

NAUTICAL PETROLEUM LIMITED
REPORT & FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 2019



Nautical Petroleum Limited

Directors:

James Smith
Simon Thomson
Paul Mayland

Secretary:

Duncan Wood

Independent Auditors:

PricewaterhouseCoopers LLP
Atria One
144 Morrison Street
Edinburgh
EH3 8EX

Solicitors:

Shepherd and Wedderburn LLP
1 Exchange Crescent
Conference Square
Edinburgh
EH3 8UL

Registered Office:

4th Floor
Wellington House
125 The Strand
London
WC2R 0AP

Registered No:

04362104

Nautical Petroleum Limited

Directors' Report

The Directors of Nautical Petroleum Limited ("the Company") present their Annual Report for the year ended 31 December 2019 together with the audited Financial Statements of the Company for the year.

The operations of Nautical Petroleum Limited and its direct and indirect subsidiaries have been impacted by COVID-19 and increased oil price volatility. The Company has deferred capital expenditure to preserve liquidity during this period of uncertainty. Production activities on the Company's subsidiary assets in the North Sea have continued uninterrupted to date, but the Company continues to monitor the situation. The Company and the wider Cairn Energy PLC Group have performed additional sensitivity analysis. This includes scenarios forecasting a prolonged economic downturn as a result of COVID-19 and the demand-side impact forecast on oil prices together with supply-side risk as a result of increased production in the global oil market. These confirm that the Company can continue to operate as a going concern.

Though COVID-19 is a non-adjusting post balance sheet event, the Company has extended the additional sensitivity analysis to show the impact on the results of impairment tests carried out on the value of producing assets as at 31 December 2019, including scenarios forecasting a prolonged downturn in oil price. Results of these sensitivities can be seen in note 2.6.

Consolidated financial statements are not produced for the Company and its wholly owned subsidiaries (detailed in note 6.4 to the Financial Statements) as provided under the exemption in section 400(1) of the Companies Act 2006.

The Company is a wholly-owned subsidiary of Capricorn Energy Limited. The results of the Company are consolidated into those of the ultimate parent company, Cairn Energy PLC, registered in Scotland, whose principal place of business is at 50 Lothian Road, Edinburgh, EH3 9BY. Copies of Cairn Energy PLC's financial statements are available to the public and may be obtained from the above mentioned address.

Results and Dividend

During the year Nautical Petroleum Limited made a profit of US\$618.7m (2018: loss US\$111.0m). This was due to improved production on its Kraken and Catcher assets, including the reversal of an impairment on Kraken of US\$130.7m. A dividend of US\$269.2m was declared and distributed in respect of the year ended 31 December 2019 by offset against loans due by the Company's parent undertaking (2018: US\$nil).

Strategic Report

Included in the Strategic Report are the Company's Business Review and principal risks and uncertainties.

Accounting Policies

Nautical Petroleum Limited applies accounting policies in line with the Cairn Energy PLC Group accounting policies. Significant accounting policies of the Group are included in the Cairn Energy PLC Group financial statements.

Directors

The directors of the Company who were in office during the year and up to the date of signing the Financial Statements were:

James Smith
Paul Mayland
Simon Thomson
Brita Holstad (resigned 5 February 2020)

The Company maintains qualifying third-party indemnity insurance on behalf of its directors.

Nautical Petroleum Limited

Directors' Report (continued)

Statement of Directors' Responsibilities

The directors are responsible for preparing the Strategic Report, Directors' Report and the Financial Statements in accordance with applicable law and regulations.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the Financial Statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. Under company law the directors must not approve the Financial Statements unless they are satisfied that they give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period. In preparing these Financial Statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable IFRSs as adopted by the European Union have been followed, subject to any material departures disclosed and explained in the Financial Statements;
- prepare the Financial Statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

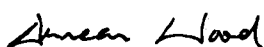
The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the Financial Statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Disclosure of Information to Auditors

The directors of the Company who held office as at the date of this report confirm that, as far as they are aware, there is no relevant audit information of which the Company's auditors are unaware. In making this confirmation, the directors have taken appropriate steps to make themselves aware of the relevant audit information and that the Company's auditors are aware of this information.

The auditors, PricewaterhouseCoopers LLP, have indicated their willingness to continue in office, and a resolution that they be re-appointed will be presented at the annual general meeting.

BY ORDER OF THE BOARD



Duncan Wood
Secretary

50 Lothian Road
Edinburgh EH3 9BY

5 May 2020

Nautical Petroleum Limited

Strategic Report

Results and Dividend

During the year Nautical Petroleum Limited made a profit of US\$618.7m (2018: loss US\$111.0m). This was due to improved production on its Kraken and Catcher assets, including a reversal of an impairment on Kraken of US\$130.7m. A dividend of US\$269.2m was declared and distributed in respect of the year ended 31 December 2019 by offset against loans due by the Company's parent company (2018: US\$nil).

Business Review

The Company's principal activity is that of oil and gas exploration, development and production in the UK sector of the North Sea (UKCS).

The Company's core competence is within the subsurface, hydrocarbon development and commercial arena of the exploration and production ('E & P') business. The company has built an asset portfolio which will continue to be expanded through 'farming in' to and acquisitions of assets from existing oil and gas companies on the UKCS and with focused licence round applications.

The Company's strategy and business model are linked to those of the Cairn Energy PLC Group ("the Group") during the year and the information that fulfils the requirements of the Strategic Report can be found in the Strategic Report section of the Group's annual report on pages 2 to 71, which does not form part of this report.

Principal Risks and Uncertainties

From the perspective of the Company, the principal risks and uncertainties are integrated with the principal risks of the Group and are not managed separately. Accordingly, the principal risks and uncertainties of the Group which include those of the Company, are discussed in pages 39 to 45 of the Group's annual report which does not form part of this report.

Key Performance Indicators

The key performance indicators of the Company are aligned with those of the Group where these concern activities in the UK sector of the North Sea. These are discussed on pages 32 to 35 of the Group's annual report and do not form part of this report.

BY ORDER OF THE BOARD



Duncan Wood
Secretary

50 Lothian Road
Edinburgh EH3 9BY

5 May 2020

Independent auditors' report to the members of Nautical Petroleum Limited

Report on the audit of the financial statements

Opinion

In our opinion, Nautical Petroleum Limited's financial statements:

- give a true and fair view of the state of the company's affairs as at 31 December 2019 and of its profit and cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Report & Financial Statements (the "Annual Report"), which comprise: the balance sheet as at 31 December 2019; the income statement, the statement of comprehensive income, the statement of cash flows, the statement of changes in equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISAs (UK) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the company's ability to continue as a going concern.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic Report and Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, ISAs (UK) require us also to report certain opinions and matters as described below.

Independent auditors' report to the members of Nautical Petroleum Limited (continued)

Strategic Report and Directors' Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended 31 December 2019 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' Report.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of Directors' Responsibilities set out on page 3, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of directors' remuneration specified by law are not made; or
- the financial statements are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.



Lindsay Gardiner (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
Edinburgh
5 May 2020

Nautical Petroleum Limited

Income Statement

For the year ended 31 December 2019

	Note	2019 US\$m	2018 US\$m
Continuing operations			
Revenue	2.1	532.3	409.1
Cost of sales	2.1	(68.7)	(131.4)
Depletion and amortisation	2.3	(217.6)	(169.1)
Gross profit		246.0	108.6
Pre-award costs		(0.8)	(2.9)
Unsuccessful exploration costs	2.2	(6.1)	(15.5)
Administrative expenses		(0.6)	(0.5)
Impairment of investment in subsidiary	6.4	(15.5)	(0.1)
Reversal of impairment/(Impairment) of property, plant & equipment - development/producing assets	2.3	130.7	(147.5)
Operating profit/(loss)		353.7	(57.9)
Dividends received	6.5	279.9	-
Finance income	4.2	15.5	16.3
Finance costs	4.3	(30.4)	(69.4)
Profit/(Loss) before taxation		618.7	(111.0)
Taxation			
Tax charge/credit	5.1	-	-
Profit/(Loss) for the year		618.7	(111.0)

Nautical Petroleum Limited

Statement of Comprehensive Income

For the year ended 31 December 2019

		2019 US\$m	2018 US\$m
Profit/(Loss) for the year		618.7	(111.0)
Other Comprehensive (Expense)/Income – items that may be recycled to the Income Statement			
Fair value on hedge options	3.5	(29.7)	36.1
Hedging (gain)/loss recycled to the Income Statement	2.1	(10.9)	7.8
Other Comprehensive (Expense)/Income for the year		(40.6)	43.9
Total Comprehensive Income/(Expense) for the year		578.1	(67.1)

Nautical Petroleum Limited

Balance Sheet

As at 31 December 2019

	Note	2019 US\$m	2018 US\$m
Non-current assets			
Intangible exploration/appraisal assets	2.2	21.3	41.2
Property, plant & equipment – development/producing assets	2.3	1,010.6	901.9
Derivative financial instruments	3.5	-	7.7
Investments in subsidiaries	6.4	0.1	15.6
		1,032.0	966.4
Current assets			
Inventory	2.1	13.8	8.2
Cash and cash equivalents	3.1	120.4	161.5
Trade and other receivables	3.4	76.7	62.3
Derivative financial instruments	3.5	4.1	36.7
		215.0	268.7
Total assets		1,247.0	1,235.1
Current liabilities			
Lease liabilities/Finance lease liability	3.3	41.0	18.5
Derivative financial instruments	3.5	1.6	-
Trade and other payables	3.6	58.0	386.0
Deferred revenue	3.7	16.9	22.0
		117.5	426.5
Non-current liabilities			
Provisions – decommissioning	2.4	139.8	117.8
Loans and borrowings	3.2	-	85.0
Lease liabilities/Finance lease liability	3.3	234.0	146.9
Deferred revenue	3.7	18.7	30.8
		392.5	380.5
Total liabilities		510.0	807.0
Net assets		737.0	428.1
Equity attributable to owners of the parent			
Called-up share capital	6.1	24.9	24.9
Share premium	6.1	93.0	93.0
Hedge reserve	6.1	0.4	41.0
Retained earnings		618.7	269.2
Total equity		737.0	428.1

The Financial Statements on pages 7 to 40 were approved by the Board of Directors on 5 May 2020 and signed on its behalf by:



James Smith
Director

Company Registered No: 04362104

Nautical Petroleum Limited

Statement of Cash Flows

For the year ended 31 December 2019

		Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
	Note		
Cash flows from operating activities			
Profit/(Loss) before taxation		618.7	(111.0)
Adjustments for non-cash income and expense and non-operating cash flow:			
Release of deferred revenue		(17.2)	(21.2)
Unsuccessful exploration costs		6.1	15.4
Depreciation, depletion and amortisation		217.6	169.1
Discounted financial activities		-	9.9
(Reversal of impairment)/Impairment of property, plant & equipment - development/producing assets		(130.7)	147.5
Impairment of investment in subsidiary		15.5	0.1
Dividends	6.5	(279.9)	-
Finance income		(15.5)	-
Finance costs		30.4	(6.7)
Adjustments for cash flow movements in assets and liabilities:			
Inventory movement		(5.6)	2.9
Trade and other receivables movement	3.4	(6.2)	(34.9)
Trade and other payables movement	3.6	4.6	3.0
Net cash flows from operating activities		437.8	174.1
Cash flows from investing activities			
Expenditure on intangible exploration/appraisal assets	2.2	(13.0)	(29.4)
Expenditure on property, plant & equipment - development/producing assets	2.3	(24.0)	(98.3)
Interest received		0.3	-
Repayment of loan from parent	3.6	(45.9)	-
Loan to parent	3.4	(255.1)	-
Net cash flows used in investing activities		(337.7)	(127.7)
Cash flows from financing activities			
Other interest and charges		(6.4)	-
Group funding		-	(22.2)
Proceeds from borrowings	3.2	20.0	85.0
Repayment of borrowings		(105.0)	-
Lease payments	3.3	(56.8)	(7.4)
Lease reimbursements	3.3	7.0	4.7
Net cash flows (used in)/from financing activities		(141.2)	60.1
Net (decrease)/increase in cash and cash equivalents		(41.1)	106.5
Opening cash and cash equivalents at beginning of year		161.5	55.0
Closing cash and cash equivalents	3.1	120.4	161.5

Nautical Petroleum Limited

Statement of Changes in Equity

For the year ended 31 December 2019

	Equity share capital US\$m	Share premium US\$m	Hedge reserve US\$m	Retained earnings US\$m	Total equity US\$m
At 1 January 2018	24.9	93.0	(2.9)	(40.3)	74.7
Loss for the year	-	-	-	(111.0)	(111.0)
Fair value on hedge options	-	-	36.1	-	36.1
Hedging loss recycled to the Income Statement	-	-	7.8	-	7.8
Total comprehensive income/(expense)	-	-	43.9	(111.0)	(67.1)
Waiver of intercompany loan	-	-	-	420.5	420.5
At 31 December 2018	24.9	93.0	41.0	269.2	428.1
Profit for the year	-	-	-	618.7	618.7
Fair value on hedge options	-	-	(29.7)	-	(29.7)
Hedging gain recycled to the Income Statement	-	-	(10.9)	-	(10.9)
Total comprehensive (expense)/income	-	-	(40.6)	618.7	578.1
Dividend	-	-	-	(269.2)	(269.2)
At 31 December 2019	24.9	93.0	0.4	618.7	737.0

Nautical Petroleum Limited

Section 1 – Basis of Preparation

1.1 Significant Accounting Policies

a) Basis of Preparation

The Financial Statements of Nautical Petroleum Limited ("the Company") for the year ended 31 December 2019 were authorised for issue in accordance with a resolution of the Directors on 5 May 2020. The Company is a private limited company incorporated in England and domiciled in the United Kingdom. The registered office is located at 4th Floor, Wellington House, 125 The Strand, London WC2R 0AP. The registered company number is 04362104.

The Company prepares its Financial Statements on a historical cost basis applied consistently throughout the period, unless accounting standards require an alternate measurement basis. Where there are assets and liabilities calculated on a different basis, this fact is disclosed either in the relevant accounting policy or in the notes to the Financial Statements. The Financial Statements comply with the Companies Act 2006 as applicable to companies using International Financial Reporting Standards ('IFRS').

The Company's business activities, together with the factors likely to affect its future development, performance and position are set out in the Strategic Report on page 4. The financial position of the company, its liquidity position and borrowing facilities are presented in the financial statements and supporting notes. In addition, notes 3.9 and 6.2 to the Financial Statements includes the Company's objectives, policies and processes for managing its capital; its financial risk management objectives and details of its financial instruments; and its exposures to credit risk and liquidity risk.

b) Going Concern

The Directors have considered the factors relevant to support a statement of going concern.

In assessing whether the going concern assumption is appropriate, the Board considered the Cairn Energy PLC Group and the Company cash flow forecasts under various scenarios, identifying risks and mitigants and ensuring the Cairn Energy PLC Group and the Company have sufficient funding to meet its current commitments as and when they fall due. This includes scenarios run to take account of a prolonged economic downturn as a result of COVID-19 and the resultant demand-side impact forecast on oil prices which have led to a significant decrease in oil prices in the first four months of 2020.

The directors have a reasonable expectation that the Company will continue in operational existence for a period of 12 months from the date of signing these Financial Statements and have therefore used the going concern basis in preparing the Financial Statements.

c) Accounting Standards

The Company prepares its Financial Statements in accordance with applicable IFRS, issued by the International Accounting Standards Board ('IASB') as adopted by the EU, and interpretations issued by the International Financial Reporting Interpretations Committee ('IFRS IC'), and Companies Act 2006 applicable to companies reporting under IFRS. The Company's Financial Statements are also consistent with IFRS as issued by the IASB as they apply to accounting periods ended 31 December 2019.

Effective 1 January 2019, the Company has adopted the following standards and amendments to standards:

- Amendments to IAS 28 'Investments in Associates and Joint Ventures'
- Amendments to IFRS 9 'Financial Instruments'
- IFRS 16 'Leases'
- Annual improvements to IFRS 2015-2017 cycle

In 2018, the Company early adopted the following interpretation issued by IFRS IC:

- IFRIC 23 'Uncertainty over Income Tax Treatments'

There are no new standards or amendments, issued by the IASB and endorsed by the EU, that have yet to be adopted by the Company that will materially impact the Company's Financial Statements.

The impact of adoption of IFRS 16 can be found in note 1.2. None of the other amendments adopted have a material impact on the Company's Financial Statements or disclosures.

d) Investments

The Company's investments in subsidiaries are carried at cost less provisions resulting from impairment. In testing for impairment the carrying value of the investment is compared to its recoverable amount, being its fair value less costs of disposal.

Nautical Petroleum Limited

Section 1 – Basis of Preparation

1.1 Significant Accounting Policies (continued)

e) Joint Arrangements

The Company is a partner (joint operator) in oil and gas exploration, development and production licences which are unincorporated joint arrangements. All of the Company's current interests in these arrangements are determined to be joint operations. The Company's principal licence interests are below:

Asset Name	Licence	Block(s)	Operator	Interest (%)
Kraken	P1077	9/2b	Enquest Heather Ltd (70.5%)	29.5
Catcher	P1430	28/9a	Premier Oil UK Ltd (50%)	20
Agar-Plaintain	P1763	9/9d, 9/14a	Apache Beryl Ltd (50%)	25
Laverda	P2070	28/4a	Premier Oil UK Ltd (54%)	20
Chimera	P2312	3/16a, 3/17a 22/11b, 22/12b, 22/16b,	Nautical Petroleum Limited Nautical Petroleum Limited	45
Woodstock	P2379	22/17c		100
Manhattan	P2381	22/13c, 22/18d	Nautical Petroleum Limited	40
Peppermint	P2393	28/10a	Nautical Petroleum Limited	60
Bonneville	P2453	28/9c	Premier Oil UK Ltd (50%)	20
Laverda Template	P2454	28/9d	Premier Oil UK Ltd (54%)	20
Mane	P2466	3/16b, 3/21a, 3/22a 13/10, 13/3, 13/4, 13/5, 13/8,	No Operator	100
East Orkney Basin	P2468	13/9, 14/1, 14/6, 6/28, 6/29	No Operator	50

Costs incurred relating to an interest in a joint operation other than costs relating to production are capitalised in accordance with the Company's accounting policies for oil and gas assets as appropriate (notes 2.2 and 2.3). All the Company's intangible exploration/appraisal assets and property, plant & equipment – development/producing assets relate to interests in joint operations.

The Company's working capital balances relating to joint operations are included in trade and other receivables (note 3.4) and trade and other payables (note 3.6). Any share of finance income or costs generated or incurred by the joint operation is included within the appropriate income statement account.

f) Foreign Currencies

These Financial Statements continue to be presented in US dollars (US\$), the functional currency of the Company.

The Company translates foreign currency transactions into the functional currency at the rate of exchange prevailing at the transaction date (or an approximation thereof where not materially different). Monetary assets and liabilities denominated in foreign currency are translated into the functional currency at the rate of exchange prevailing at the balance sheet date. Exchange differences arising are taken to the Income Statement except for those incurred on borrowings specifically allocable to development projects, which are capitalised as part of the cost of the asset, though there were none in either the current or preceding year.

1.2 Adoption of IFRS 16 'Leases'

The Company has adopted IFRS 16 'Leases' with effect from 1 January 2019. The Company has chosen to apply IFRS 16 retrospectively with the cumulative effect of initial application recognised at the date of adoption. In doing so the Company has elected not to re-assess whether contracts contain a lease.

IFRS 16 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognise a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments.

In assessing the impact of IFRS 16, the Company identified the FPSO on the UK Catcher producing asset where a right-of-use asset and lease liability is recognised on adoption.

All other leases identified have either yet to commence on the date of adoption, are for periods of less than one year, have less than one year remaining on the date of adoption or are for low-value items which have no material impact on the Company's Financial Statements.

In applying IFRS 16, the Company has used the following practical expedients permitted by the standard:

- Accounting for leases with a remaining term of less than 12 months at 1 January 2019 as short-term leases; and
- The exclusion of initial direct costs for the measurement of the right-of-use assets at the date of adoption.

Nautical Petroleum Limited

Section 1 – Basis of Preparation

1.2 Adoption of IFRS 16 ‘Leases’ (continued)

The Company has also chosen to measure the right-of-use assets recognised at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments, immediately before the date of adoption for all right-of-use assets recognised. There is therefore no adjustment to opening retained earnings.

Kraken FPSO

Under IFRS 16, the carrying amount of a right-of-use asset and lease liability for leases previously classified as finance leases is equal to the carrying amount of the lease asset and lease liability immediately before the date of adoption. Therefore, the adoption of IFRS 16 has no impact on the right-of-use asset and lease liability previously recognised for the Kraken FPSO.

Catcher FPSO

The Company has recognised a lease liability and a corresponding right-of-use asset of US\$147.5m for the Catcher FPSO on adoption of IFRS 16. The Catcher FPSO lease was previously classified as an operating lease under IAS 17.

The key estimates and assumptions applied in measuring the right-of-use asset and lease liability were as follows:

- The minimum lease commitment is equal to 75% of the contracted day rate with all payments in excess of the minimum being classified as variable lease payments dependent upon performance;
- The lease term is equal to the current non-cancellable period of the lease with no reasonable plans to extend the lease contract beyond the initial term;
- No exercise of the option to purchase at the end of the initial term; and
- The interest rate applied is equal to the Company's incremental borrowing rate on the date of adoption rather than a rate implicit in the lease contract which could not be readily determined.

The right-of-use asset is being amortised on a unit-of-production basis in accordance with the Company's accounting policy.

Adjustments recognised on adoption of IFRS 16: Reconciliation to 2018 operating lease commitment

A reconciliation of operating lease commitments at 31 December 2018 to the opening lease liabilities on adoption of IFRS 16 is as follows:

	Production costs US\$m	Development/ Producing assets US\$m	Total US\$m
Operating lease commitments	171.6	3.9	175.5
Attributable to:			
Short-term leases	-	(3.9)	(3.9)
Gross lease liability	171.6	-	171.6
Interest implicit in lease	(24.1)	-	(24.1)
Increase in opening lease liabilities	147.5	-	147.5
Right-of-use asset – tangible development/producing asset	147.5	-	147.5
Increase in opening right-of-use assets	147.5	-	147.5

The weighted average incremental borrowing rate used to discount opening lease liabilities is 5.75%.

Impact on Financial Statements at 31 December 2019

As a result of adoption of IFRS 16, the following Income Statement line items have been impacted for the year ended 31 December 2019:

	US\$m
Impact on Income Statement line items:	
Decrease in cost of sales	33.9
Increase in depletion and amortisation	(36.6)
Decrease in gross profit	(2.7)
Decrease in operating profit	(2.7)
Increase in finance costs	(7.2)
Decrease in profit before taxation	(9.9)
Decrease in profit after taxation	(9.9)

In the Cash Flow Statement, lease payments of US\$33.9m, which would previously have been classified as operating cash outflows are now included in financing activities. In the Balance Sheet at 31 December 2019, property, plant & equipment - development/producing assets have increased by US\$110.9m, and lease liabilities by US\$120.9m as a result of adoption.

Nautical Petroleum Limited

Section 2 – Oil and Gas Assets and Operations

Significant accounting judgements in this section:

Impairment testing of oil and gas assets

At the year end, revised production profile estimates and additional reserve volumes booked have increased the fair value less cost of disposal of the Kraken cash-generating unit significantly above its previously recorded net book value. As the increase in the production profile is an indicator that the impairment charge recorded in 2018 may have reversed or decreased, impairment tests were performed and the charge has been reversed in full after adjusting for the depletion charge that would have resulted from the increased carrying value of the asset.

Impairment testing of UK Laverda exploration/appraisal asset prior to transfer to development/producing assets

Prior to transfer to development, the UK Laverda asset, a satellite field to the Catcher producing asset, was tested for impairment in accordance with the Company's accounting policy. While no impairment was identified, the Company has not reversed impairments recorded in earlier years and has transferred the net book value to development assets on approval of the field development plan.

On approving the field development plan, Cairn simultaneously completed a farm-down to align working interest shares among partners across the Greater Catcher Area, receiving nominal consideration for the share of the Laverda asset surrendered. While the remaining carrying value of Laverda is supported by headroom on the Catcher producing asset impairment test, there are no indications that the value of the Laverda exploration/appraisal assets has itself increased significantly that would have allowed for a reversal of impairments recorded in earlier years.

Key estimates and assumptions in this section:

Estimation of hydrocarbon reserves and long-term oil price assumption

Oil and gas reserve volumes and related production profiles are estimated based on the internal process manual which follows industry best-practice. This represents the Company's best estimate of reserves as at the reporting date. The Reserves and Resources Reporting Committee, which provides oversight, advice and guidance while providing senior level review, reports to the Group Audit Committee before ultimately requesting approval of annual reserve volumes by the Board. At the year end, the significantly improved production performance on the Kraken asset and more regular well testing performed by the Operator, improving reservoir monitoring, have resulted in an upward revision to production profile estimates. Forecast production volumes on satellite fields on both Catcher and Kraken were also promoted to reserves at the year end. Third-party audits of reserves and resources are conducted annually.

A change in reserve volumes could impact depletion and decommissioning charges, impairment testing, release of deferred revenue and related deferred tax assets and liabilities. The Company reduced its long-term oil price assumption from US\$70 to US\$65 per bbl which it believes reflects current market conditions. The Company's three-year short-term assumption remains linked to the forward curve.

Impairment testing of intangible exploration/appraisal assets and property, plant & equipment – development/producing assets

Where it is identified that there is an indicator of impairment, or an indicator identified that a prior year impairment may have reversed or decreased, on an intangible exploration/appraisal asset or a development/producing asset, an impairment test is conducted in accordance with the Company's accounting policies. The test compares either the carrying value of the asset or the carrying value of the cash-generating unit ('CGU') containing the asset, to the recoverable amount of that asset or CGU.

The recoverable amount of an asset represents its fair value less costs of disposal. This is based on either a verifiable third-party arm's length transaction from which a fair value can be obtained or, where there is no such transaction, the fair value less costs of disposal of an asset is calculated using a discounted post-tax cash flow model over the field life of the asset. The Company does not believe that the value in use of the asset would materially exceed its fair value less cost of disposal.

The key assumptions used in the Company's discounted cash flow models reflect past experience and take account of external factors. These assumptions include:

- Short/medium-term oil price based on a three-month average forward curve for three years from the balance sheet date;
- Long-term oil price of US\$65 per bbl (2018: US\$70 per bbl) escalated at 2.0% (2018: 2.0%) per annum;
- Reserve estimates of discovered resource (2P and 2C) based on P50 reserve estimates;
- Production profiles based on internal estimates including assumptions on performance of assets;
- Cost profiles for the development and operating costs supplied by the Operator and escalated at 2.0% (2018: 2.0%) per annum; and
- Post-tax discount rates of 10% (2018: 10%).

Decommissioning estimates

Provisions for decommissioning are based on the latest estimates provided by operators, subject to review by the Company and adjusted where deemed necessary. Costs provided to date are an estimate of the cost that would be incurred to remove and decommission facilities that existed at the year end and to plug and abandon development wells drilled to that date. Costs are escalated at 2.0% per annum (2018: 2.0%) and discounted at a risk-free rate of 2.0% (2018: 2.0%).

Nautical Petroleum Limited

Section 2 – Oil and Gas Assets and Operations

2.1 Gross Profit: Revenue and Cost of Sales

Accounting policies

Revenue

Revenue from oil sales represents the Company's share of sales, on a liftings basis, from its producing interests in the UK North Sea, at the point in time where ownership of the oil or gas has been passed to the buyer. This occurs when the customer takes delivery of a cargo of oil from the FPSO as this is the point in time that the consideration due is unconditional as only the passage of time is required before payment is due. Revenue is measured using the Brent (or estimated Brent) oil price plus or minus the applicable discount based on the quality of the oil.

Revenue from the sale of gas is recorded based on the volume of gas accepted each day by customers at the delivery point.

Commodity price hedging

The Company may hedge oil production for the Company's assets in line with hedging policies approved by the Board. Where a hedging instrument has been formally designated as a hedge for hedge accounting, changes in the intrinsic value of the hedged item and the time value of the option are recognised within Other Comprehensive Income (where the hedge is effective) based on fair value and are reclassified to the Income Statement when the hedged production itself affects profit or loss. Hedge effectiveness is assessed on a prospective basis at commencement and throughout the life of the option. Any hedge ineffectiveness identified is immediately charged to the Income Statement.

A change in the fair value of an option that is either not designated as a hedging instrument for hedge accounting or does not qualify for hedge accounting is recognised in the Income Statement.

Cost of sales

Production costs include the Company's share of costs incurred by the joint operation in extracting oil and gas. Also included are marketing and transportation costs and loss-of-production insurance costs payable over the year.

Adjustments for overlift (where liftings taken by the Company exceed its working interest share), underlift (where liftings taken by the Company are less than its working interest share) and movements in inventory are included in cost of sales. Oil inventory is measured at market value in accordance with established industry practice.

Variable lease charges represent lease payments made on leases over and above the fixed lease commitment. Variable lease costs are charged directly to the Income Statement.

	Year end 31 December 2019 US\$m	Year end 31 December 2018 US\$m
Oil sales	501.6	393.2
Gas sales	2.6	2.5
Gain/(Loss) on hedge options	10.9	(7.8)
Release of deferred revenue (see note 3.7)	17.2	21.2
Revenue from oil and gas sales	532.3	409.1
Production costs	(68.1)	(64.2)
Oil inventory and underlift adjustment	20.6	(7.7)
Variable and operating lease charges	(21.2)	(59.5)
Cost of sales	(68.7)	(131.4)
Depletion and amortisation (see note 2.3)	(217.6)	(169.1)
Gross profit	246.0	108.6

Revenue

The Company receives revenue from its producing assets in the UK North Sea Kraken and Catcher. On Kraken, where only oil is sold, the Company takes a full lifting of crude on a scheduled basis to reflect its working interest, whereas on Catcher, the Company receives its working interest percentage share of each lifting of crude and its working interest share of gas sales. Payment terms are within 30 days.

Net sales volumes during the year averaged ~21,400 boepd (2018: ~16,000 boepd) for the two assets combined, realising an average sales price of US\$64.52/boe (2018: US\$67.99/boe).

Nautical Petroleum Limited

Section 2 – Oil and Gas Assets and Operations

2.1 Revenue and Cost of Sales (continued)

Commodity price hedging

During 2019, the Company realised gains on hedge options of US\$10.9m (2018: loss of US\$7.8m) as the oil price fell below the floor on several hedge contracts. Hedging gains and losses are recycled to the Income Statement from Other Comprehensive Income when the option matures.

Details on the Company's hedging position at 31 December 2019 can be found in note 3.5.

Cost of sales

Inventory of oil held at the year end is recorded at a market value of US\$13.8m (2018: US\$8.2m). Underlift adjustments on Kraken production volumes were US\$15.1m (2018: US\$0.1m) at 31 December 2019. The total inventory and underlift increase in the year was US\$20.6m (2018: decrease of US\$7.7m).

Variable lease costs on the Kraken FPSO of US\$6.1m (2018: variable finance lease costs of US\$22.7m) and on the Catcher FPSO of US\$15.1m (2018: operating lease charge of US\$36.8m) are charged to the Income Statement. Details on leases can be found in note 3.3.

2.2 Intangible Exploration/Appraisal Assets

Accounting policy

The Company follows a successful-efforts based accounting policy for oil and gas assets.

Costs incurred prior to obtaining the legal rights to explore an area are expensed immediately to the Income Statement as pre-award costs. Expenditure incurred on the acquisition of a licence interest is initially capitalised on a licence-by-licence basis. Costs are held, undepleted, within intangible exploration/appraisal assets until such time as the exploration phase on the licence area is complete or commercial reserves have been discovered and a field development plan approved.

Exploration expenditure incurred in the process of determining oil and gas exploration targets is capitalised initially within intangible exploration/appraisal assets and subsequently allocated to drilling activities. Costs are recognised following a cost accumulation model where any contingent future costs on recognition of an asset are recognised only when incurred. This includes where the Company has entered into a 'farm-in' agreement to either acquire or part-dispose of an exploration interest.

A farm-in is an agreement in which a party agrees to acquire from one or more of the existing licencees, an interest in an exploration licence, for a consideration which may consist of the performance of a specified work obligation on behalf of the existing licencees. This obligation may be subject to a monetary cap. Refund of full or partial costs incurred to date may also be included in a farm-in agreement. Where the Company has part-disposed of an exploration licence interest through a farm-in arrangement, a 'farm-down', the contingent consideration payable by the third party on the Company's behalf is not recognised in the Financial Statements. The future economic benefit which the Company will receive as a result of the farm-down will be dependent upon future success of any exploration drilling.

Exploration/appraisal drilling costs are capitalised on a well-by-well basis until the success or otherwise of the well has been established. The success or failure of each exploration/appraisal effort is judged on a well-by-well basis. Drilling costs are written off on completion of a well unless the results indicate that hydrocarbon reserves exist and there is a reasonable prospect that these reserves are commercial and work to confirm the commercial viability of such hydrocarbons is intended to be carried out in the foreseeable future. Where results of exploration drilling indicate the presence of hydrocarbons which are ultimately not considered commercially viable, all related costs are written off to the Income Statement.

Following appraisal of successful exploration wells, if commercial reserves are established and technical feasibility for extraction demonstrated and approved in a field development plan, then the related capitalised intangible exploration/appraisal costs are transferred into a single field cost centre within property, plant & equipment – development/producing assets, after testing for impairment (see below).

Proceeds from the disposal or farm-down of part or all of an exploration/appraisal asset are credited initially to that interest with any excess being credited to the Income Statement.

Impairment

Intangible exploration/appraisal assets are reviewed regularly for indicators of impairment and tested for impairment where such indicators exist. An indicator that one of the Company's assets may be impaired is most likely to be one of the following:

- There are no further plans to conduct exploration activities in the area;
- Exploration drilling in the area has failed to discover commercial reserve volumes;
- Changes in the oil price or other market conditions indicate that discoveries may no longer be commercial; or
- Development proposals for appraisal assets in the pre-development stage indicate that it is unlikely that the carrying value of the exploration/appraisal asset will be recovered in full.

Nautical Petroleum Limited

Section 2 – Oil and Gas Assets and Operations

2.2 Intangible Exploration/Appraisal Assets (continued)

In such circumstances the intangible exploration/appraisal asset is allocated to any property, plant & equipment – development/producing assets within the same CGU and tested for impairment. Any impairment arising is recognised in the Income Statement for the year. Where there are no development assets within the CGU, the excess of the carrying amount of the exploration/appraisal asset over its recoverable amount is charged immediately to the Income Statement.

	UK Total US\$m
Cost	
At 1 January 2018	25.4
Additions	34.3
Unsuccessful exploration costs	(15.5)
At 31 December 2018	44.2
Additions	4.3
Unsuccessful exploration costs	(6.1)
Transfer to development/producing assets	(18.1)
At 31 December 2019	24.3
Impairment	
At 1 January 2018, 31 December 2018 and 31 December 2019	3.0
Net book value	
At 31 December 2017	22.4
At 31 December 2018	41.2
At 31 December 2019	21.3

All additions to exploration/appraisal assets have been funded through cash and working capital.

UK

During the year the operated P2312 Chimera well was drilled in the UK incurring additions of US\$3.2m with the Company agreeing a farm-down prior to drilling reducing the Company's capital exposure. The well was ultimately unsuccessful. Other exploration additions of US\$1.1m relate to ongoing portfolio management. Additions relating to drilling in the year include US\$2.5m of rig costs incurred under short-term lease contracts.

US\$6.1m charged to the Income Statement as unsuccessful costs include the costs of the Chimera well drilled in 2019 which was unsuccessful and the write off costs on other licences where no further exploration activity is planned.

In July 2019, the Company completed a farm-down on the UK Laverda and Catcher North licences, equalising the working interest shares of partners in the Catcher development and allowing the proposed development of the two satellite fields to proceed. Costs of US\$18.1m have been transferred to development/producing assets after testing for impairment (see Key Estimates and Assumptions in this section).

Costs capitalised at 31 December 2019 of US\$21.3m include US\$18.8m relating to the 2018 Agar-Plantain discovery where the Company is assessing farm-down opportunities ahead of proceeding to development.

In 2018, well cost additions were US\$31.4m as the Company completed exploration wells on PL1863 Agar-Plantain and P2184 Ekland in the UK North Sea. Remaining additions of US\$2.9m were incurred across remaining licences in the portfolio. Unsuccessful exploration costs in 2018 of US\$15.5m include US\$14.6m of costs on the Ekland, well which did not result in the discovery of commercial hydrocarbons.

Impairment review

At the year end, the Company reviewed its remaining intangible exploration/appraisal assets for indicators of impairment. No indicators of impairment were identified.

Nautical Petroleum Limited

Section 2 – Oil and Gas Assets and Operations

2.3 Property, Plant & Equipment – Development/Producing Assets

Accounting policy

Costs

All costs incurred after the technical feasibility and commercial viability of producing hydrocarbons has been demonstrated and a development plan approved, are capitalised within development/producing assets on a field-by-field basis. Subsequent expenditure is capitalised only where it either enhances the economic benefits of the development/producing asset or replaces part of the existing development/producing asset. Any remaining costs associated with the part replaced are expensed.

Costs of borrowings relating to the ongoing construction of development/producing assets and facilities are capitalised during the development phase of the project. Capitalisation ceases once the asset is ready to commence production.

Net proceeds from any disposal, part-disposal or farm-down of development/producing assets are credited against the appropriate portion of previously capitalised cost. A gain or loss on disposal of a development/producing asset is recognised in the Income Statement to the extent that the net proceeds, measured at fair value, exceed or are less than the appropriate portion of the net capitalised costs.

Depletion and amortisation

Depletion is charged on a unit-of-production basis, based on proved and probable reserves on a field-by-field basis. Fields within a single development area may be combined for depletion purposes. Where production commences prior to completion of the development, costs to be depleted include the costs-to-complete of the facility required to extract the volume of reserves recorded. Amortisation charged on right-of-use leased assets is also charged on a unit-of-production basis, based on proved and probable reserves.

Impairment

Development/producing assets are reviewed for indicators of impairment at the balance sheet date. Indicators of impairment for the Company's development assets include:

- Downward revisions of reserve estimates;
- Increases in cost estimates for development projects; or
- A decrease in the oil price or other negative changes in market conditions.

Impairment tests are carried out on each development/producing asset at the balance sheet date where an indicator of impairment is identified. The test compares the carrying value of an asset to its recoverable amount based on the higher of its fair value less costs of disposal or value in use. Where the fair value less costs of disposal supports the carrying value of the asset, no value-in-use calculation is performed.

If it is not possible to calculate the fair value less costs of disposal of an individual asset, the fair value less costs of disposal is calculated for the CGU containing the asset and tested against the carrying value of the assets and liabilities in the CGU for impairment. Where an asset can be tested independently for impairment, this test is performed prior to the inclusion of the asset into a CGU for further impairment tests.

If the carrying amount of the asset or CGU exceeds its recoverable amount, an impairment charge is made.

Where there has been a charge for impairment in an earlier period that charge will be reversed in a later period where there has been a change in circumstances to the extent that the recoverable amount is higher than the net book value at the time. In reversing impairment losses, the carrying amount of the asset will be increased to the lower of its original carrying value or the carrying value that would have been determined (net of depletion) had no impairment loss been recognised in prior years.

Decommissioning

At the end of the producing life of a field, costs are incurred in plugging and abandoning wells, removing subsea installations and decommissioning production facilities. The company recognises the full discounted cost of decommissioning as an asset and liability when the obligation to rectify environmental damage arises. The decommissioning asset is included within property, plant & equipment – development/producing assets with the cost of the related installation. The liability is included within provisions.

Revisions to the estimated costs of decommissioning which alter the level of the provisions required are also reflected in adjustments to the decommissioning asset. The amortisation of the asset is calculated on a unit-of-production basis based on proved and probable reserves. The amortisation of the asset is included in the depletion charge in the Income Statement and the unwinding of discount of the provision is included within finance costs.

Nautical Petroleum Limited

Section 2 – Oil and Gas Assets and Operations

2.3 Property, Plant & Equipment – Development/Producing Assets (continued)

	UK US\$m	UK Right-of-use leased assets US\$m	Total US\$m
Cost			
At 1 January 2018	1,033.7	177.4	1,211.1
Additions	38.4	-	38.4
Increase in decommissioning asset	5.3	-	5.3
Remeasurement of right-of-use leased asset	-	(11.5)	(11.5)
At 31 December 2018	1,077.4	165.9	1,243.3
Right-of-use leased asset – IFRS 16 opening balance adjustment (see note 1.2)	-	147.5	147.5
At 1 January 2019	1,077.4	313.4	1,390.8
Additions	16.4	-	16.4
Increase in decommissioning asset	10.7	2.9	13.6
Transfer from exploration/appraisal assets	18.1	-	18.1
At 31 December 2019	1,122.6	316.3	1,438.9
Depletion, amortisation and impairment			
At 1 January 2018	21.3	3.5	24.8
Depletion and amortisation charges	150.9	18.2	169.1
Impairment charge	147.5	-	147.5
At 31 December 2018	319.7	21.7	341.4
Depletion and amortisation charges	161.1	56.5	217.6
Reversal of impairment	(130.7)	-	(130.7)
At 31 December 2019	350.1	78.2	428.3
Net book value			
At 31 December 2017	1,012.4	173.9	1,186.3
At 31 December 2018	757.7	144.2	901.9
At 31 December 2019	772.5	238.1	1,010.6

All current year additions of US\$16.4m were funded through cash and working capital and include US\$3.8m of costs under short-term lease contracts.

Kraken producing asset additions of US\$12.1m include the completion of the final sub-surface drill centre, DC-4. 2018 additions of US\$31.8m were offset by a US\$23.0m reversal of accruals following the successful renegotiation of the development drilling rig contract. Remaining additions of US\$4.3m (2018: US\$29.6m) were incurred on the Catcher producing asset.

The increase in the decommissioning asset in the current year of US\$10.7m relates to change in estimates for Kraken and Catcher. The 2018 increase was due to a revision to the Catcher decommissioning cost estimate.

Combined depletion and amortisation charges for the year of US\$217.6m (2018: US\$169.1m) were charged to the Income Statement based on production during the year and total reserves over the life of the asset.

Leased assets

At 1 January 2019, US\$147.5m, the net present value of future fixed lease payments was recorded on the Balance Sheet for the Catcher FPSO, as a right-of-use producing asset following adoption of IFRS 16. There were no changes to the Kraken FPSO right-of-use asset on adoption.

In the second half of 2018, the Kraken FPSO lease agreement was amended resulting in a reduction of the lease liability and right-of-use asset by US\$11.5m – see note 3.3. There were no such revisions to either the Catcher or Kraken lease agreements during 2019.

Nautical Petroleum Limited

Section 2 – Oil and Gas Assets and Operations

2.3 Property, Plant & Equipment – Development/Producing Assets (continued)

Impairment review

At 31 December 2018, impairment tests were conducted on the Company's UK & Norway development/producing assets, resulting in an impairment charge of US\$147.5m on the UK Kraken producing asset. No impairment arose on the Catcher producing asset. The Kraken impairment followed a reserves downgrade arising from poor performance of the asset from inception to the previous balance sheet date.

During 2019, production performance on Kraken has improved significantly and in addition the Operator has conducted more regular well testing to improve reservoir monitoring. Consequently the Company has revised production profile estimates upward to reflect this improvement while also incorporating new volumes associated with the Worcester satellite field to be developed in 2020. The changes to the production profile resulting from improved performance is an indicator that the impairment charge recorded in 2018 may no longer exist or may have decreased. The resultant impairment test, incorporating the revised fair value of the Kraken cash-generating unit, indicated that a full reversal of the 2018 impairment charge should be recorded, despite the reduction to the Company's long-term oil price assumption. The reversal is capped to US\$130.7m, being the original impairment adjusted for the depletion that would have been charged in 2019 had no impairment been recorded.

Sensitivity analysis on the Company's impairment tests can be found in note 2.6.

2.4 Provisions - Decommissioning

	Development/ Producing assets US\$m	Total US\$m
At 1 January 2018	116.9	116.9
Foreign exchange	(6.7)	(6.7)
Unwinding of discount	2.3	2.3
Provided in the year	5.3	5.3
At 31 December 2018	117.8	117.8
Foreign exchange	5.8	5.8
Unwinding of discount (note 4.3)	2.6	2.6
Provided in the year	13.6	13.6
At 31 December 2019	139.8	139.8

The decommissioning provisions at 31 December 2019 represent the present value of decommissioning costs related to the Kraken and Catcher development/producing assets. The provisions are based on operator cost estimates, subject to internal review and amendment where considered necessary and are calculated using assumptions based on existing technology and the current economic environment, with a discount rate of 2.0% per annum (2018: 2.0%). The reasonableness of these assumptions is reviewed at each reporting date to take into account any material changes required.

Provisions during the year relate to revised decommissioning estimates for Kraken.

During 2018, the decommissioning estimate for Catcher increased by US\$5.3m. The Kraken decommissioning estimate remained unchanged.

The decommissioning provisions represent management's best estimate of the obligation arising based on work undertaken at the balance sheet date. Actual decommissioning costs will depend upon the prevailing market conditions for the work required at the relevant time.

The decommissioning of the Company's development/producing assets is forecast to occur between 2026 and 2043.

Nautical Petroleum Limited

Section 2 – Oil and Gas Assets and Operations

2.5 Capital Commitments

	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Oil and gas expenditure:		
Intangible exploration/appraisal assets	40.4	10.1
Property, plant & equipment – development/producing assets	63.7	18.9
Contracted for	104.1	29.0

Capital commitments represent the Company's share of obligations in relation to its interests in joint operations. These commitments include the Company's share of the capital commitments of the joint operations themselves.

The capital commitments for intangible exploration/appraisal assets include the planned Diadem exploration well on the P2379 licence. In March 2020, the Company entered into an asset exchange agreement with Shell UK Limited in which the Company transferred a 50% WI in this licence in exchange for 50% WI of P2380 (Jaws). Each licence contains a firm commitment to drill an exploration well (with both wells planned to be drilled prior to October 2022).

The capital commitments for property, plant & equipment – development/producing assets on Kraken and Catcher include the planned Worcester and Catcher satellite developments.

As at 31 December 2019, the company had the following commitments relating to short-term leases and leases yet to commence. These amounts are also included in the total of capital commitments shown above.

	Development/ Producing assets US\$m	Total US\$m
Lease commitments at 31 December 2019	10.6	10.6

Commitments relating to the Kraken and Catcher FPSO lease obligations which are operating rather than capital commitments are disclosed in note 3.3.

Nautical Petroleum Limited

Section 2 – Oil and Gas Assets and Operations

2.6 Impairment Testing Sensitivity Analysis

At 31 December 2019, impairment tests were conducted on the Company's development/producing assets.

The recoverable amount for all assets is based on fair value less costs of disposal estimated using discounted cash flow modelling. The key assumptions used in determining the fair value are often subjective, such as the future long-term oil price assumption and estimates of recoverable hydrocarbon reserves. In 2018, the Company downgraded Kraken reserves estimates on the back of disappointing performance of the asset and facilities reducing future production estimates, resulting in an impairment charge. 2019 has seen much improved performance on Kraken, which together with more regular well testing, has led to an upward revision of production profile estimates, indicating a possible reversal or decrease of impairment, and the subsequent impairment test results in the 2018 impairment being reversed in full in the 2019 profit for the year, even though the Company's long-term price assumption has reduced to US\$65/bbl.

Oil price assumption

The Company ran sensitivities on its long-term oil price assumption of US\$65/bbl, using alternate long-term price assumptions of US\$60/bbl, US\$55/bbl and US\$50/bbl. These were considered to be reasonably possible changes to oil price assumptions used in impairment tests for the purposes of sensitivity analysis at the balance sheet date. The impact on the carrying value of development/producing assets is shown below.

Reduction in long-term oil price assumption to:	US\$60 US\$m	US\$55 US\$m	US\$50 US\$m
Reduction in carrying value of development/producing assets	(38.5)	(97.6)	(216.1)

Post year end, the economic shutdown resulting from COVID-19 has had a significant impact on oil prices in the first four months of 2020. Though these circumstances could not have been forecast when running year-end impairment test sensitivities, the Company has run additional sensitivities on the short-term oil price assumption. The three presented below represent:

- Scenario 1 – Q1 2020 oil price forecast replaced with Q1 2020 actual;
- Scenario 2 – Assumes oil prices recovering within 12 months: Q1 2020 actual, Q2 2020 US\$30/bbl, Q3 2020 US\$35/bbl, Q4 2020 US\$40/bbl, Q1 2021 US\$51/bbl; US\$50/bbl escalated thereafter over remaining short-term period; and
- Scenario 3 – Assumes oil prices recovering over three years: Q1 2020 actual, Q2 2020 US\$26/bbl, Q3 2020 US\$28/bbl, Q4 2020 US\$30/bbl, H1 2021 US\$35/bbl, H2 2021 US\$40/bbl, FY 2022 US\$50

Scenarios 2 and 3 were presented to senior management in April 2020.

Reduction in short-term oil price assumption to:	Scenario 1 US\$m	Scenario 2 US\$m	Scenario 3 US\$m
Reduction in carrying value of development/producing assets	(55.3)	(106.0)	(171.6)

Reserve estimates

The Company's proved and probable and contingent reserve estimates are based on P50 probabilities. P10 and P90 estimates are also produced but would not provide a reasonable estimate to be used in calculating the fair value of the Company's assets. The reserve estimates are incorporated into production profiles which include assumptions on the performance of the asset. The Company's current assumptions imply a maximum uptime for producing assets of 85%-90%. Given the improvement and stability of the performance of the assets over 2019, the Company does not believe reducing this assumption would provide a reasonable estimate of fair value at the year end.

Nautical Petroleum Limited

Section 3 – Working Capital, Financial Instruments and Long-term Liabilities

Significant accounting judgements in this section:

Lease classification of Kraken and Catcher FPSO lease agreements

The new accounting standard, IFRS 16 'Leases', was effective for the Company's financial year beginning 1 January 2019 and resulted in the Catcher FPSO leased asset being recognised on the Balance Sheet as a right-of-use asset. Further details are provided in note 1.2.

Prior to IFRS 16 adoption, it was assessed whether leases for the Company's producing asset FPSOs should be classified as operating or finance leases. The Company concluded that the lease agreement for the Kraken FPSO, where it is considered reasonably certain that the FPSO will be purchased by the joint operation towards the end of the initial term, should be classified as a finance lease. By contrast, the Catcher FPSO, with a shorter initial lease term and with no current expectation that the joint operation shall purchase the FPSO at the end of that lease term, was determined to be an operating lease, with substantially all risks and rewards of ownership remaining with the lessor.

As a result of this judgement, the Catcher lease right-of-use asset and liability is measured at the date of adoption of IFRS 16 on 1 January 2019, using interest rates applicable at that date, rather than on commencement of the lease itself, in June 2017. There is no change to the measurement of the Kraken right-of-use lease asset and liability.

Key estimates and assumptions in this section:

Measurement of Catcher FPSO lease liability and right-of-use asset

The key assumptions used in the calculation of the Catcher FPSO lease asset and liability can be found in note 1.2.

3.1 Cash and Cash Equivalents

	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Cash and cash equivalents	120.4	161.5

3.2 Loans and Borrowings

The Company has a Reserve-Based Lending ('RBL') facility which was undrawn at 31 December 2019.

Reconciliation of opening and closing liability to cash flow movements:	Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
Opening liability	85.0	-
Loan advances disclosed in the Cash Flow Statement:		
Advances in the year	20.0	85.0
Loan repayments disclosed in the Cash Flow Statement:		
Repayments in the year	(105.0)	-
Other movements in the Cash Flow Statement:		
Debt arrangement fees paid	0.8	15.1
Non-cash movements		
Amortisation of debt arrangement fees	(0.8)	(15.1)
Closing liability	-	85.0
Amounts due greater than one year	-	85.0
	-	85.0

Debt arrangement fees paid in 2019 represent amounts paid by Capricorn Energy Limited, the Company's parent undertaking in 2018 for the extension of the RBL which were recharged to the Company as loan funding was drawn down during the year. Debt arrangement fees of US\$15.1m were recharged in 2018 relating to the RBL.

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Section 3 – Working Capital, Financial Instruments and Long-term Liabilities

3.2 Loans and Borrowings (continued)

The Company's RBL facility was undrawn at 31 December 2019 with the opening balance of cash drawings of US\$85.0m, advanced during 2018, fully repaid in the year.

The Company signed an extension to its existing RBL facility with a syndicate of international banks, effective on 20 December 2018. Interest on outstanding debt is charged at the appropriate LIBOR for the currency drawn plus an applicable margin. The facility remains subject to biannual redeterminations, has a market standard suite of covenants and is cross-guaranteed by all Group companies party to the facility. Debt is repayable in line with the amortisation of bank commitments over the period from 1 July 2022 to the extended final maturity date of 31 December 2025.

Under IFRS 9, the extension of the facility to December 2025 constituted substantially different terms from the original and as such the financial liability relating to the original facility was extinguished on the date of the extension and replaced with a new liability based on the revised terms. This resulted in the acceleration of the amortisation of borrowing costs relating to the previous facility, resulting in a charge of US\$15.1m to the Income Statement in 2018.

Total commitments remain unchanged at US\$575.0m under the revised facility, but an accordion feature permits additional future commitments of up to US\$425.0m. The maximum available drawdown at 31 December 2019 was US\$317.0m. The facility can also be used for general corporate purposes and may also be used to issue letters of credit and performance guarantees for the Group of up to US\$250.0m.

3.3 Lease Liabilities

Accounting policy

Lease liabilities are measured and recorded on commencement of the asset being brought in to use. Measurement is based on the lower of fair value of the asset or the net present value of fixed lease commitments under the contract. Lease payments made in excess of the fixed instalments are charged direct to the Income Statement as variable lease costs.

Lease payments are allocated between capital and interest based on the rate implicit in the lease agreement. Where this is not practical to determine, the Company's incremental borrowing rate is used.

Where there are changes subsequent to initial recognition, adjustments are made to both the lease liability and the capitalised asset. The interest rate used where the rate implicit in the lease is not determinable is updated at the date of the remeasurement.

No lease liability is recognised for leases where the period over which the right-of-use of an asset is obtained is forecast to be less than 12 months. Leases for low value items are not recorded as a liability but are charged as appropriate when the benefit is obtained.

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Section 3 – Working Capital, Financial Instruments and Long-term Liabilities

3.3 Lease Liabilities (continued)

Reconciliation of opening and closing liabilities to cash flow movements:	Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
Opening finance lease liability brought forward	165.4	169.7
IFRS 16 opening balance adjustment (note 1.2)	147.5	-
Revised opening lease liabilities	312.9	169.7
Leases commenced and revisions to leases in year:		
Revisions to lease liabilities	-	(11.5)
	-	(11.5)
Lease payments disclosed in the Cash Flow Statement as financing cash flows:		
Total lease payments	(78.0)	(30.1)
Variable lease payments (note 2.1)	21.2	22.7
	(56.8)	(7.4)
Other movements in the Cash Flow Statement:		
Reimbursements received from lessors	7.0	4.7
Non-cash movements		
Reimbursements due transferred (from)/to other receivables	(3.0)	2.1
Lease interest charges	14.9	7.8
	11.9	9.9
Closing liabilities	275.0	165.4
Amounts due less than one year:		
Tangible development/producing assets - right-of-use assets	41.0	18.5
Amounts due greater than one year:		
Tangible development/producing assets - right-of-use assets	234.0	146.9
Total lease liabilities	275.0	165.4

Comparative information has not been restated on adoption of IFRS 16.

Variable lease costs are disclosed in note 2.1. Amortisation charges on right-of-use assets relating to property, plant & equipment - development/producing assets are disclosed in note 2.3. Costs relating to short-term leases and leases of low value assets, relating to exploration and development activities are disclosed in notes 2.2 and 2.3 where material. There are no further material short-term leases or charges for leases of low-value assets. Maturity analysis for lease liability is disclosed in note 3.8. The carrying value of right-of-use development/producing assets at 31 December 2019 is US\$238.1m (see note 2.3).

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3.4 Trade and Other Receivables

Accounting Policy

Trade receivables represent amounts due from the sale of oil and gas from the Company's UK producing assets. Other receivables primarily represent recharges to joint operations. Joint operation receivables are receivables that relate to the Company's interest in its oil and gas joint arrangements, including the Company's participating interest share of the other receivables of the joint arrangements themselves.

Trade receivables, other receivables and joint operation receivables, which are financial assets, are measured initially at fair value and subsequently recorded at amortised cost.

A loss allowance is recognised, where material, for expected credit losses on all financial assets held at the balance sheet date. Expected credit losses are the difference between the contractual cash flows due to the Company, and the discounted actual cash flows that are expected to be received. Where there has been no significant increase in credit risk since initial recognition, the loss allowance is equal to 12-month expected credit losses. Where the increase in credit risk is considered significant, lifetime credit losses are provided. For trade receivables a lifetime credit loss is recognised on initial recognition where material.

	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Trade receivables	22.2	42.6
Amounts receivable from group companies	10.2	0.5
Other receivables	5.7	1.9
Accrued income – underlift (see note 2.1)	15.1	0.1
Joint operation receivables	23.5	17.2
	76.7	62.3

Trade receivables are measured at amortised cost. Revenue is recognised at the point in time where title passes to the customer and payment becomes unconditional.

Where material the Company has assessed the recoverability of trade and other receivables and no further loss allowance is recognised for expected credit losses on all financial assets held at the balance sheet date.

Reconciliation of opening and closing receivables to operating cash flow movements:	Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
Opening trade and other receivables	62.3	22.3
Closing trade and other receivables	(76.7)	(62.3)
(Increase)/Decrease in trade and other receivables	(14.4)	(40.0)
Movements in joint operation receivables relating to investing activities	0.3	5.1
Movements in prepayments and other receivables relating to other non-operating activities	(1.1)	-
Movements in amounts receivable from group companies	(9.4)	-
Foreign exchange	18.4	-
Trade and other receivables movement recorded in operating cash flows	(6.2)	(34.9)

The movements in joint operation receivables relating to investing activities, relate to the Company's share of the receivables of joint operations in respect of exploration, appraisal and development activities. Movements relating to production activities are included in amounts through operating cash flows. Foreign exchange of US\$18.4m arose principally on an amount payable by the Company's parent company.

The increase in trade and other receivables movements through operating cash flows of US\$34.9m in 2018 primarily reflected the increase in trade receivables held as at 31 December 2018.

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Section 3 – Working Capital, Financial Instruments and Long-term Liabilities

3.5 Derivative Financial Instruments

	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Non-current assets		
Financial assets – hedge options maturing after one year	-	7.7
Current assets		
Financial assets – hedge options maturing within one year	4.1	36.7
Current liabilities		
Financial liabilities – hedge options maturing within one year	(1.6)	-
	2.5	44.4

The Company currently has an active commodity price hedging programme in place to protect debt capacity and support committed capital programmes of the wider Cairn Energy PLC Group. Mark-to-market gains and losses on oil price hedge options are recorded as financial assets and financial liabilities as appropriate at 31 December 2019.

At 31 December 2019 the Company had hedged ~2.8m barrels of 2020 forecast Kraken and Catcher oil production, using collar and swap structures. ~1.9m barrels of production have been hedged through collars, with a weighted average floor and ceiling price of US\$62.09/bbl and US\$74.89/bbl respectively (all prices quoted relate to dated Brent). ~0.9m barrels of production have been hedged through swap options with a weighted average strike price of US\$61.85/bbl. At 31 December 2019, no production forecast beyond 31 December 2020 had been hedged.

The collars and swaps have been designated as hedges for hedge accounting. Hedge effectiveness is assessed at commencement of the option and prospectively thereafter. At the year end, the closing Brent oil price was US\$66.00/bbl (2018: US\$50.70/bbl). Fair value movements on the cost of the option are recorded in the Statement of Comprehensive Income in the year, with fair value losses of US\$40.6m being offset by fair value gains on options that matured in the year of US\$10.9m. The gain on matured options has been recycled to the Income Statement. In 2018 fair value gains of US\$43.9m were offset by a loss of US\$7.8m on options that matured in the year. The loss on matured options was recycled to the Income Statement.

	At 31 December 2019	At 31 December 2018
Hedge options outstanding at the year end		
Volume of oil production hedged	2.8mmbbls	3.2mmbbls
Weighted average floor price of options	US\$62.09	US\$67.14
Weighted average ceiling price of options	US\$74.89	US\$83.81
Weighted average strike price of swaps	US\$61.85	-
Maturity dates	January 2020 – December 2020	January 2019 – March 2020
Effects of hedge accounting on financial position and profit/(loss) for the year	US\$m	US\$m
Financial assets	4.1	44.4
Financial liabilities	(1.6)	-
Accruals and other payables – accrued option costs	(2.1)	(3.4)
Hedging (loss)/gain recorded in Other Comprehensive Income	(29.7)	36.1
Hedging (gain)/loss recycled to Income Statement	(10.9)	7.8
Hedging gain/(loss) recorded in Income Statement against revenue (note 2.1)	10.9	(7.8)

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Section 3 – Working Capital, Financial Instruments and Long-term Liabilities

3.5 Derivative Financial Instruments (continued)

Sensitivity analysis

Sensitivity analysis has been performed on equity movements that would arise from changes in the oil price from the year end forward curve to average prices from US\$20 to US\$60 across 2020 and the resulting impact on the fair value of open hedge options at the year end. The sensitivity analysis considers only the impact on line items directly relating to hedge accounting (being financial assets and liabilities and fair value gains through Other Comprehensive Income) and not the impact of the change of other balance sheet items where valuation is based on the year end oil price, such as inventory.

	At 31 December 2019 US\$m
Increase/(decrease) in equity	
Change in 2020 forecast oil price per bbl to:	
US\$20	114.1
US\$31.8 (forward curve at end of Q1 2020)	81.3
US\$40	58.7
US\$60	8.1

3.6 Trade and Other Payables

Accounting policy

Trade and other payables are non-interest bearing and are measured at fair value initially then amortised cost subsequently.

Joint operation payables are payables that relate to the Company's interest in its oil and gas joint arrangements, including the Company's participating interest share of the trade and other payables of the joint arrangements themselves. Where the Company is operator of the joint operation, joint operation payables also include amounts that the Company will settle to third parties on behalf of joint operation partners. The amount to be recovered from partners for their share of such liabilities are included within joint operation receivables.

	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Trade payables	-	8.4
Other taxation and social security	0.1	-
Amounts payable to group companies	7.2	326.0
Accruals and other payables	10.5	9.2
Joint operation payables	40.2	42.4
	58.0	386.0

Joint operation payables include US\$4.2m (2018: US\$7.6m), US\$5.5m (2018: US\$14.4m) and US\$30.5m (2018: US\$20.4m) relating to exploration/appraisal assets, development/producing assets and production costs respectively. Joint operation payables on development/producing assets at 31 December 2019 continue to reduce for Kraken and Catcher. Production costs have increased as oil production has improved during 2019.

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Section 3 – Working Capital, Financial Instruments and Long-term Liabilities

3.6 Trade and Other Payables (continued)

Reconciliation of opening and closing payables to operating cash flow movements:	Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
Opening trade and other payables	(386.0)	(852.1)
Closing trade and other payables	58.0	386.0
Decrease in trade and other payables	(328.0)	(466.1)
Movement in joint operation payables relating to investing activities	12.9	25.6
Movement in trade payables relating to investing activities	1.1	-
Movements in accruals and other payables relating to non-operating activities	1.1	-
Movements in amounts payable to group companies	319.7	443.4
Foreign exchange	(2.2)	0.1
Trade and other payables movement recorded in operating cash flows	4.6	3.0

Movements above for investing activities relate to exploration, appraisal and development activities through the Company's joint operations. Movements relating to production activities are included in amounts through operating cash flows. The movement in trade and other payables recorded in the Cash Flow Statement through operating cash flows primarily arise on production activities in the UK North Sea. The reduction in amounts payable to group companies in 2019 of US\$319.7m represents US\$279.9m of dividends from subsidiaries which were settled by offset against existing balances due, cash settlements on intercompany balances of US\$45.9m, and an offsetting amount of intercompany interest payable of US\$6.1m. The 2018 reduction of US\$443.4m principally related to intercompany loans waived by the Company's parent of US\$420.5m.

3.7 Deferred Revenue

Accounting policy

Deferred revenue, arising from a streaming agreement, is treated as cash received in advance of future oil sales. Revenue is recorded at the fair value of the consideration received and is amortised to the Income Statement on a unit-of-production basis, based on expected future volumes to which the stream provider is entitled.

FlowStream deferred revenue	Note	2019 US\$m	2018 US\$m
At 1 January		52.8	74.0
Released during the year	2.1	(17.2)	(21.2)
At 31 December		35.6	52.8
Amounts expected to be released within one year		16.9	22.0
Amounts expected to be released after one year		18.7	30.8
		35.6	52.8

Deferred revenue relates to the stream agreement with FlowStream entered into in 2017.

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3.8 Financial Instruments

Set out below is the comparison by category of carrying amounts and fair values of all the Company's financial instruments that are carried in the Financial Statements.

Financial assets	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Carrying amount and fair value		
<i>Financial assets at amortised cost</i>		
Cash and cash equivalents	120.4	161.5
Trade receivables	22.2	42.6
Amounts receivable from group companies	10.2	0.5
Other receivables	5.7	1.9
Joint operation receivables	23.5	17.2
Accrued underlift	15.1	0.1
<i>Derivative financial instruments</i>		
Financial assets – hedge options	4.1	44.4
	201.2	268.2

Due to the short-term nature of financial assets held at amortised cost, their carrying amount is considered to be the same as the fair value. There are no material impairments of financial assets held on the balance sheet at either 31 December 2018 or 2019.

All the Company's financial assets are expected to mature within one year. (2018: all less than one year, other than hedge options which extended into 2020).

Financial liabilities	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Carrying amount and fair value		
<i>Financial liabilities at amortised cost</i>		
Trade payables	-	8.4
Joint operation payables	40.2	42.4
Amounts payable to group companies	7.2	326.0
Accruals and other payables	10.5	9.2
Loans and borrowings	-	85.0
Lease liabilities/Finance lease liability	275.0	165.4
<i>Derivative financial instruments</i>		
Financial liabilities – hedge options	1.6	-
	334.5	636.4

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Section 3 – Working Capital, Financial Instruments and Long-term Liabilities

3.8 Financial Instruments (continued)

The fair value of financial assets and liabilities, other than the hedge options, has been calculated by discounting the expected future cash flows at prevailing interest rates.

Comparative information has not been restated on adoption of IFRS 16.

Maturity analysis

The expected financial maturity of the Company's financial liabilities at 31 December 2019 is as follows:

	< 1 year US\$m	1-2 years US\$m	2-5 years US\$m	>5 years US\$m
<i>Financial liabilities at amortised cost</i>				
Joint operation payables	40.2	-	-	-
Amounts payable to group companies	7.2	-	-	-
Accruals and other payables	10.5	-	-	-
Lease liabilities	41.0	40.9	123.0	70.1
Financial liabilities – hedge options	1.6	-	-	-
	100.5	40.9	123.0	70.1

The expected financial maturity of the Company's financial liabilities at 31 December 2018 is as follows:

	< 1 year US\$m	1-2 years US\$m	2-5 years US\$m	>5 years US\$m
<i>Financial liabilities at amortised cost</i>				
Trade payables	8.4	-	-	-
Amounts payable to group companies	326.0	-	-	-
Joint operation payables	42.4	-	-	-
Accruals and other payables	9.2	-	-	-
Finance lease liability	18.5	18.6	58.3	70.0
Loans and borrowings	-	-	-	85.0
	404.5	18.6	58.3	155.0

Fair value

The Company holds hedge options which are held at fair value determined by models which have observable inputs.

The Company held the following financial instruments measured at fair value:

	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Assets measured at fair value – Level 2		
<i>Derivative financial instruments</i>		
Financial assets – hedge options	4.1	44.4
Liabilities measured at fair value – Level 2		
<i>Derivative financial instruments</i>		
Financial liabilities – hedge options	(1.6)	-
	2.5	44.4

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Section 3 – Working Capital, Financial Instruments and Long-term Liabilities

3.9 Financial Risk Management: Objectives and Policies

The main risks arising from the Company's financial instruments are commodity price risk, liquidity risk, credit risk and foreign currency risk. The Board of Cairn Energy PLC, through the Treasury Sub-Committee, reviews and agrees policies for managing each of these risks and these are summarised below.

Cairn Energy PLC's Treasury function and Executive Team as appropriate are responsible for managing these risks, in accordance with the policies set by the Board. Management of these risks is carried out by monitoring of cash flows, investment and funding requirements using a variety of techniques. These potential exposures are managed while ensuring that the Company has adequate liquidity at all times in order to meet its immediate cash requirements. There are no significant concentrations of risks unless otherwise stated. The Company does not enter into or trade financial instruments, including derivatives, for speculative purposes.

The primary financial assets and liabilities comprise cash, short and medium-term deposits, money market liquidity funds, intra-group loans and other receivables and financial liabilities held at amortised cost. The strategy has been to finance operations through a mixture of retained profits, bank borrowings and other production related streaming agreements. Other alternatives such as equity issues and other forms of non-investment-grade debt finance are reviewed by the Board, when appropriate.

Commodity price risk

Commodity price risk arises principally from the Company's North Sea production, which could adversely affect revenue and debt availability due to changes in commodity prices.

The Company measures commodity price risk through an analysis of the potential impact of changing commodity prices. Based on this analysis and considering materiality and the potential business impact, the Company may choose to hedge.

Linked to production in the UK North Sea, the Company continued to hedge during 2019 in order to protect debt capacity and support committed capital programmes. Details of current hedging arrangements, together with oil price sensitivity analysis, can be found in note 3.5.

Transacted derivatives are designated, where possible, in cash flow hedge relationships to minimise accounting income statement volatility. The Company is required to assess the likely effectiveness of any proposed cash flow hedging relationship and demonstrate that the hedging relationship is expected to be highly effective prior to entering into a hedging instrument and at subsequent reporting dates.

Liquidity risk

The Company closely monitors and manages its liquidity risk using both short and long-term cash flow projections, supplemented by debt and equity financing plans and active portfolio management. Cash forecasts are regularly produced and sensitivities run for different scenarios including, but not limited to, changes in asset production profiles and cost schedules.

Details of the Company's debt facilities can be found in note 3.2. The Company as part of the Cairn Energy PLC Group is subject to quarterly forecast liquidity tests as part of the RBL facility agreement. The Company has complied with the liquidity requirements of this test at all times during the year. The Company also runs various sensitivities on its liquidity position on a quarterly basis throughout the year.

The Company currently has surplus cash that is invested in a combination of money market liquidity funds and term deposits with a number of international and UK financial institutions, ensuring sufficient liquidity to enable the Company to meet its short and medium-term expenditure requirements.

Credit risk

Credit risk arises from cash and cash equivalents, investments with banks and financial institutions, trade receivables and joint operation receivables.

Customers and joint operation partners are subject to a risk assessment using publicly available information and credit reference agencies, with follow-up due diligence and monitoring if required.

Investment credit risk for investments with banks and other financial institutions is managed by the Group Treasury function in accordance with the Board-approved policies of Cairn Energy PLC. These policies limit counterparty exposure, maturity, collateral and take account of published ratings, market measures and other market information. The limits are set to minimise the concentration of risks and therefore mitigate the risk of financial loss through counterparty failure.

It is the Company's policy to invest with banks or other financial institutions that firstly offer the greatest degree of security and, secondly the most competitive interest rates. Repayment of principal is the overriding priority and this is achieved by diversification and shorter maturities to provide flexibility. The Board continually re-assesses the Company's policy and updates as required.

At the year end the Company does not have any significant concentrations of bad debt risk. The maximum credit risk exposure relating to financial assets is represented by the carrying value as at the balance sheet date.

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Section 3 – Working Capital, Financial Instruments and Long-term Liabilities

3.9 Financial Risk Management: Objectives and Policies (continued)

Foreign currency risk

The Company manages exposures that arise from non-functional currency receipts and payments by matching receipts and payments in the same currency and actively managing the residual net position.

Where residual net exposures do exist and they are considered significant, the Company may from time to time opt to use derivative financial instruments to minimise exposure to fluctuations in foreign exchange and interest rates.

The following table demonstrates the sensitivity to movements in the US\$:GBP exchange rates, with all other variables held constant, on the Company's monetary assets and liabilities. These are considered to be reasonably possible changes for the purposes of sensitivity analysis. The Company's exposure to foreign currency changes for all other currencies is not material.

	At 31 December 2019		At 31 December 2018	
	Effect on loss before tax US\$m	Effect on equity US\$m	Effect on loss before tax US\$m	Effect on equity US\$m
10% increase in GBP to US\$	(16.3)	(16.3)	(46.7)	(46.7)
10% decrease in GBP to US\$	16.3	16.3	46.7	46.7

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Section 4 – Income Statement Analysis

4.1 Operating Result

The Company's auditors' remuneration for 2019 was US\$37,035 (2018: US\$25,519). The Company had additional timewriting audit services provided by the auditors of US\$83,840 (2018: US\$17,966). Auditors' remuneration for other services for the Cairn Energy PLC Group is disclosed in the financial statements of the ultimate parent undertaking.

The Company has a policy in place for the award of non-audit work to the auditors which requires Audit Committee approval. No such costs were incurred by the Company during the year (2018: US\$nil).

Remuneration of key management personnel

The directors of the Company are also directors of other companies in the Cairn Energy PLC Group. The directors received remuneration for the year as shown in note 6.5 which was paid by other companies in the Group. The directors do not believe that it is practicable to apportion this amount between their services as directors of the Company and their services as directors of Cairn Energy PLC and fellow subsidiary companies. There are no agreements between the Company and the Board of Directors.

Employees

The Company has no employees (2018: none).

4.2 Finance Income

	Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
Bank and other interest receivable	0.5	-
Interest receivable from group companies	4.7	-
Exchange gain	10.3	16.3
	15.5	16.3

4.3 Finance Costs

	Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
Loan interest and facility fee amortisation	3.5	18.6
Interest payable to group companies	6.1	32.5
Other finance charges	3.3	2.3
Unwinding of discount - provisions	2.6	2.3
Lease interest	14.9	7.8
Exchange loss	-	5.9
	30.4	69.4

Loan interest and facility fee amortisation includes US\$0.8m (2018: US\$15.1m) of fees relating to the RBL facilities, which are recharged by Cairn Energy PLC over the expected useful life of the facility. Following the extension to the facility in 2018, accounted for as a replacement of the original facility under IFRS 9, all costs of the initial facility (US\$15.1m) were recharged from Cairn Energy PLC in the preceding year.

The increase in lease interest charges results from the adoption of IFRS 16. See note 3.3.

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Section 5 – Taxation

Significant accounting judgements in this section:

Deferred taxation

At each reporting date, the Company reviews unused tax losses and allowances to assess whether it is probable that taxable profits will be available against which the Group can utilise these losses and allowances and whether or not a deferred tax asset should be recognised.

At 31 December 2018 and 2019, the Company concluded that no deferred tax asset should be recognised.

Key estimates and assumptions in this section:

Future taxable profits used in determining whether it is appropriate to recognise a deferred tax asset are based on the key assumptions used in impairment testing, detailed in section 2.

Accounting policy

The total tax charge or credit represents the sum of current tax and deferred tax.

The current tax credit is based on the taxable loss for the year. Taxable profit or loss differs from net profit or loss as reported in the Income Statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. Where there are uncertain tax positions, the Company assesses whether it is probable that the position adopted in tax filings will be accepted by the relevant tax authority, with the results of this assessment determining the accounting that follows.

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the Financial Statements and the corresponding tax bases used in the computation of taxable profit or loss.

Deferred tax assets are recognised for deductible temporary differences that exist only where it is probable that taxable profits will be generated against which the carrying value of the deferred tax asset can be recovered.

Deferred tax liabilities are recognised for all taxable temporary differences except in respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint operations where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

A deferred tax asset or liability is not recognised if a temporary difference arises on initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss. However, where the recognition of an asset is associated with an interest in a joint operation, which applies to all the Company's intangible exploration/appraisal asset and property, plant & equipment – development/producing asset additions, and the Company is not able to control the timing of the reversal of the temporary difference or the temporary difference is expected to reverse in the foreseeable future, a deferred tax asset or liability shall be recognised.

Current and deferred tax is calculated using tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Nautical Petroleum Limited

Section 5 – Taxation

5.1 Tax Charge/(Credit) on Profit/(Loss) for the Year

Factors affecting tax charge/(credit) for the year

A reconciliation of the income tax charge/(credit) applicable to the profit/(loss) before income tax to the UK statutory rate of income tax is as follows:

	Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
Profit/(Loss) before taxation from continuing operations	618.7	(111.0)
Profit/(Loss) before tax multiplied by the UK statutory rate of corporation tax of 19% (2018: 19%)	117.6	(21.1)
Effect of:		
Special tax rates and reliefs applying to oil and gas activities	61.9	(33.7)
Impact on deferred tax of adjustments in respect of prior years	(3.3)	-
Temporary differences not recognised	(121.1)	53.9
Permanent items (non-taxable)/non-deductible	(51.9)	(0.6)
Tax losses (claimed from)/surrendered to other group companies	(3.2)	1.5
Total tax charge/(credit) on profit/(loss) from continuing operations	-	-

The reconciliation shown above has been based on the average UK statutory rate of corporation tax for 2019 of 19% (2018: 19%).

The UK main rate of corporation tax is currently 19% (2018: 19%). The applicable UK statutory tax rate applying to North Sea oil and gas activities is 40% (2018: 40%).

The effect of special tax rates and reliefs applying to oil and gas activities of US\$61.9m (2018: US\$(33.7)m) comprises US\$65.7m (2018: US\$(24.2)m) in respect of differences between the average UK statutory rate and the special rates applying to oil and gas activities in the UK and US\$(3.8)m (2018: US\$(9.5)m) in respect of the UK ring fence expenditure supplement ("RFES") claimed in the year.

The effect of temporary differences not recognised of US\$(121.1)m (2018: US\$53.9m) relates to the movement on the unrecognised deferred tax asset primarily comprised of UK ring fence and supplementary charge tax losses and the deferred tax liability on UK ring fence temporary differences in respect of non-current assets.

5.2 Deferred Tax Assets and Liabilities

Reconciliation of movement in deferred tax (assets)/liabilities:

	Temporary difference in respect of non-current assets US\$m	Losses US\$m
Deferred tax (assets)/liabilities		
At 1 January 2018	(338.3)	338.3
Deferred tax credit/(charge) through the Income Statement	94.7	(94.7)
At 31 December 2018	(243.6)	243.6
Deferred tax (charge) /credit through the Income Statement	(53.8)	53.8
At 31 December 2019	(297.4)	297.4

Recognised deferred tax assets

No deferred tax asset has been recognised at the Balance Sheet date on Ring Fence trading losses in excess of the temporary differences arising in respect of non-current assets of US\$nil (2018: US\$116.4m); UK supplementary charge tax losses of US\$nil (2018: US\$855.9m); non-Ring Fence trading losses of US\$3.7m (2018: US\$3.7m); management expenses of US\$nil (2018: US\$0.6m); non trade loan relationship deficits of US\$0.9m (2018: US\$nil); or on other ring fence temporary differences of US\$116.0m (2018: US\$117.8m) relating to decommissioning liabilities, as it is not deemed probable that future profits will be available to recover the value of the asset given the detrimental change in market conditions continuing to impact the oil and gas industry.

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Section 6 – Capital Structure and Other Disclosures

6.1 Issued Capital and Reserves

Called-up share capital

Allotted, issued and fully paid ordinary shares	Number 20p ordinary '000	20p ordinary US\$m
At 1 January 2018, 31 December 2018 and 31 December 2019	92,023	24.9

Share premium

	2019 US\$m	2018 US\$m
At 1 January 2018, 31 December 2018 and 31 December 2019	93.0	93.0

Hedge reserve

The hedge reserve at 31 December 2019 of US\$0.4m (2018 US\$41.0m) has arisen on commodity price hedging, see note 3.5 for full details. The hedge reserve is used to recognise the effective portion of gains or losses on the derivatives that are designated for, and qualify as, cash flow hedges.

6.2 Capital Management

The objective of the Company's capital management structure is to ensure that there remains sufficient liquidity within the Company to carry out committed work programme requirements. The Company monitors the long-term cash flow requirements of the business in order to assess the requirement for changes to the capital structure to meet that objective and to maintain flexibility. The Company, as part of the Cairn Energy PLC Group, is subject to quarterly forecast liquidity tests as part of the RBL facility. The Company has complied with the capital requirements of this test at all times during the year.

The Company manages the capital structure and makes adjustments to it in light of changes to economic conditions. No significant changes were made in the objectives, policies or processes during the year ended 31 December 2019.

Capital and net debt, including lease liabilities, was as follows:

	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Continuing operations		
Loans and borrowings	-	85.0
Amounts payable to group companies	7.2	326.0
Lease liabilities/Finance lease liability	275.0	165.4
Less cash and cash equivalents	(120.4)	(161.5)
Net debt	161.8	414.9
Equity	737.0	428.1
Capital and net funds less payables	898.8	843.0
Gearing ratio	18.0%	49.2%

Nautical Petroleum Limited

Section 6 – Capital Structure and Other Disclosures

6.3 Guarantees

Details of the Company's RBL facility can be found in note 3.2. On entering into the facility the Company granted cross-guarantees to each of the lenders.

6.4 Investments in Subsidiaries

Accounting policy

The Company's investments in subsidiaries are carried at cost less provisions resulting from impairment. In testing for impairment the carrying value of the investment is compared to its recoverable amount, being its fair value less costs of disposal. The fair value includes the discounted future net cash flows of oil and gas assets held by the subsidiary, using estimated cash flow projections over the licence period. For exploration assets, estimated discounted cash flows are risk-weighted for future exploration success.

Discounted future net cash flows are calculated using an estimated short-term oil price based on the forward curve and long-term oil price of US\$65 per bbl (2018: long-term oil price of US\$70 per bbl), escalation for prices and costs of 2.0% (2018: 2.0%) and a discount rate of 10% (2018: 10%). Full details on the assumptions used for valuing oil and gas assets can be found in section 2.

	Subsidiary undertakings US\$m	Total US\$m
Cost		
At 1 January 2018, 31 December 2018 and 31 December 2019	21.7	21.7
Impairment		
At 1 January 2018	6.0	6.0
Impairment charge	0.1	0.1
At 31 December 2018	6.1	6.1
Impairment charge	15.5	15.5
At 31 December 2019	21.6	21.6
Net book value		
At 31 December 2017	15.7	15.7
At 31 December 2018	15.6	15.6
At 31 December 2019	0.1	0.1

At the year end, investments in subsidiaries were reviewed for indicators of impairment and impairment tests conducted where indicators were identified. Following this review, the Company's investments in Alba Resources Limited and Nautical Holdings Limited were impaired to reflect the fair value of their underlying assets. Charges of US\$5.8m and US\$9.7m relating to these respective companies were made to the Income Statement in 2019 (2018: US\$0.1m in respect of Transunion Italia SRL).

Nautical Petroleum Limited

Section 6 – Capital Structure and Other Disclosures

6.4 Investments in Subsidiaries (continued)

The Company's subsidiaries as at the balance sheet date are set out below. The Company holds 100% of the voting rights and beneficial interests in the ordinary shares of the following companies:

Direct holdings	Business	Country of incorporation	Country of operation	Registered office address
Agora Oil and Gas (UK) Limited	Exploration	Scotland	UK	50 Lothian Road, Edinburgh, EH3 9BY
Alba Resources Limited [^]	Exploration	Scotland	UK	50 Lothian Road, Edinburgh, EH3 9BY
Nautical Holdings Limited	Holding company	England	UK	Wellington House 4th Floor, 125 The Strand, London, WC2R 0AP
Indirect holdings	Business	Country of incorporation	Country of operation	Registered office address
Nautical Italia SRL [^]	Non-trading	Italy	Italy	Piazza Pietro Merolli n. 2, 00151 Roma, Italy
Nautical Petroleum AG [^]	Production	Switzerland	UK	Baarerstrasse 8, 6300 Zug, Switzerland
Transunion Petroleum Italia SRL [^]	Non-trading	Italy	Italy	Piazza Pietro Merolli n. 2, 00151 Roma, Italy
UAH Limited	Holding company	England	UK	Wellington House 4th Floor, 125 The Strand, London, WC2R 0AP

[^] Company is in the process of liquidation

6.5 Related Party Transactions

The Company's subsidiaries are listed in note 6.4. The following table provides the Company's balances which are outstanding with subsidiary companies at the balance sheet date:

	At 31 December 2019 US\$m	At 31 December 2018 US\$m
Amounts payable to subsidiary undertakings	(7.2)	(326.0)
Amounts receivable from group companies	10.2	0.5
	3.0	(325.5)

The amounts outstanding are unsecured and repayable on demand and will be settled in cash.

The following table provides the Company's transactions with subsidiary companies recorded in the profit for the year:

	Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
Amounts invoiced by group companies	6.6	16.6
Amounts invoiced to group companies	5.3	-

Directors' remuneration

The remuneration of the Directors of the Company is set out below.

	Year ended 31 December 2019 US\$m	Year ended 31 December 2018 US\$m
Emoluments	3.5	3.4
Share-based payments	-	3.5
	3.5	6.9

Nautical Petroleum Limited

Section 6 – Capital Structure and Other Disclosures

6.5 Related Party Transactions (continued)

Pension contributions were made on behalf of Directors in 2019 of US\$0.2m (2018: US\$0.3m).

No LTIP share awards to Directors vested during 2019 (2018: 1,206,200). Share-based payments shown above represent the market value at the vesting date of these awards.

Other transactions

During the year the Company did not make any purchases in the ordinary course of business from an entity under common control (2018: US\$nil).

Dividends

During 2019 the Company received dividends of US\$279.9m from various subsidiaries as follows: Nautical Holdings Limited US\$125.2m, UAH Limited US\$41.6m and Alba Resources Limited US\$6.2m, all of which were settled by assignation of inter-company receivables. An additional distribution is recorded in the Income Statement of US\$106.9m from Agora Oil and Gas (UK) Limited which was settled by forgiving a debt to that company by the Company.

A dividend of US\$269.2m was declared and distributed by the Company in respect of the year ended 31 December 2019 by offset against loans due by the Company's parent company, Capricorn Energy Limited (2018: US\$nil).

6.6 Ultimate Parent Company

The Company is a wholly-owned subsidiary of Capricorn Energy Limited and of its ultimate parent, Cairn Energy PLC. The results of the Company are consolidated into Cairn Energy PLC, registered in Scotland, whose principal place of business is at 50 Lothian Road, Edinburgh, EH3 9BY.

Copies of Cairn Energy PLC's financial statements are available to the public and may be obtained from the above mentioned address.