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BHP OPERATIONAL REVIEW FOR THE QUARTER ENDED 30 SEPTEMBER 2018

- Group copper equivalent production increased by 2% in the September 2018 quarter despite maintenance across a number of operations. Volumes for the 2019 financial year are expected to be broadly in line with last year⁽¹⁾.
- Full year production guidance remains unchanged for petroleum, iron ore, metallurgical coal and energy coal. Total copper production guidance reduced by approximately 3% to between 1,620 and 1,705 kt reflecting lower volumes now expected at Spence (electro-winning plant outage) and Olympic Dam (acid plant outage).
- Unit cost guidance⁽²⁾ maintained for all major assets for the 2019 financial year.
- All major projects under development are tracking to plan.
- In Petroleum, the Victoria-1 and Bongos-2 exploration wells in Trinidad and Tobago, and the Samurai-2 well in the US Gulf of Mexico, encountered hydrocarbons. A sidetrack of the Samurai-2 well is currently being drilled to further appraise the discovery.
- Onshore US sale process is on track to be completed by the end of October 2018, with the Fayetteville transaction completed on 29 September 2018. The net proceeds from the sale of our Onshore US assets are expected to be returned to shareholders.

Production	Sep Q18	vs Sep Q17	Sep Q18 commentary
Petroleum (MMboe)	33	(1%)	Higher natural gas volumes at Trinidad and Tobago offset by natural field decline and planned maintenance at Pyrenees.
Copper (kt)	409	1%	Higher volumes at Escondida supported by the utilisation of the three concentrators, offset by the impact of planned maintenance and a fire at Spence, and an acid plant outage at Olympic Dam.
Iron ore (Mt)	61	10%	Higher volumes at WAIO supported by record quarterly production at Jimblebar and improved reliability across our rail network and port operations.
Metallurgical coal (Mt)	10	(2%)	Record stripping and truck performance at BMA offset by the impact of planned maintenance across both port and mine operations.
Energy coal (Mt)	7	(1%)	Improved stripping fleet performance at New South Wales Energy Coal offset by lower bypass coal and a higher average strip ratio.

BHP Chief Executive Officer, Andrew Mackenzie, said: “We delivered a two per cent increase in copper equivalent production despite maintenance at a number of our operations. We are on track to meet guidance for the 2019 financial year across our commodities, except copper where we have reduced production guidance slightly following outages at Olympic Dam in Australia and Spence in Chile. In petroleum, we have extended our exploration success and encountered hydrocarbons in three wells. The Onshore US sale process is progressing to plan and is expected to be completed by the end of October 2018.”

Summary

Operational performance

Production for the September 2018 quarter and guidance for the 2019 financial year are summarised in the table below.

Production	Sep Q18	Sep Q18 vs Sep Q17	Sep Q18 vs Jun Q18	Previous FY19 guidance	Current FY19 guidance	
Continuing operations						
Petroleum – Conventional (MMboe)	33	(1%)	15%	113 - 118	113 - 118	Unchanged
Copper (kt)	409	1%	(12%)	1,675 - 1,770	1,620 - 1,705	Reduced
Escondida (kt)	295	10%	(7%)	1,120 - 1,180	1,120 - 1,180	Unchanged
Other copper ⁽ⁱ⁾ (kt)	114	(16%)	(23%)	555 - 590	500 - 525	Olympic Dam now 170 - 180 kt; previously 200 - 220 kt Spence now 160 - 175 kt; previously 185 - 200 kt
Iron ore (Mt)	61	10%	(3%)	241 - 250	241 - 250	Unchanged
WAIO (100% basis) (Mt)	69	8%	(4%)	273 - 283	273 - 283	Unchanged
Metallurgical coal (Mt)	10	(2%)	(14%)	43 - 46	43 - 46	Unchanged
Energy coal (Mt)	7	(1%)	(26%)	28 - 29	28 - 29	Unchanged
Discontinued operations						
Petroleum – Onshore US (MMboe)	20	16%	(2%)	Refer footnote ⁽ⁱⁱ⁾		

- (i) Other copper comprises Pampa Norte (including Cerro Colorado production for the first half of the 2019 financial year), Olympic Dam and Antamina.
- (ii) Given our announcement to exit Onshore US, no annual guidance for the 2019 financial year for these assets will be provided; however, until sale completion, we expect a production run rate broadly consistent with the second half of the 2018 financial year.

Major development projects

At the end of the September 2018 quarter, BHP had five major projects under development in petroleum, copper, iron ore and potash, with a combined budget of US\$10.6 billion over the life of the projects.

Corporate update

On 18 September 2018, BHP released its Economic Contribution Report which shows the Group's direct economic contribution globally in the 2018 financial year was US\$33.9 billion. This includes US\$7.8 billion in taxes, royalties and other payments to governments. BHP's adjusted effective tax rate in the 2018 financial year was 31.4 per cent. When royalties are included, the rate was 39.9 per cent.

Petroleum

Production

	Sep Q18	Sep Q18 vs Sep Q17	Sep Q18 vs Jun Q18
Crude oil, condensate and natural gas liquids (MMboe)	14	(7%)	4%
Natural gas (bcf)	112	5%	24%
Total petroleum production (MMboe)	33	(1%)	15%

Petroleum - Total Conventional petroleum production was broadly flat at 33 MMboe. Guidance for the 2019 financial year remains unchanged at between 113 and 118 MMboe.

Crude oil, condensate and natural gas liquids production declined by seven per cent to 14 MMboe due to natural field decline across the portfolio and a 70 day planned dry dock maintenance at Pyrenees, which was completed on schedule and budget in September 2018. This decline was partially offset by higher uptimes at our Gulf of Mexico assets.

Natural gas production increased by five per cent to 112 bcf, reflecting increased tax barrels at Trinidad and Tobago in accordance with the terms of our Production Sharing Contract. This was partially offset by natural field decline across the portfolio.

Projects

Project and ownership	Capital expenditure (US\$m)	Initial production target date	Capacity	Progress
North West Shelf Greater Western Flank-B (Australia) 16.67% (non-operator)	216	CY19	To maintain LNG plant throughput from the North West Shelf operations.	Ahead of schedule and budget. The overall project is 95% complete.
Mad Dog Phase 2 (US Gulf of Mexico) 23.9% (non-operator)	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 31% complete.

Study work continues on the Atlantis Phase 3, Ruby and West Barracouta projects and they remain on track.

Petroleum exploration

Exploration and appraisal wells drilled during the September 2018 quarter are summarised below.

Well	Location	Target	Formation age	BHP equity	Spud date	Water depth	Total well depth	Status
Samurai-2	US Gulf of Mexico GC432	Oil	Miocene	50% (Murphy Operator)	16 April 2018	1,088 m	9,777 m	Hydrocarbons encountered; plugged and abandoned
Samurai-2 ST01	US Gulf of Mexico GC476	Oil	Drilling ahead	50% (Murphy Operator)	25 August 2018	1,088 m	9,178 m	Drilling ahead
Victoria-1	Trinidad & Tobago Block TTDA 5	Gas	Pleistocene/ Pliocene	65% (BHP Operator)	12 June 2018	1,828 m	3,282 m	Hydrocarbons encountered; plugged and abandoned
Bongos-1	Trinidad & Tobago Block TTDA 14	Gas	Pliocene/ Miocene	70% (BHP Operator)	20 July 2018	1,909 m	2,469 m	Plugged and abandoned due to mechanical failure
Bongos-2	Trinidad & Tobago Block TTDA 14	Gas	Pliocene/ Miocene	70% (BHP Operator)	22 July 2018	1,910 m	5,151 m	Hydrocarbons encountered; plugged and abandoned
Concepcion-1	Trinidad & Tobago Block TTDA 5	Gas	Drilling ahead	65% (BHP Operator)	30 September 2018	1,721 m	1,817 m	Drilling ahead

In the US Gulf of Mexico, the Samurai-2 exploration well encountered hydrocarbons in multiple horizons not previously observed by the Wildling-2 exploration well and was plugged and abandoned on 23 August 2018. A sidetrack of the Samurai-2 well commenced on 25 August 2018 to further appraise the discovery and is currently drilling ahead. In the Western US Gulf of Mexico, we commenced the acquisition of an Ocean Bottom Node seismic survey.

In Trinidad and Tobago, we continued with Phase 2 of our deepwater exploration drilling campaign. The Victoria-1 exploration well, which further assessed the commercial potential of the Magellan play in our Southern licence area in Trinidad and Tobago, encountered gas and was plugged and abandoned on 18 July 2018. Following the Victoria-1 well, the Bongos-1 exploration well was spud on 20 July 2018 and experienced mechanical difficulty shortly after spud. The Bongos-2 exploration well was spud on 22 July 2018 and encountered hydrocarbons. The Bongos-2 and Bongos-1 wells were plugged and abandoned on 23 September 2018 and 26 September 2018 respectively. Following the Bongos-2 well, the Concepcion-1 well was spud on 30 September 2018 to further test the Magellan play and is currently drilling ahead.

In Mexico, we expect to begin drilling the first appraisal well at Trion in the December 2018 quarter. In Australia, the final processed data of the Exmouth sub-basin 3D seismic data has been received.

A US\$750 million exploration and appraisal program is being executed for the 2019 financial year. Petroleum exploration expenditure for the September 2018 quarter was US\$133 million, of which US\$55 million was expensed.

Onshore US – Discontinued operations

Following BHP's sale of the Onshore US assets, as announced on 27 July 2018, these assets have been presented as discontinued operations. The effective date at which the right to economic profits transfers to the purchasers is 1 July 2018.

Onshore US production for the September 2018 quarter increased by 16 per cent to 20 MMboe as a result of additional wells put online in Haynesville, Permian and Eagle Ford. Drilling and development expenditure for the September 2018 quarter was US\$299 million. Our operated rig count remained unchanged at five, with two rigs at Eagle Ford, two rigs at Permian and one at Haynesville. No annual guidance for the 2019 financial year for these assets will be provided; however until sale completion, we expect a production run rate broadly consistent with the second half of the 2018 financial year.

On 29 September 2018, BHP announced the completion of the sale of its Fayetteville Onshore US gas assets to a wholly owned subsidiary of Merit Energy Company. Completion of the sale of BHP's interests in the Eagle Ford, Haynesville and Permian Onshore US oil and gas assets to BP America Production Company, a subsidiary of BP Plc, is expected to occur by the end of October 2018.

Copper

Production

	Sep Q18	Sep Q18 vs Sep Q17	Sep Q18 vs Jun Q18
Copper (kt)	409	1%	(12%)
Zinc (t)	30,558	5%	(15%)
Uranium oxide concentrate (t)	559	(36%)	(50%)

Copper – Total copper production for the September 2018 quarter was broadly flat at 409 kt. Guidance for the 2019 financial year has been reduced to between 1,620 and 1,705 kt and reflects lower volumes at Spence and Olympic Dam.

Escondida copper production increased by 10 per cent to 295 kt driven by higher copper concentrate output. This is a result of the diversion of ore feed from sulphide leach to the three concentrators to maximise their utilisation, which offset the impact of expected lower copper grades and adverse weather conditions in the quarter. Guidance remains unchanged at between 1,120 and 1,180 kt in the 2019 financial year. During the period, we successfully completed negotiations with Escondida Union N°1 and signed a new collective agreement, effective for 36 months from 1 August 2018.

Pampa Norte copper production decreased by 25 per cent to 43 kt as a result of lower volumes from Spence. The decrease reflected a lower stacking rate in May and June 2018 as a result of planned maintenance, and a production outage following a fire at the electro-winning plant in September 2018. Production guidance for Spence has been reduced from between 185 and 200 kt to between 160 and 175 kt, with volumes weighted to the second half as a return to full capacity is expected during the December 2018 quarter. Since the fire, mining and stacking operations at Spence have continued, accumulating copper in the system, which will be recovered over the coming years as tankhouse capacity becomes available. On 19 June 2018, BHP entered into an agreement to sell Cerro Colorado to EMR Capital⁽³⁾. The transaction is expected to close during the December 2018 quarter, subject to financing and customary closing conditions. During the period, we successfully completed the advanced negotiation with Cerro Colorado Union N°1 (operators and maintenance), with the new agreement effective for 36 months from 1 September 2018.

Olympic Dam copper production decreased by 21 per cent to 33 kt as a result of an unplanned acid plant outage in August 2018. Surface operations remain suspended as remediation works continue on the gas converter, sulphur burner and waste heat boiler in the acid plant. Surface operations are expected to recommence at the end of October 2018 and ramp up to full capacity during November 2018. As a result, production guidance for the 2019 financial year has been reduced from between 200 and 220 kt to between 170 and 180 kt. Underground operations have been unaffected with total development of nine kilometres achieved in the September 2018 quarter and progression into the higher ore grade Southern Mine Area continuing.

Antamina copper production increased by three per cent to 37 kt due to higher head grades. Production guidance for the 2019 financial year remains unchanged at approximately 135 kt for copper and approximately 85 kt for zinc.

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 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.	On schedule and budget. The overall project is 23% complete.

Iron Ore

Production

	Sep Q18	Sep Q18 vs Sep Q17	Sep Q18 vs Jun Q18
Iron ore (kt)	61,391	10%	(3%)

Iron ore – Total iron ore production increased by 10 per cent to 61 Mt or 69 Mt on a 100 per cent basis. Guidance for the 2019 financial year remains unchanged at between 241 and 250 Mt, or between 273 and 283 Mt on a 100 per cent basis.

At WAIO, increased volumes were supported by record production at Jumblebar and improved reliability across our rail network and port operations. As expected, production was lower than the June 2018 quarter as we optimised maintenance schedules across the supply chain and implemented a program of work to further improve port reliability and performance.

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

Projects

Project and ownership	Capital expenditure (US\$m)	Initial production target date	Capacity	Progress
South Flank (Australia) 85%	3,061	CY21	Sustaining iron ore mine to replace production from the 80 Mtpa (100 per cent basis) Yandi mine.	On schedule and budget. The overall project is 15% complete.

Coal

Production

	Sep Q18	Sep Q18 vs Sep Q17	Sep Q18 vs Jun Q18
Metallurgical coal (kt)	10,358	(2%)	(14%)
Energy coal (kt)	6,640	(1%)	(26%)

Metallurgical coal – Metallurgical coal production was down two per cent to 10 Mt. Guidance for the 2019 financial year remains unchanged at between 43 and 46 Mt, with volumes weighted to the second half of the year.

Queensland Coal production reflected planned maintenance across both port and mine operations. This was partially offset by record stripping and truck performance at BMA, utilisation of latent dragline capacity at Caval Ridge and higher wash-plant throughput at Poitrel following the purchase of the Red Mountain processing facility. The maintenance program of work is expected to continue through the December 2018 quarter. A longwall move at Broadmeadow is scheduled for the December 2018 quarter.

The Caval Ridge Southern Circuit project is progressing according to plan with the conveying of first coal expected in October 2018.

Energy coal – Energy coal production decreased by one per cent to 7 Mt. Guidance for the 2019 financial year is unchanged at approximately 28 to 29 Mt.

New South Wales Energy Coal production decreased by six per cent as improved stripping fleet performance was offset by lower bypass coal and a higher average strip ratio, consistent with the mine plan. Cerrejón production increased by six per cent as the prior quarter was impacted by adverse weather conditions.

Other

Nickel production

	Sep Q18	Sep Q18 vs Sep Q17	Sep Q18 vs Jun Q18
Nickel (kt)	21.4	(8%)	(16%)

Nickel – Nickel West production decreased by eight per cent to 21 kt. On 23 September 2018, operations at the Kalgoorlie smelter were suspended following a fire which caused damage to a localised area in the furnace building. The smelter returned to operation on 1 October 2018 and is expected to ramp up to full capacity from early November 2018. Planned maintenance at the Kwinana refinery was brought forward to align with the smelter outage and, as a result, production guidance for the 2019 financial year remains unchanged and is expected to be broadly in line with the 2018 financial year.

Potash project

Project and ownership	Investment (US\$m)	Scope	Progress
Jansen Potash (Canada) 100%	2,700	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 81% complete and within the approved budget.

Minerals exploration

Minerals exploration expenditure for the September 2018 quarter was US\$40 million, of which US\$30 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. Consistent with our exploration focus on copper, in September 2018, BHP acquired an initial 6.1⁽⁴⁾ per cent interest in SolGold Plc (SolGold), the majority owner and operator of the Cascabel porphyry copper-gold project in Ecuador. On 15 October 2018, BHP entered into an agreement to acquire an additional 100 million shares in SolGold, which would bring our total interest to approximately 11.2 per cent.

Variance analysis relates to the relative performance of BHP and/or its operations during the September 2018 quarter compared with the September 2017 quarter, 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 2018 financial year average realised prices.

The following footnotes apply to this Operational Review:

- (1) Excludes production from Onshore US and Cerro Colorado.
- (2) 2019 financial year unit cost guidance is based on exchange rates of AUD/USD 0.75 and USD/CLP 663.
- (3) On 19 June 2018, BHP announced it has entered into an agreement to sell the Cerro Colorado copper mine in Chile to EMR Capital. The total cash consideration consist of US\$230 million to be paid to BHP after the closing of the transaction, plus approximately US\$40 million in proceeds from the post-closing sale of certain copper inventory, and a contingent payment of up to US\$50 million to be paid in the future, depending upon copper price performance.
- (4) As at 4 September 2018, BHP acquired a 6.1% interest in SolGold, which has been diluted to 6.0% as at 12 October 2018 as a result of the exercise of options by third parties.

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).

In this release, the terms 'BHP', 'Group', 'BHP Group', 'we', 'us', 'our' and ourselves' are used to refer to BHP Billiton Limited, BHP Billiton Plc and, except where the context otherwise requires, their respective subsidiaries as defined in note 28 'Subsidiaries' in section 5.1 of BHP's 30 June 2017 Annual Report on Form 20-F and in note 13 'Related undertaking of the Group' in section 5.2 of BHP's 30 June 2017 Annual Report on Form 20-F. Notwithstanding that this release may include production and other data from non-operated assets, non-operated assets are not included in the BHP Group.

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Production summary

		Quarter ended					Year to date	
BHP interest		Sep 2017	Dec 2017	Mar 2018	Jun 2018	Sep 2018	Sep 2018	Sep 2017
Petroleum ⁽¹⁾								
Petroleum								
Conventional								
Crude oil, condensate and NGL (Mboe)		15,090	14,869	13,960	13,486	14,087	14,087	15,090
Natural gas (bcf)		107.3	96.1	82.9	90.7	112.3	112.3	107.3
Total (Mboe)		32,973	30,886	27,777	28,603	32,804	32,804	32,973
Onshore US - Discontinued Operations								
Crude oil, condensate and NGL (Mboe)		7,079	7,423	6,256	8,266	7,351	7,351	7,079
Natural gas (bcf)		61.4	60.5	64.1	72.5	76.0	76.0	61.4
Total (Mboe)		17,312	17,506	16,939	20,349	20,018	20,018	17,312
Copper ⁽²⁾								
Copper								
Payable metal in concentrate (kt)								
Escondida ⁽³⁾	57.5%	196.3	238.5	244.9	246.1	240.0	240.0	196.3
Antamina	33.8%	35.9	33.8	35.2	34.6	37.0	37.0	35.9
Total		232.2	272.3	280.1	280.7	277.0	277.0	232.2
Cathode (kt)								
Escondida ⁽³⁾	57.5%	71.9	76.1	69.4	70.1	55.4	55.4	71.9
Pampa Norte ⁽⁴⁾	100%	58.0	68.4	66.8	70.6	43.4	43.4	58.0
Olympic Dam	100%	42.0	12.2	40.5	42.0	33.3	33.3	42.0
Total		171.9	156.7	176.7	182.7	132.1	132.1	171.9
Total copper (kt)		404.1	429.0	456.8	463.4	409.1	409.1	404.1
Lead								
Payable metal in concentrate (t)								
Antamina	33.8%	1,415	1,009	464	546	563	563	1,415
Total		1,415	1,009	464	546	563	563	1,415
Zinc								
Payable metal in concentrate (t)								
Antamina	33.8%	29,201	29,054	25,562	35,983	30,558	30,558	29,201
Total		29,201	29,054	25,562	35,983	30,558	30,558	29,201
Gold								
Payable metal in concentrate (troy oz)								
Escondida ⁽³⁾	57.5%	50,525	50,279	59,953	68,345	63,578	63,578	50,525
Olympic Dam (refined gold)	100%	13,101	15,969	28,989	33,497	23,471	23,471	13,101
Total		63,626	66,248	88,942	101,842	87,049	87,049	63,626
Silver								
Payable metal in concentrate (troy koz)								
Escondida ⁽³⁾	57.5%	1,737	2,193	2,339	2,527	1,997	1,997	1,737
Antamina	33.8%	1,596	1,331	1,189	1,321	1,309	1,309	1,596
Olympic Dam (refined silver)	100%	131	135	248	278	213	213	131
Total		3,464	3,659	3,776	4,126	3,519	3,519	3,464
Uranium								
Payable metal in concentrate (t)								
Olympic Dam	100%	880	243	1,118	1,123	559	559	880
Total		880	243	1,118	1,123	559	559	880
Molybdenum								
Payable metal in concentrate (t)								
Antamina	33.8%	402	579	420	261	464	464	402
Total		402	579	420	261	464	464	402

Production summary

		Quarter ended					Year to date	
BHP interest		Sep 2017	Dec 2017	Mar 2018	Jun 2018	Sep 2018	Sep 2018	Sep 2017
Iron Ore								
Iron Ore								
Production (kt) ⁽⁵⁾								
Newman	85%	13,842	18,317	16,412	18,500	16,378	16,378	13,842
Area C Joint Venture	85%	13,099	13,575	12,802	12,041	11,696	11,696	13,099
Yandi Joint Venture	85%	14,559	16,348	15,802	17,339	16,870	16,870	14,559
Jimblebar ⁽⁶⁾	85%	6,283	4,583	4,669	15,092	16,333	16,333	6,283
Wheelarra	85%	7,804	8,734	8,006	614	114	114	7,804
Samarco	50%	-	-	-	-	-	-	-
Total		55,587	61,557	57,691	63,586	61,391	61,391	55,587
Coal								
Metallurgical coal								
Production (kt) ⁽⁷⁾								
BMA	50%	8,296	7,394	7,983	9,220	7,744	7,744	8,296
BHP Mitsui Coal ⁽⁸⁾	80%	2,271	2,291	2,396	2,789	2,614	2,614	2,271
Total		10,567	9,685	10,379	12,009	10,358	10,358	10,567
Energy coal								
Production (kt)								
Australia	100%	4,235	4,383	3,662	6,261	3,982	3,982	4,235
Colombia	33.3%	2,497	2,914	2,444	2,762	2,658	2,658	2,497
Total		6,732	7,297	6,106	9,023	6,640	6,640	6,732
Other								
Nickel								
Saleable production (kt)								
Nickel West ⁽⁹⁾	100%	23.3	23.1	21.1	25.6	21.4	21.4	23.3
Total		23.3	23.1	21.1	25.6	21.4	21.4	23.3
Cobalt								
Saleable production (t)								
Nickel West	100%	280	263	240	277	249	249	280
Total		280	263	240	277	249	249	280

- (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) Production restated to include other nickel by-products.

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	
		Sep	Dec	Mar	Jun	Sep	Sep	Sep
		2017	2017	2018	2018	2018	2018	2017
Petroleum - Conventional ⁽¹⁾								
Bass Strait								
Crude oil and condensate	(Mboe)	1,815	1,513	1,126	1,361	1,653	1,653	1,815
NGL	(Mboe)	1,950	1,584	1,170	1,428	1,840	1,840	1,950
Natural gas	(bcf)	42.6	32.9	20.5	29.9	35.1	35.1	42.6
Total petroleum products	(MMboe)	10.9	8.6	5.7	7.8	9.3	9.3	10.9
North West Shelf								
Crude oil and condensate	(Mboe)	1,474	1,442	1,377	1,267	1,514	1,514	1,474
NGL	(Mboe)	227	200	210	186	242	242	227
Natural gas	(bcf)	36.2	36.2	35.8	34.2	36.6	36.6	36.2
Total petroleum products	(MMboe)	7.7	7.7	7.6	7.2	7.9	7.9	7.7
Pyrenees								
Crude oil and condensate	(Mboe)	1,510	1,210	1,250	1,168	282	282	1,510
Total petroleum products	(MMboe)	1.5	1.2	1.3	1.2	0.3	0.3	1.5
Other Australia ⁽²⁾								
Crude oil and condensate	(Mboe)	9	8	8	7	7	7	9
Natural gas	(bcf)	16.1	13.3	13.4	13.9	13.8	13.8	16.1
Total petroleum products	(MMboe)	2.7	2.2	2.2	2.3	2.3	2.3	2.7
Atlantis ⁽³⁾								
Crude oil and condensate	(Mboe)	3,022	3,377	3,459	3,471	3,190	3,190	3,022
NGL	(Mboe)	218	195	248	217	215	215	218
Natural gas	(bcf)	1.6	1.8	1.8	1.5	1.5	1.5	1.6
Total petroleum products	(MMboe)	3.5	3.9	4.0	3.9	3.7	3.7	3.5
Mad Dog ⁽³⁾								
Crude oil and condensate	(Mboe)	1,020	1,231	1,140	581	1,270	1,270	1,020
NGL	(Mboe)	44	72	55	27	61	61	44
Natural gas	(bcf)	0.1	0.2	0.2	0.1	0.2	0.2	0.1
Total petroleum products	(MMboe)	1.1	1.3	1.2	0.6	1.4	1.4	1.1
Shenzi ⁽³⁾								
Crude oil and condensate	(Mboe)	2,291	2,513	2,323	2,110	2,016	2,016	2,291
NGL	(Mboe)	141	184	140	151	122	122	141
Natural gas	(bcf)	0.4	0.5	0.4	0.4	0.4	0.4	0.4
Total petroleum products	(MMboe)	2.5	2.8	2.5	2.3	2.2	2.2	2.5
Trinidad/Tobago								
Crude oil and condensate	(Mboe)	118	135	232	233	447	447	118
Natural gas	(bcf)	9.7	10.5	10.0	9.8	24.0	24.0	9.7
Total petroleum products	(MMboe)	1.7	1.9	1.9	1.9	4.4	4.4	1.7
Other Americas ^{(3) (4)}								
Crude oil and condensate	(Mboe)	229	207	189	313	207	207	229
NGL	(Mboe)	5	3	3	22	3	3	5
Natural gas	(bcf)	0.1	0.1	-	0.3	-	-	0.1
Total petroleum products	(MMboe)	0.3	0.2	0.2	0.4	0.2	0.2	0.3
UK								
Crude oil and condensate	(Mboe)	40	22	43	38	36	36	40
NGL	(Mboe)	39	13	18	18	21	21	39
Natural gas	(bcf)	0.5	0.6	0.8	0.6	0.7	0.7	0.5
Total petroleum products	(MMboe)	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Algeria								
Crude oil and condensate	(Mboe)	938	960	969	888	961	961	938
Total petroleum products	(MMboe)	0.9	1.0	1.0	0.9	1.0	1.0	0.9

Production and sales report

		Quarter ended					Year to date	
		Sep	Dec	Mar	Jun	Sep	Sep	Sep
		2017	2017	2018	2018	2018	2018	2017
Petroleum - Onshore US - Discontinued Operations ⁽¹⁾⁽⁵⁾								
Eagle Ford								
Crude oil and condensate	(Mboe)	3,457	3,720	2,838	3,826	3,256	3,256	3,457
NGL	(Mboe)	1,856	2,100	1,555	1,767	1,919	1,919	1,856
Natural gas	(bcf)	13.8	14.4	12.6	13.9	13.8	13.8	13.8
Total petroleum products	(MMboe)	7.6	8.2	6.5	7.9	7.5	7.5	7.6
Permian								
Crude oil and condensate	(Mboe)	1,179	1,142	1,398	1,903	1,478	1,478	1,179
NGL	(Mboe)	587	460	465	770	687	687	587
Natural gas	(bcf)	4.5	3.6	4.1	6.4	4.8	4.8	4.5
Total petroleum products	(MMboe)	2.5	2.2	2.5	3.7	3.0	3.0	2.5
Haynesville								
Crude oil and condensate	(Mboe)	-	1	-	-	11	11	-
NGL	(Mboe)	-	-	-	-	-	-	-
Natural gas	(bcf)	21.5	22.0	28.7	33.1	39.0	39.0	21.5
Total petroleum products	(MMboe)	3.6	3.7	4.8	5.5	6.5	6.5	3.6
Fayetteville								
Natural gas	(bcf)	21.6	20.5	18.7	19.1	18.4	18.4	21.6
Total petroleum products	(MMboe)	3.6	3.4	3.1	3.2	3.1	3.1	3.6
Petroleum - Total ⁽¹⁾								
Conventional								
Crude oil and condensate	(Mboe)	12,466	12,618	12,116	11,437	11,583	11,583	12,466
NGL	(Mboe)	2,624	2,251	1,844	2,049	2,504	2,504	2,624
Natural gas	(bcf)	107.3	96.1	82.9	90.7	112.3	112.3	107.3
Total	(Mboe)	32,973	30,886	27,777	28,603	32,804	32,804	32,973
Onshore US - Discontinued Operations ⁽⁵⁾								
Crude oil and condensate	(Mboe)	4,636	4,863	4,236	5,729	4,745	4,745	4,636
NGL	(Mboe)	2,443	2,560	2,020	2,537	2,606	2,606	2,443
Natural gas	(bcf)	61.4	60.5	64.1	72.5	76.0	76.0	61.4
Total	(Mboe)	17,312	17,506	16,939	20,349	20,018	20,018	17,312

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

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

Production and sales report

		Quarter ended					Year to date	
		Sep 2017	Dec 2017	Mar 2018	Jun 2018	Sep 2018	Sep 2018	Sep 2017
Copper								
Metals production is payable metal unless otherwise stated.								
Escondida, Chile ⁽¹⁾								
Material mined	(kt)	104,867	101,371	103,385	106,788	107,260	107,260	104,867
Sulphide ore milled	(kt)	24,080	30,260	32,203	31,732	30,513	30,513	24,080
Average concentrator head grade	(%)	1.06%	0.98%	0.96%	0.96%	0.94%	0.94%	1.06%
Production ex mill	(kt)	204.2	245.7	252.6	253.6	241.9	241.9	204.2
Production								
Payable copper	(kt)	196.3	238.5	244.9	246.1	240.0	240.0	196.3
Copper cathode (EW)	(kt)	71.9	76.1	69.4	70.1	55.4	55.4	71.9
- Oxide leach	(kt)	22.4	27.4	24.5	27.1	19.5	19.5	22.4
- Sulphide leach	(kt)	49.5	48.7	44.9	43.0	35.8	35.8	49.5
Total copper	(kt)	268.2	314.6	314.3	316.2	295.4	295.4	268.2
Payable gold concentrate	(troy oz)	50,525	50,279	59,953	68,345	63,578	63,578	50,525
Payable silver concentrate	(troy koz)	1,737	2,193	2,339	2,527	1,997	1,997	1,737
Sales								
Payable copper	(kt)	195.1	236.7	228.3	260.3	216.5	216.5	195.1
Copper cathode (EW)	(kt)	61.6	84.1	61.7	80.9	53.2	53.2	61.6
Payable gold concentrate	(troy oz)	50,525	50,279	59,953	68,345	63,578	63,578	50,525
Payable silver concentrate	(troy koz)	1,737	2,193	2,339	2,527	1,997	1,997	1,737
(1) Shown on a 100% basis. BHP interest in saleable production is 57.5%.								
Pampa Norte, Chile								
<u>Cerro Colorado</u>								
Material mined	(kt)	21,381	20,191	17,766	17,918	18,488	18,488	21,381
Ore milled	(kt)	3,951	4,611	4,905	4,833	4,802	4,802	3,951
Average copper grade	(%)	0.62%	0.59%	0.58%	0.58%	0.53%	0.53%	0.62%
Production								
Copper cathode (EW)	(kt)	13.3	17.4	13.6	19.0	14.2	14.2	13.3
Sales								
Copper cathode (EW)	(kt)	12.3	17.7	13.7	20.9	13.8	13.8	12.3
<u>Spence</u>								
Material mined	(kt)	22,314	23,096	21,463	23,103	23,007	23,007	22,314
Ore milled	(kt)	5,375	4,919	5,144	4,009	5,642	5,642	5,375
Average copper grade	(%)	1.21%	1.18%	1.03%	1.11%	1.15%	1.15%	1.21%
Production								
Copper cathode (EW)	(kt)	44.7	51.0	53.2	51.6	29.2	29.2	44.7
Sales								
Copper cathode (EW)	(kt)	43.0	52.2	49.8	57.1	29.7	29.7	43.0

Production and sales report

Quarter ended					Year to date	
Sep	Dec	Mar	Jun	Sep	Sep	Sep
2017	2017	2018	2018	2018	2018	2017

Copper (continued)

Metals production is payable metal unless otherwise stated.

Antamina, Peru

Material mined (100%)	(kt)	59,216	59,125	58,085	59,002	62,470	62,470	59,216
Sulphide ore milled (100%)	(kt)	12,822	13,098	12,166	12,973	13,197	13,197	12,822
Average head grades								
- Copper	(%)	0.94%	0.89%	1.01%	0.91%	0.96%	0.96%	0.94%
- Zinc	(%)	0.99%	0.93%	1.01%	1.19%	1.10%	1.10%	0.99%

Production

Payable copper	(kt)	35.9	33.8	35.2	34.6	37.0	37.0	35.9
Payable zinc	(t)	29,201	29,054	25,562	35,983	30,558	30,558	29,201
Payable silver	(troy koz)	1,596	1,331	1,189	1,321	1,309	1,309	1,596
Payable lead	(t)	1,415	1,009	464	546	563	563	1,415
Payable molybdenum	(t)	402	579	420	261	464	464	402

Sales

Payable copper	(kt)	31.9	37.0	32.1	36.6	33.6	33.6	31.9
Payable zinc	(t)	25,224	30,340	26,456	33,088	31,822	31,822	25,224
Payable silver	(troy koz)	1,475	1,470	1,052	1,311	1,193	1,193	1,475
Payable lead	(t)	1,624	972	859	595	612	612	1,624
Payable molybdenum	(t)	168	693	500	388	208	208	168

Olympic Dam, Australia

Material mined ⁽¹⁾	(kt)	1,851	1,391	2,056	2,201	2,044	2,044	1,851
Ore milled	(kt)	2,302	554	2,188	2,171	1,242	1,242	2,302
Average copper grade	(%)	2.10%	2.22%	2.36%	2.12%	2.05%	2.05%	2.10%
Average uranium grade	(kg/t)	0.55	0.58	0.71	0.69	0.62	0.62	0.55

Production

Copper cathode (ER and EW)	(kt)	42.0	12.2	40.5	42.0	33.3	33.3	42.0
Uranium oxide concentrate	(t)	880	243	1,118	1,123	559	559	880
Refined gold	(troy oz)	13,101	15,969	28,989	33,497	23,471	23,471	13,101
Refined silver	(troy koz)	131	135	248	278	213	213	131

Sales

Copper cathode (ER and EW)	(kt)	31.6	24.3	36.8	46.0	33.9	33.9	31.6
Uranium oxide concentrate	(t)	680	338	509	1,230	765	765	680
Refined gold	(troy oz)	22,435	17,999	20,715	35,714	21,145	21,145	22,435
Refined silver	(troy koz)	219	118	202	307	216	216	219

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

Production and sales report

Quarter ended					Year to date	
Sep	Dec	Mar	Jun	Sep	Sep	Sep
2017	2017	2018	2018	2018	2018	2017

Iron Ore

Iron ore production and sales are reported on a wet tonnes basis.

Pilbara, Australia

Production

Newman	(kt)	13,842	18,317	16,412	18,500	16,378	16,378	13,842
Area C Joint Venture	(kt)	13,099	13,575	12,802	12,041	11,696	11,696	13,099
Yandi Joint Venture	(kt)	14,559	16,348	15,802	17,339	16,870	16,870	14,559
Jimblebar ⁽¹⁾	(kt)	6,283	4,583	4,669	15,092	16,333	16,333	6,283
Wheelarra	(kt)	7,804	8,734	8,006	614	114	114	7,804
Total production	(kt)	55,587	61,557	57,691	63,586	61,391	61,391	55,587
Total production (100%)	(kt)	64,287	71,611	67,048	72,145	69,342	69,342	64,287

Sales

Lump	(kt)	13,896	15,145	13,993	15,173	15,014	15,014	13,896
Fines	(kt)	40,733	45,769	44,332	47,730	46,527	46,527	40,733
Total	(kt)	54,629	60,914	58,325	62,903	61,541	61,541	54,629
Total sales (100%)	(kt)	63,322	70,733	67,799	71,385	69,421	69,421	63,322

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

Samarco, Brazil ⁽¹⁾

Production	(kt)	-	-	-	-	-	-	-
Sales	(kt)	-	14	25	-	-	-	-

(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	
Sep	Dec	Mar	Jun	Sep	Sep	Sep
2017	2017	2018	2018	2018	2018	2017

Coal

Coal production is reported on the basis of saleable product.

Queensland Coal

Production ⁽¹⁾

BMA

Blackwater	(kt)	1,985	1,470	1,384	1,849	1,704	1,704	1,985
Goonyella	(kt)	1,639	1,369	2,314	2,639	1,989	1,989	1,639
Peak Downs	(kt)	1,602	1,367	1,723	1,658	1,131	1,131	1,602
Saraji	(kt)	1,414	1,198	1,240	1,201	1,111	1,111	1,414
Daunia	(kt)	662	718	547	629	620	620	662
Caval Ridge	(kt)	994	1,272	775	1,244	1,189	1,189	994
Total BMA	(kt)	8,296	7,394	7,983	9,220	7,744	7,744	8,296

BHP Mitsui Coal ⁽²⁾

South Walker Creek	(kt)	1,400	1,524	1,490	1,615	1,505	1,505	1,400
Poitrel	(kt)	871	767	906	1,174	1,109	1,109	871
Total BHP Mitsui Coal	(kt)	2,271	2,291	2,396	2,789	2,614	2,614	2,271
Total Queensland Coal	(kt)	10,567	9,685	10,379	12,009	10,358	10,358	10,567

Sales

Coking coal	(kt)	7,934	6,341	7,177	8,489	7,356	7,356	7,934
Weak coking coal	(kt)	3,150	2,816	2,598	2,866	2,813	2,813	3,150
Thermal coal	(kt)	102	173	168	85	141	141	102
Total	(kt)	11,186	9,330	9,943	11,440	10,310	10,310	11,186

(1) Production figures include some thermal coal.

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

NSW Energy Coal, Australia

Production	(kt)	4,235	4,383	3,662	6,261	3,982	3,982	4,235
Sales								
Export thermal coal	(kt)	3,622	4,048	3,181	5,795	3,549	3,549	3,622
Inland thermal coal	(kt)	405	411	400	160	332	332	405
Total	(kt)	4,027	4,459	3,581	5,955	3,881	3,881	4,027

Corrección, Colombia

Production	(kt)	2,497	2,914	2,444	2,762	2,658	2,658	2,497
Sales thermal coal - export	(kt)	2,518	2,619	2,480	2,763	2,589	2,589	2,518

Production and sales report

Quarter ended					Year to date	
Sep	Dec	Mar	Jun	Sep	Sep	Sep
2017	2017	2018	2018	2018	2018	2017

Other

Nickel production is reported on the basis of saleable product

Nickel West, Australia

Mt Keith

Nickel concentrate	(kt)	54.4	49.8	44.9	55.6	50.2	50.2	54.4
Average nickel grade	(%)	20.5	20.3	21.3	18.8	18.9	18.9	20.5

Leinster

Nickel concentrate	(kt)	78.7	87.6	54.7	78.4	78.8	78.8	78.7
Average nickel grade	(%)	9.3	8.8	9.3	9.8	8.4	8.4	9.3

Saleable production

Refined nickel ^{(1) (2)}	(kt)	16.0	17.7	19.2	18.5	19.8	19.8	16.0
Intermediates and nickel by-products ^{(1) (3)}	(kt)	7.3	5.4	1.9	7.1	1.6	1.6	7.3
Total nickel ⁽¹⁾	(kt)	23.3	23.1	21.1	25.6	21.4	21.4	23.3

Cobalt	(t)	280	263	240	277	249	249	280
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Sales

Refined nickel ^{(1) (2)}	(kt)	16.3	17.7	19.5	17.5	19.3	19.3	16.3
Intermediates and nickel by-products ^{(1) (3)}	(kt)	5.0	6.9	2.5	6.3	2.2	2.2	5.0
Total nickel ⁽¹⁾	(kt)	21.2	24.6	21.9	23.8	21.5	21.5	21.2

Cobalt	(t)	280	263	240	277	249	249	280
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(1) Production and sales restated to include other nickel by-products.

(2) High quality refined nickel metal, including briquettes and powder.

(3) Nickel contained in matte and by-product streams.