relevant government approvals. These processes are likely to occur during the 2017 calendar year.

On 18 January 2017, Samarco, Vale and BHP Billiton Brasil have also entered into a preliminary agreement with the Federal Prosecutors Office in Brazil in relation to the Fundão tailings dam failure on 5 November 2015(3) (Preliminary Agreement). The Preliminary Agreement outlines the process and timeline for negotiation of a settlement of the BRL 155 billion (approximately US\$47.5 billion) Civil Claim relating to the dam failure.

For the December 2016 half year, we are not yet in a position to provide an update to 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.

The above guidance will be updated should material information or events arise as the Group finalises its financial statements.

**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 reflecting 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 H16	Dec H15	Jun H16	FY16	Dec H16	Dec H16	Dec H16
					vs	vs	vs
					Dec H15	Jun H16	FY16
Oil (crude and condensate) (US\$/bbl)	<b>45</b>	42	37	39	7%	22%	15%
Natural gas (US\$/Mscf) <sup>(ii)</sup>	<b>3.21</b>	2.91	2.74	2.83	10%	17%	13%
US natural gas (US\$/Mscf)	<b>2.79</b>	2.35	1.96	2.16	19%	42%	29%
LNG (US\$/Mscf)	<b>6.35</b>	8.24	7.12	7.71	(23%)	(11%)	(18%)
Copper (US\$/lb)	<b>2.41</b>	2.12	2.16	2.14	14%	12%	13%
Iron ore (US\$/wmt, FOB)	<b>55</b>	43	44	44	28%	25%	25%
Hard coking coal (US\$/t)	<b>179</b>	82	83	83	118%	116%	116%
Weak coking coal (US\$/t)	<b>122</b>	67	70	69	82%	74%	77%
Thermal coal (US\$/t) <sup>(iii)</sup>	<b>74</b>	49	46	48	51%	61%	54%
Nickel metal (US\$/t)	<b>10,581</b>	9,926	8,792	9,264	7%	20%	14%

(i) Based on provisional, unaudited estimates. Prices exclude third party product and internal sales, and represent the weighted average of various sales terms (for example: FOB, CIF and CFR), unless otherwise noted.

(ii) Includes internal sales.

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

At 31 December 2016, the Group had 267 kt of outstanding copper sales that were revalued at a weighted average price of US\$2.51 per pound. The final price of these sales will be determined over the remainder of the 2017 financial year. In addition, 316 kt of copper sales from the 2016 financial year were subject to a finalisation adjustment in the current period. The provisional pricing and finalisation adjustments will increase earnings before interest and tax by US\$37 million in the December 2016 half year.

**Petroleum****Production**

	Dec H16	Dec Q16	Dec H16 vs Dec H15	Dec Q16 vs Dec Q15	Dec Q16 vs Sep Q16
Crude oil, condensate and natural gas liquids (MMboe)	48.2	23.9	(20%)	(20%)	(1%)
Natural gas (bcf)	347	165	(10%)	(10%)	(9%)
Total petroleum production (MMboe)	105.9	51.4	(15%)	(15%)	(6%)

**Total petroleum production** Total petroleum production for the December 2016 half year decreased by 15 per cent to 105.9 MMboe. Guidance for the 2017 financial year remains unchanged at between 200 and 210 MMboe, comprising Conventional volumes between 123 and 127 MMboe and Onshore US volumes between 77 and 83 MMboe.

**Crude oil, condensate and natural gas liquids** Crude oil, condensate and natural gas liquids production for the December 2016 half year decreased by 20 per cent to 48.2 MMboe.

Onshore US liquids volumes decreased by 37 per cent to 16.4 MMboe as a result of a reduction in activity in the Black Hawk for value and natural field decline, which more than offset increased liquids production from the Permian.

Conventional liquids volumes decreased by seven per cent as higher production at Bass Strait and North West Shelf and an additional infill well at Mad Dog partially offset natural field decline across the portfolio and planned maintenance at Atlantis.

**Natural gas** Natural gas production for the December 2016 half year declined by 10 per cent to 347 bcf.

The decline primarily reflects lower Onshore US gas volumes as a result of the decision to defer development activity for value and the divestment of our gas business in Pakistan. This was partially offset by higher demand at Bass Strait and Macedon and increased LNG volumes at North West Shelf.

On 5 September 2016, BHP Billiton announced the sale of 50 per cent of its interest in the undeveloped Scarborough area gas fields. ExxonMobil will remain operator of Scarborough and operatorship of North Scarborough will transfer from BHP Billiton to Woodside. The sale was completed during the December 2016 quarter.

**Projects**

Project and ownership	Capital expenditure (US\$m)	Initial production target date	Capacity	Progress
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Bass Strait Longford Gas Conditioning Plant (Australia)	520	CY16	Designed to process approximately 400 MMcf/d of high-CO <sub>2</sub> gas.	Initial gas sales achieved in Q4 CY16, under budget and production ramping up to full rate.
50% (non-operator)				
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 27% complete.

16.67% (non-operator)

Petroleum capital expenditure guidance of approximately US\$1.4 billion (excluding US\$0.2 billion from capital creditor movements) for the 2017 financial year remains unchanged. This includes Conventional capital expenditure of US\$0.8 billion which is focused on life extension projects at Bass Strait and North West Shelf. Onshore US capital expenditure is expected to be US\$0.6 billion with development activity tailored to market conditions.

During the December 2016 quarter, BP (the operator) sanctioned the Mad Dog Phase 2 project. Approval from BHP Billiton's Board will be sought during the March 2017 quarter.

**Onshore US development activity**

Onshore US drilling and development expenditure for the December 2016 half year was approximately US\$273 million. Our operated rig count increased from two to three during the December 2016 quarter with deployment of a rig in the Haynesville in October 2016, following the successful execution of our hedging pilot. Additional hedge activity during the quarter has led to approval of a second rig in the Haynesville with operations expected to commence in March 2017. Completions activity in the Black Hawk was accelerated in the December 2016 quarter to drawdown drilled and uncompleted inventory as market conditions improved. We are currently progressing trials in the Black Hawk, testing the potential for staggered wells to increase recovery, larger frac jobs to improve productivity and the potential of the Upper Eagle Ford horizon. We expect early results of these trials to be known during the September 2017 quarter.

December 2016 half year (December 2015 half year)		Liquids focused areas		Gas focused areas		Total
		Eagle Ford	Permian	Haynesville	Fayetteville	
Capital expenditure <sup>(i)</sup>	US\$ billion	0.1 (0.6)	0.1 (0.2)	0.0 (0.0)	0.0 (0.0)	0.3 (0.8)
Rig allocation	At period end	1 (5)	1 (2)	1 (0)	0 (0)	3 (7)
Net wells drilled and completed <sup>(ii)</sup>	Period total	43 (74)	15 (19)	0 (4)	2 (10)	60 (107)
Net productive wells	At period end	942 (912)	118 (94)	394 (409)	1,042 (1,085)	2,496 (2,500)

- (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.

**Petroleum exploration**

Exploration and appraisal wells drilled during the December 2016 quarter are summarised below.

Well	Location	Target	BHP Billiton equity	Spud date	Water depth	Total well depth	Status
Burrokeet-1	Trinidad & Tobago Block 23a	Oil	70% (Operator)	8 August 2016	1,923 m	3,337 m	Plugged and abandoned
Burrokeet-2	Trinidad & Tobago Block 23a	Oil	70% (Operator)	18 August 2016	1,923 m	7,348 m	Plugged and abandoned

The Burrokeet-1 well encountered mechanical difficulty shortly after spud and was plugged and abandoned. Non-commercial hydrocarbons were encountered at Burrokeet-2 with analysis ongoing. Phase 1 of the Trinidad and Tobago deep water drilling campaign has concluded. Following the oil discovery in the Shenzi North and Caicos wells in the central Gulf of Mexico, the Invictus rig has been mobilised for drilling the Wildling well in the March 2017 quarter.

During the December 2016 quarter, BHP Billiton won the bid to acquire a 60 per cent participating interest in and operatorship of blocks AE-0092 and AE-0093, containing the Trion discovered resource, in Mexico. Subject to satisfaction of conditions, BHP Billiton anticipates signing the relevant agreements in the March 2017 quarter.

In the US Gulf of Mexico, we increased acreage position and operatorship in the Southern Green Canyon Miocene and Western Gulf of Mexico Paleogene key focus areas. The regulator awarded all 12 of the leases for which BHP Billiton was the apparent high bidder in the Western Gulf of Mexico Lease Sale 248. In addition, BHP Billiton cross-assigned nine leases in Green Canyon with Statoil Gulf of Mexico LLC and Repsol E&P USA Inc. The cross-assignment results in BHP Billiton having a 65 per cent interest and operatorship over the nine leases, ahead of drilling the Scimitar exploration well in the June 2017 quarter. The regulator also approved assignment of BHP Billiton's 60 per cent interest in two leases in Green Canyon (GC 633 and 676) to Chevron U.S.A. Inc.

In Australia, seismic work commenced in the Exmouth sub-basin following regulatory approval of the Good Standing Agreement in relation to the WA-475-P permit. The WA-335-P permit was officially relinquished after receiving consent from the regulator to surrender the permit.

Petroleum exploration expenditure for the December 2016 half year was US\$364 million, of which US\$217 million was expensed. An US\$820 million exploration program is now planned for the 2017 financial year, an increase of US\$120 million from prior guidance, following the successful bid for Trion in Mexico and positive drilling results at the LeClerc well in Trinidad and Tobago and the Caicos well in the Gulf of Mexico.

**Copper****Production**

	<b>Dec H16</b>	<b>Dec Q16</b>	<b>Dec H16</b> vs <b>Dec H15</b>	<b>Dec Q16</b> vs <b>Dec Q15</b>	<b>Dec Q16</b> vs <b>Sep Q16</b>
Copper (kt)	712	357	(7%)	(7%)	1%
Zinc (t)	37,773	22,406	2%	36%	46%
Uranium oxide concentrate (t)	1,976	1,060	(22%)	(22%)	16%

**Copper** Total copper production for the December 2016 half year decreased by seven per cent to 712 kt. Production for the 2017 financial year is now expected to be approximately 1.62 Mt, two per cent below prior guidance, and reflects a reduction in volumes at Olympic Dam.

Escondida copper production for the December 2016 half year was unchanged at 452 kt as higher concentrate production was offset by lower cathode production. During the period there was a four day site-wide suspension of operations to conduct an investigation following a fatality on 21 October 2016. Production guidance for Escondida remains unchanged at 1,070 kt, with volumes weighted to the second half of the 2017 financial year. The current Collective Agreement with Escondida N°1 Union expires on 31 January 2017 and negotiations for a new agreement are in progress. The commissioning of the Escondida Water Supply project and the planned ramp-up of the Los Colorados Extension project late in the 2017 financial year, will enable full utilisation of three concentrators during the 2018 financial year.

Pampa Norte copper production for the December 2016 half year decreased by eight per cent to 116 kt, with an unplanned outage offsetting improved recoveries at Cerro Colorado, and planned maintenance offsetting record ore milled at Spence in the December 2016 quarter. Copper production decreased by 13 per cent from the September 2016 quarter mainly due to suspension of the processing operations at the Cerro Colorado Ore Handling Plant 2 following the failure of a transfer chute. Pampa Norte copper production guidance for the 2017 financial year remains unchanged and is expected to be higher than the prior year supported by the completion of the Spence Recovery Optimisation project which achieved an annualised production run rate of 200 ktpa in the month of December 2016.

Olympic Dam copper production for the December 2016 half year decreased by 30 per cent to 78 kt following planned maintenance and a state-wide power outage which commenced on 28 September 2016. Power was safely restored on 14 October 2016 and operations were fully ramped-up in the December 2016 quarter. Olympic Dam copper production of approximately 160 kt to 170 kt is now expected for the 2017 financial year. Lower volumes reflect the power outage and unplanned maintenance at the refinery which commenced at the end of December 2016, ahead of the major smelter maintenance campaign planned for the September 2017 quarter.

Antamina copper production for the December 2016 half year decreased by nine per cent to 66 kt reflecting lower copper grades as mining progressed through a zinc rich ore zone, consistent with the mine plan. Guidance for the 2017 financial year remains unchanged at 130 kt. Zinc production for the December 2016 half year increased by two per cent to 38 kt with guidance for the 2017 financial year unchanged at 90 kt.

**Project****Project and ownership****Capacity****Progress**

	<b>Capital expenditure (US\$m)</b>	<b>Initial production target date</b>		
Escondida Water Supply (Chile) 57.5%	3,430	CY17	New desalination facility to ensure continued water supply to Escondida.	Mechanical completion achieved with first water expected in the March 2017 quarter. Project on schedule and budget. The overall project is 99% complete.

**Iron Ore****Production**

			Dec H16 vs Dec H15	Dec Q16 vs Dec Q15	Dec Q16 vs Sep Q16
Iron ore <sup>(i)</sup> (kt)	Dec H16	Dec Q16			
	117,636	60,049	4%	9%	4%

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

**Iron ore** Total iron ore production for the December 2016 half year increased by four per cent to 118 Mt or 136 Mt on a 100 per cent basis. Guidance for the 2017 financial year remains unchanged at between 228 and 237 Mt or between 265 and 275 Mt on a 100 per cent basis, excluding production from Samarco.

WAIO achieved record production for the December 2016 half year as a result of the continued ramp-up of additional capacity at Jumblebar with the commissioning of a new primary crusher and additional conveying capacity. Combined with improved track reliability and lower scheduled maintenance at Yandi, volumes increased by four per cent from the September 2016 quarter. The rail renewal and maintenance program, which will support the supply chain's long-term reliability, is progressing ahead of schedule and is now expected to be completed in the June 2017 quarter.

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 H16 vs Dec H15	Dec Q16 vs Dec Q15	Dec Q16 vs Sep Q16
	Dec H16	Dec Q16			
Metallurgical coal <sup>(i)</sup> (kt)	21,142	10,613	1%	2%	1%
Energy coal <sup>(ii)</sup> (kt)	13,531	6,651	(4%)	(4%)	(3%)

(i) Represents Queensland Coal. Excludes production from Haju following the divestment of IndoMet Coal (2017 financial year: 129 kt).

(ii) Excludes production from New Mexico Coal following divestments (2017 financial year: 451 kt).

**Metallurgical coal** Metallurgical coal production for the December 2016 half year increased by one per cent to 21 Mt. Guidance for the 2017 financial year remains unchanged at 44 Mt.

Strong performances at Broadmeadow, Peak Downs, Saraji and Caval Ridge, underpinned by additional stripping and higher wash-plant utilisation, more than offset the completion of longwall mining at Crinum in the December 2015 quarter, adverse weather conditions in the September 2016 quarter and lower yield at South Walker Creek.

Record production at Peak Downs was achieved during the December 2016 quarter with coal opportunistically trucked to Caval Ridge in order to utilise latent wash-plant capacity.

**Energy coal** Energy coal production for the December 2016 half year decreased by four per cent to 14 Mt. Guidance for the 2017 financial year remains unchanged at 30 Mt.

New South Wales Energy Coal recorded improved underlying truck utilisation, however production declined by 13 per cent as a higher drawdown of in-pit and Run-of-Mine (ROM) inventories benefitted the December 2015 half year. This was partially offset by an 11 per cent increase in volumes at Cerrejón compared to the December 2015 half year which was constrained by drought conditions.

The divestment of Navajo Coal was completed on 29 July 2016, with management of the mine transferred to Navajo Transitional Energy Company on 31 December 2016.

**Other****Nickel production**

	Dec H16	Dec Q16	Dec H16 vs Dec H15	Dec Q16 vs Dec Q15	Dec Q16 vs Sep Q16
Nickel (kt)	40.9	22.1	10%	45%	18%

**Nickel** Nickel West production for the December 2016 half year increased by 10 per cent to 40.9 kt. Ongoing debottlenecking activities have resulted in record production at the Kwinana refinery. Nickel production guidance for the 2017 financial year remains unchanged and is expected to increase by approximately 10 per cent from the prior year.

**Potash project**

Project and ownership	Investment (US\$m)	Scope	Progress
Jansen Potash (Canada) 100%	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 64% complete and on budget. Both shafts have been safely excavated and lined through the Blairmore aquifer. The engineering contract for feasibility studies of Jansen Stage 1 has been awarded.

**Minerals exploration**

Minerals exploration expenditure for the December 2016 half year was US\$75 million, of which US\$75 million was expensed. Greenfield minerals exploration is predominantly focused on advancing copper targets within Chile, Peru, Canada, South Australia and the South-West United States.

Variance analysis relates to the relative performance of BHP Billiton and/or its operations during December 2016 half year compared with the December 2015 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.

The following footnotes apply to this Operational Review:

- (1) Underlying EBITDA and Underlying attributable profit are used to reflect the underlying performance of BHP Billiton. Underlying EBITDA is earnings before net finance costs, taxation, depreciation, amortisation,



impairment and any exceptional items. Underlying attributable profit is Attributable profit excluding any exceptional items.

- (2) Excludes production from Samarco, Haju (IndoMet Coal) and New Mexico Coal.
- (3) Under the Preliminary Agreement, Samarco, Vale and BHP Billiton Brasil will provide, subject to Court approval, total security of BRL 2.2 billion (approximately US\$675 million, 100 per cent basis) to support the payments for the social and environmental remediation programs under the Framework Agreement (Interim Security). The Interim Security comprises a charge over Samarco's assets of BRL 800 million (approximately US\$245 million), insurance bonds of BRL 1.3 billion (approximately US\$400 million), and liquid assets of BRL 100 million (approximately US\$30 million). During the period that the Interim Security is in place, it will, subject to Court approval, replace the BRL 1.2 billion injunction (approximately US\$370 million) issued in the BRL 20 billion Civil Claim. In addition, the applications by the Federal Prosecutors for the BRL 7.7 billion injunction (approximately US\$2.4 billion) in the BRL 155 billion Civil Claim and the BRL 20 billion asset freezing order (approximately US\$6 billion) in the criminal proceedings commenced by the Federal Prosecutors in Brazil against Samarco, Vale, BHP Billiton Brasil and others will be suspended. The parties have agreed that the Interim Security will remain in place until the earlier of 30 June 2017 and the date that a final settlement arrangement is agreed between the Federal Prosecutors' Office in Brazil, and Samarco, Vale and BHP Billiton Brasil. If a final settlement arrangement is not agreed by 30 June 2017, the Federal Prosecutors may request reinstatement by the Court of the BRL 1.2 billion (approximately US\$370 million) injunction.

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 Billiton can be found at: [bhpbilliton.com](http://bhpbilliton.com)

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**Production summary**

	BHP Billiton interest	Quarter ended				Year to date		Dec 2015
		Dec 2015	Mar 2016	Jun 2016	Sep 2016	Dec 2016	Dec 2016	
<b>Petroleum (1)</b>								
<b>Petroleum</b>								
<b>Crude oil, condensate and NGL (Mboe)</b>								
Onshore US		12,805	12,454	9,469	8,288	<b>8,143</b>	<b>16,431</b>	26,258
Conventional		16,976	16,727	16,896	15,959	<b>15,768</b>	<b>31,727</b>	34,235
Total		29,781	29,181	26,365	24,247	<b>23,911</b>	<b>48,158</b>	60,493
<b>Natural gas (bcf)</b>								
Onshore US		94.4	89.9	82.0	73.9	<b>67.8</b>	<b>141.7</b>	192.6
Conventional		88.4	91.5	95.7	107.8	<b>97.1</b>	<b>204.9</b>	193.0
Total		182.8	181.4	177.7	181.7	<b>164.9</b>	<b>346.6</b>	385.6
<b>Total petroleum production (MMboe)</b>								
		60.2	59.4	56.0	54.5	<b>51.4</b>	<b>105.9</b>	124.7
<b>Copper (2)</b>								
<b>Copper</b>								
<b>Payable metal in concentrate (kt)</b>								
Escondida (3)	57.5%	131.7	174.9	182.7	147.0	<b>162.6</b>	<b>309.6</b>	291.3
Antamina	33.8%	37.2	35.4	38.7	34.1	<b>32.0</b>	<b>66.1</b>	72.3
Total		168.9	210.3	221.4	181.1	<b>194.6</b>	<b>375.7</b>	363.6
<b>Cathode (kt)</b>								
Escondida (3)	57.5%	89.3	84.8	85.3	70.5	<b>71.5</b>	<b>142.0</b>	160.2
Pampa Norte (4)	100%	69.0	59.8	65.8	62.1	<b>53.8</b>	<b>115.9</b>	125.8
Olympic Dam	100%	57.4	49.8	40.7	40.9	<b>37.2</b>	<b>78.1</b>	112.3
Total		215.7	194.4	191.8	173.5	<b>162.5</b>	<b>336.0</b>	398.3
<b>Total copper (kt)</b>								
		384.6	404.7	413.2	354.6	<b>357.1</b>	<b>711.7</b>	761.9

**Lead**

<b>Payable metal in concentrate (t)</b>								
Antamina	33.8%	1,024	1,193	645	1,146	<b>1,220</b>	<b>2,366</b>	1,881
Total		1,024	1,193	645	1,146	<b>1,220</b>	<b>2,366</b>	1,881

<b>Zinc Payable metal in concentrate (t)</b>								
Antamina	33.8%	16,454	11,913	6,474	15,367	<b>22,406</b>	<b>37,773</b>	37,051
Total		16,454	11,913	6,474	15,367	<b>22,406</b>	<b>37,773</b>	37,051

<b>Gold Payable metal in concentrate (troy oz)</b>								
Escondida (3)	57.5%	17,889	31,408	35,894	27,561	<b>37,784</b>	<b>65,345</b>	41,694
Olympic Dam (refined gold)	100%	39,299	29,028	20,010	24,366	<b>29,651</b>	<b>54,017</b>	68,648
Total		57,188	60,436	55,904	51,927	<b>67,435</b>	<b>119,362</b>	110,342

<b>Silver Payable metal in concentrate (troy koz)</b>								
Escondida (3)	57.5%	962	1,544	1,874	1,229	<b>1,323</b>	<b>2,552</b>	2,143
Antamina	33.8%	1,636	1,751	1,558	1,345	<b>1,446</b>	<b>2,791</b>	3,402
Olympic Dam (refined silver)	100%	265	174	232	163	<b>188</b>	<b>351</b>	511
Total		2,863	3,469	3,664	2,737	<b>2,957</b>	<b>5,694</b>	6,056

<b>Uranium Payable metal in concentrate (t)</b>								
Olympic Dam	100%	1,352	961	876	916	<b>1,060</b>	<b>1,976</b>	2,526
Total		1,352	961	876	916	<b>1,060</b>	<b>1,976</b>	2,526

<b>Molybdenum Payable metal in concentrate (t)</b>								
Antamina	33.8%	232	227	562	561	<b>225</b>	<b>786</b>	324
Total		232	227	562	561	<b>225</b>	<b>786</b>	324

BHP Billiton Operational Review for the half year ended 31 December 2016

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**Production summary**

	BHP Billiton interest	Quarter ended				Year to date		Dec 2015
		Dec 2015	Mar 2016	Jun 2016	Sep 2016	Dec 2016	Dec 2016	
<b>Iron Ore</b>								
<b>Iron Ore</b>								
<b>Production (kt) (5)</b>								
Newman	85%	17,003	15,817	15,115	18,008	<b>17,751</b>	<b>35,759</b>	35,009
Area C Joint Venture	85%	11,723	11,002	11,911	12,384	<b>12,179</b>	<b>24,563</b>	23,886
Yandi Joint Venture	85%	15,960	16,204	18,325	15,729	<b>17,555</b>	<b>33,284</b>	32,846
Jimblebar (6)	85%	4,852	5,472	5,304	6,057	<b>5,178</b>	<b>11,235</b>	8,114
Wheelarra	85%	5,757	4,562	4,971	5,409	<b>7,386</b>	<b>12,795</b>	13,016
Samarco	50%	1,665						5,404
Total		56,960	53,057	55,626	57,587	<b>60,049</b>	<b>117,636</b>	118,275
<b>Coal</b>								
<b>Metallurgical coal</b>								
<b>Production (kt) (7)</b>								
BMA	50%	8,207	7,894	9,225	8,384	<b>8,684</b>	<b>17,068</b>	16,294
BHP Billiton Mitsui Coal (8)	80%	2,191	2,015	2,345	2,145	<b>1,929</b>	<b>4,074</b>	4,538
Haju (9)	75%	87	167	260	102	<b>27</b>	<b>129</b>	102
Total		10,485	10,076	11,830	10,631	<b>10,640</b>	<b>21,271</b>	20,934
<b>Energy coal</b>								
<b>Production (kt)</b>								
USA	100%	2,632	1,112	632	451		<b>451</b>	5,308
Australia	100%	4,277	4,189	3,991	3,952	<b>3,851</b>	<b>7,803</b>	8,921
Colombia	33.3%	2,628	2,610	2,329	2,928	<b>2,800</b>	<b>5,728</b>	5,155
Total		9,537	7,911	6,952	7,331	<b>6,651</b>	<b>13,982</b>	19,384
<b>Other</b>								
<b>Nickel</b>								
<b>Saleable production (kt)</b>								
Nickel West	100%	15.2	20.0	23.4	18.8	<b>22.1</b>	<b>40.9</b>	37.3
Total		15.2	20.0	23.4	18.8	<b>22.1</b>	<b>40.9</b>	37.3

(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 Billiton 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 Billiton 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 Billiton interest in saleable production is 80%.
- (9) Shown on a 100% basis. BHP Billiton 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 2015
		Dec 2015	Mar 2016	Jun 2016	Sep 2016	Dec 2016	Dec 2016	
<b>Petroleum (1)</b>								
<b>Bass Strait</b>								
Crude oil and condensate	(Mboe)	1,390	1,813	1,745	1,922	<b>1,770</b>	<b>3,692</b>	3,267
NGL	(Mboe)	1,307	1,455	1,831	2,102	<b>1,460</b>	<b>3,562</b>	3,398
Natural gas	(bcf)	23.9	30.3	38.1	41.9	<b>31.3</b>	<b>73.2</b>	62.6
Total petroleum products	(MMboe)	6.7	8.3	9.9	11.0	<b>8.4</b>	<b>19.5</b>	17.1
<b>North West Shelf</b>								
Crude oil and condensate	(Mboe)	1,423	1,124	925	1,486	<b>1,468</b>	<b>2,954</b>	2,785
NGL	(Mboe)	235	259	241	292	<b>263</b>	<b>555</b>	462
Natural gas	(bcf)	34.9	33.8	27.6	38.7	<b>36.9</b>	<b>75.6</b>	68.8
Total petroleum products	(MMboe)	7.5	7.0	5.8	8.2	<b>7.9</b>	<b>16.1</b>	14.7
<b>Pyrenees</b>								
Crude oil and condensate	(Mboe)	2,331	2,093	2,097	1,676	<b>1,726</b>	<b>3,402</b>	4,427
Total petroleum products	(MMboe)	2.3	2.1	2.1	1.7	<b>1.7</b>	<b>3.4</b>	4.4
<b>Other Australia (2)</b>								
Crude oil and condensate	(Mboe)	9	8	9	10	<b>8</b>	<b>18</b>	22
Natural gas	(bcf)	14.4	16.2	17.2	17.5	<b>17.1</b>	<b>34.6</b>	31.0
Total petroleum products	(MMboe)	2.4	2.7	2.9	2.9	<b>2.9</b>	<b>5.8</b>	5.2
<b>Atlantis (3)</b>								
Crude oil and condensate	(Mboe)	4,257	4,056	4,058	3,054	<b>3,263</b>	<b>6,317</b>	7,894
NGL	(Mboe)	278	270	269	208	<b>207</b>	<b>415</b>	509
Natural gas	(bcf)	2.0	1.9	1.9	1.5	<b>1.6</b>	<b>3.1</b>	3.6
Total petroleum products	(MMboe)	4.9	4.6	4.6	3.5	<b>3.7</b>	<b>7.2</b>	9.0
<b>Mad Dog (3)</b>								
Crude oil and condensate	(Mboe)	648	880	1,134	950	<b>1,170</b>	<b>2,120</b>	1,236
NGL	(Mboe)	41	41	52	36	<b>52</b>	<b>88</b>	64
Natural gas	(bcf)	0.1	0.1	0.2	0.1	<b>0.2</b>	<b>0.3</b>	0.2
Total petroleum products	(MMboe)	0.7	0.9	1.2	1.0	<b>1.3</b>	<b>2.3</b>	1.3

<b>Shenzi (3)</b>								
Crude oil and condensate	(Mboe)	3,185	3,094	2,813	2,632	<b>2,692</b>	<b>5,324</b>	6,462
NGL	(Mboe)	269	206	192	94	<b>131</b>	<b>225</b>	505
Natural gas	(bcf)	0.8	0.6	0.6	0.5	<b>0.5</b>	<b>1.0</b>	1.5
Total petroleum products	(MMboe)	3.6	3.4	3.1	2.8	<b>2.9</b>	<b>5.7</b>	7.2
<b>Eagle Ford (4)</b>								
Crude oil and condensate	(Mboe)	7,156	7,018	4,949	3,871	<b>4,008</b>	<b>7,879</b>	14,856
NGL	(Mboe)	3,806	3,649	2,717	2,268	<b>2,159</b>	<b>4,427</b>	7,605
Natural gas	(bcf)	25.4	25.1	19.5	16.5	<b>15.2</b>	<b>31.7</b>	51.2
Total petroleum products	(MMboe)	15.2	14.9	10.9	8.9	<b>8.7</b>	<b>17.6</b>	31.0
<b>Permian (4)</b>								
Crude oil and condensate	(Mboe)	1,354	1,499	1,410	1,415	<b>1,378</b>	<b>2,793</b>	2,835
NGL	(Mboe)	488	288	393	734	<b>580</b>	<b>1,314</b>	961
Natural gas	(bcf)	3.4	2.4	4.9	4.4	<b>4.4</b>	<b>8.8</b>	7.3
Total petroleum products	(MMboe)	2.4	2.2	2.6	2.9	<b>2.7</b>	<b>5.6</b>	5.0
<b>Haynesville (4)</b>								
Crude oil and condensate	(Mboe)	1				<b>3</b>	<b>3</b>	1
NGL	(Mboe)					<b>15</b>	<b>15</b>	
Natural gas	(bcf)	34.7	34.4	31.1	28.2	<b>24.0</b>	<b>52.2</b>	71.1
Total petroleum products	(MMboe)	5.8	5.7	5.2	4.7	<b>4.0</b>	<b>8.7</b>	11.9
<b>Fayetteville (4)</b>								
Natural gas	(bcf)	30.9	28.0	26.5	24.8	<b>24.2</b>	<b>49.0</b>	63.0
Total petroleum products	(MMboe)	5.2	4.7	4.4	4.1	<b>4.0</b>	<b>8.2</b>	10.5

**Production and sales report**

		Quarter ended				Year to date		
		Dec 2015	Mar 2016	Jun 2016	Sep 2016	Dec 2016	Dec 2015	
<b>Petroleum (1) (continued)</b>								
<b>Trinidad/Tobago</b>								
Crude oil and condensate	(Mboe)	185	120	162	140	<b>156</b>	<b>296</b>	427
Natural gas	(bcf)	7.4	7.4	8.6	6.4	<b>8.4</b>	<b>14.8</b>	15.0
Total petroleum products	(MMboe)	1.4	1.4	1.6	1.2	<b>1.6</b>	<b>2.8</b>	2.9
<b>Other Americas (3) (5)</b>								
Crude oil and condensate	(Mboe)	360	334	308	275	<b>269</b>	<b>544</b>	721
NGL	(Mboe)	16	12	10	1	<b>5</b>	<b>6</b>	28
Natural gas	(bcf)	0.2	0.2	0.2	0.1	<b>0.1</b>	<b>0.2</b>	0.4
Total petroleum products	(MMboe)	0.4	0.4	0.4	0.3	<b>0.3</b>	<b>0.6</b>	0.8
<b>UK</b>								
Crude oil and condensate	(Mboe)	74	65	76	69	<b>63</b>	<b>132</b>	133
NGL	(Mboe)	27	10	10	22	<b>49</b>	<b>71</b>	23
Natural gas	(bcf)	1.0	1.0	1.3	1.1	<b>1.0</b>	<b>2.1</b>	2.0
Total petroleum products	(MMboe)	0.3	0.2	0.3	0.3	<b>0.3</b>	<b>0.6</b>	0.5
<b>Algeria</b>								
Crude oil and condensate	(Mboe)	922	887	964	990	<b>1,016</b>	<b>2,006</b>	1,838
Total petroleum products	(MMboe)	0.9	0.9	1.0	1.0	<b>1.0</b>	<b>2.0</b>	1.8
<b>Pakistan (6)</b>								
Crude oil and condensate	(Mboe)	19						42
Natural gas	(bcf)	3.7						7.9
Total petroleum products	(MMboe)	0.6						1.4
<b>Total petroleum products</b>								
<b>Crude oil and condensate</b>								
Onshore US	(Mboe)	8,511	8,517	6,359	5,286	<b>5,389</b>	<b>10,675</b>	17,692
Conventional (7)	(Mboe)	14,803	14,474	14,291	13,204	<b>13,601</b>	<b>26,805</b>	29,246
Total	(Mboe)	23,314	22,991	20,650	18,490	<b>18,990</b>	<b>37,480</b>	46,938

**NGL**

Onshore US	(Mboe)	4,294	3,937	3,110	3,002	<b>2,754</b>	<b>5,756</b>	8,566
Conventional	(Mboe)	2,173	2,253	2,605	2,755	<b>2,167</b>	<b>4,922</b>	4,989
<b>Total</b>	<b>(Mboe)</b>	<b>6,467</b>	<b>6,190</b>	<b>5,715</b>	<b>5,757</b>	<b>4,921</b>	<b>10,678</b>	13,555

**Natural gas**

Onshore US	(bcf)	94.4	89.9	82.0	73.9	<b>67.8</b>	<b>141.7</b>	192.6
Conventional	(bcf)	88.4	91.5	95.7	107.8	<b>97.1</b>	<b>204.9</b>	193.0
<b>Total</b>	<b>(bcf)</b>	<b>182.8</b>	<b>181.4</b>	<b>177.7</b>	<b>181.7</b>	<b>164.9</b>	<b>346.6</b>	385.6

- (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.
- (6) BHP Billiton completed the sale of the Pakistan gas business on 31 December 2015.
- (7) September 2015 includes (8) Mboe for the finalisation adjustment following the cessation of production at Stybarrow on 26 June 2015.

**Production and sales report**

		Quarter ended				Year to date		
	Dec 2015	Mar 2016	Jun 2016	Sep 2016	Dec 2016	Dec 2016	Dec 2015	
<b>Copper</b>								
Metals production is payable metal unless otherwise stated.								
<b>Escondida, Chile (1)</b>								
Material mined	(kt)	109,200	105,970	108,037	106,504	<b>90,863</b>	<b>197,367</b>	219,267
Sulphide ore milled	(kt)	18,076	21,188	22,905	20,787	<b>19,866</b>	<b>40,653</b>	40,896
Average copper grade	(%)	0.99%	0.99%	0.94%	0.87%	<b>1.02%</b>	<b>0.94%</b>	1.00%
Production ex mill	(kt)	142.8	175.8	181.7	153.2	<b>168.6</b>	<b>321.8</b>	312.5
<b>Production</b>								
Payable copper	(kt)	131.7	174.9	182.7	147.0	<b>162.6</b>	<b>309.6</b>	291.3
Copper cathode (EW)	(kt)	89.3	84.8	85.3	70.5	<b>71.5</b>	<b>142.0</b>	160.2
- Oxide leach	(kt)	32.1	31.0	31.3	26.8	<b>24.4</b>	<b>51.2</b>	55.5
- Sulphide leach	(kt)	57.2	53.8	54.0	43.7	<b>47.1</b>	<b>90.8</b>	104.7
Payable gold concentrate	(troy oz)	17,889	31,408	35,894	27,561	<b>37,784</b>	<b>65,345</b>	41,694
Payable silver concentrate	(troy koz)	962	1,544	1,874	1,229	<b>1,323</b>	<b>2,552</b>	2,143
<b>Sales</b>								
Payable copper	(kt)	123.8	181.7	186.6	134.9	<b>172.7</b>	<b>307.6</b>	281.4
Copper cathode (EW)	(kt)	101.1	80.3	83.8	65.6	<b>71.8</b>	<b>137.4</b>	164.9
Payable gold concentrate	(troy oz)	17,889	31,408	35,894	27,561	<b>37,784</b>	<b>65,345</b>	41,694
Payable silver concentrate	(troy koz)	962	1,544	1,874	1,229	<b>1,323</b>	<b>2,552</b>	2,143

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

**Pampa  
Norte, Chile**CerroColorado

Material mined	(kt)	14,930	12,415	12,453	13,011	<b>14,286</b>	<b>27,297</b>	28,800
Ore milled	(kt)	4,856	4,012	4,375	3,241	<b>3,342</b>	<b>6,583</b>	9,559
Average copper grade	(%)	0.82%	0.84%	0.80%	0.68%	<b>0.65%</b>	<b>0.66%</b>	0.73%

**Production**

Copper cathode (EW)	(kt)	18.8	20.0	24.8	17.1	<b>12.1</b>	<b>29.2</b>	32.5
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**Sales**

Copper cathode (EW)	(kt)	19.7	18.6	25.2	16.4	<b>13.7</b>	<b>30.1</b>	32.7
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Spence

Material mined	(kt)	21,593	22,549	21,124	23,638	<b>22,635</b>	<b>46,273</b>	44,515
Ore milled	(kt)	5,146	4,355	4,836	4,713	<b>5,187</b>	<b>9,900</b>	10,065
Average copper grade	(%)	1.30%	1.39%	1.22%	1.17%	<b>1.19%</b>	<b>1.18%</b>	1.35%

**Production**

Copper cathode (EW)	(kt)	50.2	39.8	41.0	45.0	<b>41.7</b>	<b>86.7</b>	93.3
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**Sales**

Copper cathode (EW)	(kt)	56.1	38.4	40.9	41.2	<b>41.5</b>	<b>82.7</b>	94.3
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**Production and sales report**

		Quarter ended				Year to date		
		Dec 2015	Mar 2016	Jun 2016	Sep 2016	Dec 2016	Dec 2015	
<b>Copper (continued)</b>								
Metals production is payable metal unless otherwise stated.								
<b>Antamina, Peru</b>								
Material mined (100%)	(kt)	52,130	55,183	62,793	65,111	<b>61,355</b>	<b>126,466</b>	108,923
Sulphide ore milled (100%)	(kt)	14,184	12,414	14,711	13,522	<b>13,399</b>	<b>26,921</b>	28,484
Average head grades								
- Copper	(%)	0.92%	1.02%	0.90%	0.84%	<b>0.84%</b>	<b>0.84%</b>	0.90%
- Zinc	(%)	0.55%	0.54%	0.33%	0.60%	<b>0.83%</b>	<b>0.71%</b>	0.67%
<b>Production</b>								
Payable copper	(kt)	37.2	35.4	38.7	34.1	<b>32.0</b>	<b>66.1</b>	72.3
Payable zinc	(t)	16,454	11,913	6,474	15,367	<b>22,406</b>	<b>37,773</b>	37,051
Payable silver	(troy koz)	1,636	1,751	1,558	1,345	<b>1,446</b>	<b>2,791</b>	3,402
Payable lead	(t)	1,024	1,193	645	1,146	<b>1,220</b>	<b>2,366</b>	1,881
Payable molybdenum	(t)	232	227	562	561	<b>225</b>	<b>786</b>	324
<b>Sales</b>								
Payable copper	(kt)	42.9	29.3	42.4	32.8	<b>33.0</b>	<b>65.8</b>	73.7
Payable zinc	(t)	20,423	12,097	3,035	16,043	<b>22,334</b>	<b>38,377</b>	39,170
Payable silver	(troy koz)	2,048	1,331	2,055	1,277	<b>1,388</b>	<b>2,665</b>	3,570
Payable lead	(t)	1,056	1,073	1,108	767	<b>1,100</b>	<b>1,867</b>	1,322
Payable molybdenum	(t)	138	178	331	648	<b>476</b>	<b>1,124</b>	294
<b>Olympic Dam, Australia</b>								
Material mined (1)	(kt)	2,372	2,210	1,993	2,204	<b>1,887</b>	<b>4,091</b>	4,729
Ore milled	(kt)	2,767	2,174	2,031	2,279	<b>2,116</b>	<b>4,395</b>	5,494
Average copper grade	(%)	2.22%	2.01%	2.20%	1.97%	<b>2.00%</b>	<b>1.98%</b>	1.93%
Average uranium grade	(kg/t)	0.62	0.61	0.59	0.60	<b>0.68</b>	<b>0.64</b>	0.61
<b>Production</b>								
Copper cathode (ER and EW)	(kt)	57.4	49.8	40.7	40.9	<b>37.2</b>	<b>78.1</b>	112.3
Uranium oxide concentrate	(t)	1,352	961	876	916	<b>1,060</b>	<b>1,976</b>	2,526

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Refined gold	(troy oz)	39,299	29,028	20,010	24,366	<b>29,651</b>	<b>54,017</b>	68,648
Refined silver	(troy koz)	265	174	232	163	<b>188</b>	<b>351</b>	511
<b>Sales</b>								
Copper cathode (ER and EW)	(kt)	57.3	49.4	43.9	37.5	<b>41.2</b>	<b>78.7</b>	109.8
Uranium oxide concentrate	(t)	1,013	1,261	778	1,085	<b>883</b>	<b>1,968</b>	1,690
Refined gold	(troy oz)	39,168	32,052	22,134	21,901	<b>28,234</b>	<b>50,135</b>	64,766
Refined silver	(troy koz)	265	198	201	184	<b>203</b>	<b>387</b>	478

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



**Production and sales report**

		Quarter ended				Year to date		
		Dec 2015	Mar 2016	Jun 2016	Sep 2016	Dec 2016	Dec 2016	Dec 2015
<b>Iron Ore</b>								
Iron ore production and sales are reported on a wet tonnes basis.								
<b>Pilbara, Australia</b>								
<b>Production</b>								
Newman	(kt)	17,003	15,817	15,115	18,008	<b>17,751</b>	<b>35,759</b>	35,009
Area C Joint Venture	(kt)	11,723	11,002	11,911	12,384	<b>12,179</b>	<b>24,563</b>	23,886
Yandi Joint Venture	(kt)	15,960	16,204	18,325	15,729	<b>17,555</b>	<b>33,284</b>	32,846
Jimblebar (1)	(kt)	4,852	5,472	5,304	6,057	<b>5,178</b>	<b>11,235</b>	8,114
Wheelarra	(kt)	5,757	4,562	4,971	5,409	<b>7,386</b>	<b>12,795</b>	13,016
Total production	(kt)	55,295	53,057	55,626	57,587	<b>60,049</b>	<b>117,636</b>	112,871
Total production (100%)	(kt)	64,197	61,454	64,508	66,681	<b>69,730</b>	<b>136,411</b>	131,358
<b>Sales</b>								
Lump	(kt)	13,886	13,380	13,054	14,156	<b>14,127</b>	<b>28,283</b>	27,889
Fines	(kt)	40,917	40,078	42,673	42,278	<b>45,447</b>	<b>87,725</b>	84,504
Total	(kt)	54,803	53,458	55,727	56,434	<b>59,574</b>	<b>116,008</b>	112,393
Total sales (100%)	(kt)	63,625	61,927	64,617	65,368	<b>69,196</b>	<b>134,564</b>	130,802

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

<b>Samarco, Brazil (1)</b>								
<b>Production</b>	(kt)	1,665						5,404
<b>Sales</b>	(kt)	2,425	224	94	12		<b>12</b>	5,956

(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 2015	Mar 2016	Jun 2016	Sep 2016	Dec 2016	Dec 2016	
<b>Coal</b>								
Coal production is reported on the basis of saleable product.								
<b>Queensland Coal</b>								
<b>Production (1)</b>								
<b>BMA</b>								
Blackwater	(kt)	1,861	1,756	2,206	1,981	<b>1,855</b>	<b>3,836</b>	3,664
Goonyella	(kt)	1,941	2,478	2,709	2,123	<b>2,204</b>	<b>4,327</b>	3,809
Peak Downs	(kt)	1,323	1,159	1,385	1,520	<b>1,715</b>	<b>3,235</b>	2,487
Saraji	(kt)	1,000	1,046	1,123	1,238	<b>1,307</b>	<b>2,545</b>	2,037
Gregory Joint Venture (2)	(kt)	609	13					1,316
Daunia	(kt)	616	626	684	646	<b>680</b>	<b>1,326</b>	1,314
Caval Ridge	(kt)	857	816	1,118	876	<b>923</b>	<b>1,799</b>	1,667
<b>Total BMA</b>	<b>(kt)</b>	<b>8,207</b>	<b>7,894</b>	<b>9,225</b>	<b>8,384</b>	<b>8,684</b>	<b>17,068</b>	16,294
<b>BHP Billiton Mitsui Coal (3)</b>								
South Walker Creek	(kt)	1,275	1,268	1,382	1,341	<b>1,080</b>	<b>2,421</b>	2,786
Poitrel	(kt)	916	747	963	804	<b>849</b>	<b>1,653</b>	1,752
<b>Total BHP Billiton Mitsui Coal</b>	<b>(kt)</b>	<b>2,191</b>	<b>2,015</b>	<b>2,345</b>	<b>2,145</b>	<b>1,929</b>	<b>4,074</b>	4,538
<b>Total Queensland Coal</b>	<b>(kt)</b>	<b>10,398</b>	<b>9,909</b>	<b>11,570</b>	<b>10,529</b>	<b>10,613</b>	<b>21,142</b>	20,832
<b>Sales</b>								
Coking coal	(kt)	7,642	7,348	8,059	7,240	<b>7,658</b>	<b>14,898</b>	14,657
Weak coking coal	(kt)	2,695	2,681	3,196	2,799	<b>2,659</b>	<b>5,458</b>	5,941
Thermal coal	(kt)	290	241	310	206	<b>154</b>	<b>360</b>	376
<b>Total</b>	<b>(kt)</b>	<b>10,627</b>	<b>10,270</b>	<b>11,565</b>	<b>10,245</b>	<b>10,471</b>	<b>20,716</b>	20,974

(1) Production figures include some thermal coal.

(2) Longwall mining at Crinum completed during the December 2015 quarter.

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

<b>Haju, Indonesia (1)</b>								
<b>Production</b>	(kt)	87	167	260	102	<b>27</b>	<b>129</b>	102
<b>Sales - export</b>	(kt)		148	239	117		<b>117</b>	

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

### New Mexico, USA

#### Production

Navajo Coal (1)	(kt)	1,403	694	632	451	<b>451</b>	2,673
San Juan Coal (2)	(kt)	1,229	418				2,635
<b>Total</b>	<b>(kt)</b>	<b>2,632</b>	<b>1,112</b>	<b>632</b>	<b>451</b>	<b>451</b>	<b>5,308</b>

#### Sales thermal coal - local utility

		2,661	1,106	613	105	<b>105</b>	5,332
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(1) The divestment of Navajo Coal was completed on 29 July 2016, with no further production reported by BHP Billiton. Management of Navajo Coal was transferred to Navajo Transitional Energy Company on 31 December 2016.

(2) BHP Billiton completed the sale of San Juan Mine on 31 January 2016.

### NSW Energy Coal, Australia

<b>Production</b>	<b>(kt)</b>	<b>4,277</b>	<b>4,189</b>	<b>3,991</b>	<b>3,952</b>	<b>3,851</b>	<b>7,803</b>	8,921
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#### Sales

Export thermal coal	(kt)	5,081	3,410	3,993	3,640	<b>3,539</b>	<b>7,179</b>	9,211
Inland thermal coal	(kt)	229	234	440	331	<b>311</b>	<b>642</b>	482
<b>Total</b>	<b>(kt)</b>	<b>5,310</b>	<b>3,644</b>	<b>4,433</b>	<b>3,971</b>	<b>3,850</b>	<b>7,821</b>	<b>9,693</b>

### Cerrejón, Colombia

<b>Production</b>	<b>(kt)</b>	<b>2,628</b>	<b>2,610</b>	<b>2,329</b>	<b>2,928</b>	<b>2,800</b>	<b>5,728</b>	5,155
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<b>Sales thermal coal - export</b>	<b>(kt)</b>	<b>2,565</b>	<b>2,339</b>	<b>2,844</b>	<b>2,905</b>	<b>2,722</b>	<b>5,627</b>	5,418
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**Production and sales report**

		Quarter ended				Year to date		
		Dec 2015	Mar 2016	Jun 2016	Sep 2016	Dec 2016	Dec 2016	Dec 2015
<b>Other</b>								
Nickel production is reported on the basis of saleable product								
<b>Nickel West, Australia</b>								
<b>Production</b>								
Nickel contained in concentrate	(kt)	0.2	0.3	0.3	0.3	<b>0.2</b>	<b>0.5</b>	0.9
Nickel contained in finished matte	(kt)	2.6	2.8	5.8	1.8	<b>4.1</b>	<b>5.9</b>	7.6
Nickel metal	(kt)	12.4	16.9	17.3	16.7	<b>17.8</b>	<b>34.5</b>	28.8
Total nickel production	(kt)	15.2	20.0	23.4	18.8	<b>22.1</b>	<b>40.9</b>	37.3
<b>Sales</b>								
Nickel contained in concentrate	(kt)	0.2	0.3	0.3	0.3	<b>0.2</b>	<b>0.5</b>	0.9
Nickel contained in finished matte	(kt)	3.7	2.7	5.9	1.8	<b>4.1</b>	<b>5.9</b>	7.9
Nickel metal	(kt)	12.1	17.8	17.4	16.5	<b>17.8</b>	<b>34.3</b>	27.7
Total nickel sales	(kt)	16.0	20.8	23.6	18.6	<b>22.1</b>	<b>40.7</b>	36.5

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 25, 2017

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