

Hydrocarbon Dynamics Limited   
(ABN 75 117 387 354)

**ANNUAL REPORT  
FOR THE YEAR  
ENDED 31 DECEMBER 2019**

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**HYDROCARBON DYNAMICS LIMITED**  
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**CORPORATE GOVERNANCE STATEMENT**

The Board of Directors of Hydrocarbon Dynamics Limited ('HCD' or 'the Group') believes there is a strong link between high standards of corporate governance and equity performance. We are committed to operating in accordance with HCD's corporate governance policies in all aspects of our business.

The Board believes that good corporate governance is about conducting business in a transparent and ethical way that enhances value for all of our stakeholders. The Board expects all HCD personnel to demonstrate high ethical standards and respect for others. The Board operates in an open, honest and collaborative fashion with all stakeholders and our corporate integrity is of the greatest importance.

The Board is responsible for the corporate governance of the Group. The Board's guiding principle is that it acts honestly, conscientiously and fairly, in accordance with the law and in the interests of HCD's shareholders, personnel and other stakeholders.

HCD ensures, wherever possible, that its practices are consistent with the Third Edition of the Australian Securities Exchange (ASX) *Corporate Governance Council's Principles and Recommendations* (ASX Principles). In certain circumstances, due to the size and stage of development of HCD, it may not be practicable or necessary to implement the ASX Principles in their entirety. HCD's statement of conformity to the ASX Principles is set out below, areas of divergence are noted.

**PRINCIPLE 1: LAY SOLID FOUNDATIONS FOR MANAGEMENT AND OVERSIGHT**

The Board's key responsibility is the creation, enhancement and protection of long-term shareholder value within an appropriate risk framework. HCD's commitment to governance and the Board's role, responsibilities and conduct are contained in the Board Charter which has been approved by the Board and is published on the HCD website, [www.hydrocarbondynamics.com](http://www.hydrocarbondynamics.com), under the Corporate Governance tab. The Board Charter is reviewed and amended from time to time as appropriate.

The Board establishes the strategic direction and policy framework within which the day-to-day business of the Group is managed. During the year, management's role was to manage HCD in accordance with the direction and delegations of the Board and the Board is responsible for overseeing the activities of management in carrying out these delegated duties.

Board members are committed to spending sufficient time to enable them to carry out their duties as Directors of HCD. Candidates for Directorship must confirm that they have the necessary time to devote to their Board position prior to appointment. Non-executive Directors receive formal letters of appointment setting out the key terms, conditions and expectations of their appointment.

Executives are provided with a formal job description and an employment or consulting contract describing their term of appointment, duties, rights, responsibilities and rights on termination. Executives are subject to a formal performance review process on an annual basis in December. No formal review was conducted during the year.

In relation to the appointment of future directors, at the commencement of the Non-executive Director selection process, the Group will undertake appropriate checks on potential candidates to consider their suitability to fill a casual vacancy on the Board or for election as a Non-executive Director.

Prior to their appointment, directors are expected to provide the Chairman with details of other commitments and an indication of time involved, and to acknowledge that they will have adequate time to fulfil their responsibilities as a Non-executive Director of the Group.

Directors available for re-election at a general meeting will be reviewed by the Remuneration & Nomination Committee and recommended to the Board. Directors are re-elected in accordance with the Group's Constitution and the ASX Listing Rules. Shareholders will be provided with all material information for a Director's election in the Notice of Meeting that would be relevant for shareholders to make a decision on whether or not to elect or re-elect a Director.

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Executives also undergo an induction program to gain an understanding of HCD's financial position, its strategies, operations and risk management framework and the respective roles of the Board and management.

In addition to its executive management team, HCD engages experienced consultants with valuable knowledge and experience in petroleum engineering, oil and gas leasing, land management, geology and marketing.

Each Director has access to the Company Secretary who is responsible to the Board through the Chairman on all matters relating to governance and the conduct and functions of the Board and Committees.

Given the size and scale of operations of the Group, the Board has decided not to adopt a Diversity Policy at this stage. Accordingly, the Board has not yet set any measurable objectives for achieving gender diversity.

The percentage of women employed or contracted in the whole organisation, senior management and the Board are as follows:

Whole organisation: 9%

Senior Management: 14%

HCD Board: Nil

The Board typically carries out a Board performance assessment on an annual basis where the performance of the Chairman is reviewed and assessed by the other Directors, and the Chairman reviews and assesses the performance of the other Directors.

During the year under review, the Board conducted an informal review of its performance.

The Board conducts formal strategy sessions as appropriate to provide the opportunity for Directors and management to review operations and consider proposed future activities. It is proposed to conduct a formal strategy session in 2019. Given the size of the Board and management team there are also frequent opportunities for less formal strategy discussions.

**PRINCIPLE TWO: STRUCTURE THE BOARD TO ADD VALUE**

The Remuneration & Nomination Committee is primarily responsible for determining remuneration, establishment of recruitment policies and procedures, reviewing the performance of Directors and senior executives and reviewing the composition and competencies of the Board. The Committee Charter sets out the responsibilities and functions of the Committee in detail.

During the reporting period, HCD complied with ASX Principles 2.1 and 8.1 which recommend that the Committee comprise of at least three members with majority of them being independent.

Details of the Committee members' attendance at Committee meetings are set out in the 2019 Directors' Report.

The Board's current skills matrix includes expertise and experience in: senior level energy company management and financial management (Chair, CEO, CFO), chemical engineering, corporate finance and development, investment banking, corporate affairs and community relations.

HCD has five directors at the date of this Annual Report. Mr Stephen Mitchell is the Executive Chairman, Mr Nicholas Castellano is an executive director, and Mr Ray Shorrocks, Mr Allan Ritchie and Mr Andrew Seaton are independent Non-executive Directors.

During the prior reporting period, HCD did not comply with ASX Principle 2.4 which requires that a majority of the Board should be Independent. The Board believed that, given the size of the Group, the nature of its operations and the ability of all incumbent directors to bring an independent judgement to bear in Board deliberations.

The following table outlines the Directors of the Group during the reporting period, including their period of office, non-executive and independence status.

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The board as at the date of this report is comprised of:

Name	Appointment date	Retirement date	Non-executive status	Independence status
Stephen Mitchell	12 January 2016	-	x	x
Ray Shorrocks	12 January 2016	-	✓	✓
Allan Ritchie	6 April 2017	-	✓	✓
Nicholas Castellano	6 April 2017	-	x	x
Andrew Seaton	16 August 2019	-	✓	✓

Mr Mitchell is a non-independent director, holding the office of Chairman and Executive Director, as a result there is not a clear division of responsibility between these functions and therefore, the Group does not follow Recommendation 2.5. However, having regard to the size of the Group and the nature of its activities, the appointment of more directors is not warranted and the Board considers that Mr Mitchell best serves the office of Chairman due to his extensive experience in the industry.

The Board believes that the chair is able to formulate proper and independent judgement on all relevant issues falling within the scope of the role of a chair.

It is intended that the composition of the Board be balanced, with Directors possessing an appropriate mix of skills, experience, expertise, qualifications and contacts relevant to HCD's business. The qualifications, experience and tenure of the Directors are set out in the 2019 Directors' Report. The Board Charter and the Remuneration & Nomination Committee Charter outline in more detail the procedure for the selection and appointment of new directors.

The Board considers that independent decision-making is critical to effective governance. Independent directors are those who have the ability to exercise their duties unfettered by any business or other relationships and are willing to express an objective opinion. The independence of Non-executive Directors is assessed annually by the Board against the definition outlined in the Board Charter. It is the approach and attitude of each Non-Executive Director which is critical to determining independence and this must be considered in relation to each Director while taking into account all relevant factors, which may include whether the Non-executive Director:

- (a) holds more than five percent of the voting shares of HCD (in conjunction with their associates) and is not an officer, or otherwise associated directly with a holder of more than five percent of the voting shares of HCD;
- (b) has within the last three years been employed in an executive capacity by HCD or another Group member, or has been a Director after ceasing to hold any such employment;
- (c) has within the last three years been a principal of a material professional adviser or a material consultant to HCD or another Group member, or an employee materially associated with the service provided. In this context, the relationship with the professional adviser or consultant shall be deemed to be material if payments from HCD exceed 10% of HCD's annual expenditure to all professionals and consultants or exceed 10% of the recipient's annual revenue for advisory or consultancy services;
- (d) is a material supplier or customer of HCD or another Group member, or an officer of or otherwise associated directly or indirectly with a material supplier or customer. In this context, the relationship with the supplier or customer shall be deemed to be material if annual payments to or from that supplier or customer exceed 10% of the annual consolidated gross revenue of either HCD or that supplier or customer; and
- (e) has a material contractual relationship with HCD or other Group member other than as a Director of HCD.

The HCD Constitution states that at each Annual General Meeting (AGM) one-third of the Directors (excluding the Managing Director) and any Director who has held office for three or more years since their last election are required to retire from office. Any Director appointed by the Board since the previous AGM must stand for election at the next AGM. Retiring Directors are eligible for re-election.

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New Directors undertook an induction process which included a full briefing on HCD meetings with key executives and receipt of an induction package containing key corporate information and presentations.

In order to achieve continuing improvement in Board performance, all Directors are encouraged to undergo continual professional development. This includes education concerning key developments in the Group and in the industry and environment in which the Group operates.

Each Director has the right of access to all HCD information and to HCD's executives. Further, the Board collectively and each Director individually, subject to informing the Chairman, has the right to seek independent professional advice from a suitably qualified advisor, at HCD's expense, up to specified limits, to assist them to carry out their responsibilities. Where appropriate, a copy of this advice is to be made available to all other members of the Board.

**PRINCIPLE THREE: ACT ETHICALLY AND RESPONSIBLY**

The Board has adopted a Code of Conduct and Ethics which is published on the Group's website. The Board, senior executives and all employees are committed to implementing and complying with the Code. The Code requires that the Group and its employees, consultants, contractors, advisors and all other people when they represent HCD operate to the highest standards of ethical behaviour, honesty and fairness in relationships with stakeholders. Stakeholders include employees, contractors, clients, customers, suppliers, joint venture partners, shareholders, government authorities, regulators, creditors and the community as whole.

It is in the best interests of HCD for all personnel to immediately report any observance of a breach of the Code. All personnel are requested to report immediately any circumstances which may involve a breach of this Code to the Company Secretary, the Managing Director or the Chairman.

Any breach of applicable laws, accepted ethical commercial practices or other aspects of the Code of Conduct and Ethics will result in disciplinary action.

The Group has adopted a Securities Trading Policy in line with the ASX Listing Rules and Guidance Note to regulate dealings by the Group's directors, employees and all other people when they represent HCD.

Consistent with the legal prohibitions on insider trading contained in the *Corporations Act 2001*, all HCD personnel are prohibited from trading in HCD's securities while in possession of material non-public information. Material non-public information is information, which a reasonable person would expect to have a material effect on the price or value of HCD's securities. The policy allows HCD personnel, and their related parties, to buy or sell shares only during board sanctioned windows which include the six weeks period commencing the first trading day after the announcement of the Appendix 5B, the full year results, the half year results; the date of the AGM and such other dates as the Board determines. Trading outside the permitted windows is allowed only in exceptional circumstances with the prior written approval of the Board at least two business days prior to any proposed trade.

Any transaction with HCD shares conducted by Directors is notified to the ASX. Each Director has entered into an agreement with the Group to provide information to enable HCD to notify the ASX of any share transactions within five business days.

A copy of the Securities Trading Policy is available on the Corporate Governance section of the Group's website and has also been lodged with the ASX.

**PRINCIPLE FOUR: SAFEGUARD INTEGRITY IN CORPORATE REPORTING**

The Financial Controller oversees the Group's financial resources, records and reporting.

The Board requires the persons performing the roles of CEO/Managing Director (or in the absence of a CEO, the Chair of the Audit Committee) and Financial Controller to declare in writing to the Board at the time of approving and signing the annual and half-yearly accounts that, in their opinion, the Group's financial reports present a true and fair view, in all material respects, of the Group's financial condition and operational results and are in accordance with relevant accounting standards, as required by Section 295A of the *Corporations Act 2001*. Both these officers also report to the Board at its regular meetings.

*(ASX Recommendation 4.2)*

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Additionally, an Audit Committee has been established that works in conjunction with the Group's external auditors to ensure the presented accounts are in accordance with accounting principles. In terms of the ASX Guidelines the Committee's Chair is a Non-executive Director (not being Chair of the Board) who has a strong commercial finance and accounting background making him an appropriate person for this role. The Committee has three members all of whom are independent.

The Audit Committee keeps minutes of its meetings and includes them for review at the following Board Meeting. The Audit Committee members' attendance at meetings as compared to total meetings held is set out in the Directors' Report contained in the Annual Report.

*(ASX Recommendation 4.1)*

The external auditors attend the committee meetings at least twice a year and on other occasions where circumstances warrant, as well as being available at the Group's AGM to answer shareholders questions about the conduct of the audit and the preparation and content of the audit report.

*(ASX Recommendation 4.3)*

**PRINCIPLE FIVE: MAKE TIMELY AND BALANCED DISCLOSURE**

HCD fully supports the continuous disclosure regime and its current practice is consistent with the Principles. HCD has in place mechanisms to ensure that:

- (a) all investors have equal and timely access to material information concerning HCD; and
- (b) all announcements released by HCD are factual, presented in a clear and balanced way, do not omit any material information and are expressed in a clear and objective manner that allows investors to assess the impact of the information when making investment decisions.

The Board has designated HCD's Chairman and Executive Director, with the assistance of the Company Secretary, as the person responsible for overseeing and coordinating disclosure of information to the ASX as well as communicating with the ASX.

In accordance with the ASX Listing Rules, HCD immediately notifies the ASX of information:

- (a) concerning HCD that a reasonable person would expect to have a material effect on the price or value of HCD's shares; and
- (b) that would, or would be likely to, influence persons who commonly invest in securities in deciding whether to acquire or dispose of HCD's shares.

Upon confirmation of receipt from the ASX, HCD posts all information disclosed in accordance with this policy on its website in an area accessible by the public.

A copy of the Continuous Disclosure Policy is available on the HCD website.

To enhance clarity and balance in reporting, and to enable investors to make an informed assessment of HCD's performance, financial results are accompanied by a commentary.

**PRINCIPLE SIX: RESPECT THE RIGHTS OF SHAREHOLDERS**

The Board is committed to communicating with shareholders regularly and clearly.

HCD is committed to:

- communicating effectively with shareholders through releases to the market via ASX, HCD's website, information mailed to shareholders and general meetings of shareholders;
- giving shareholders ready access to balanced and understandable information about HCD and corporate proposals; and
- making it easy for shareholders to participate in general meetings of HCD.

The Annual Report, half-year report, Annual General Meeting and specific investor briefings are all important communication forums. The Group encourages shareholders to attend and participate at general meetings to ensure accountability. HCD welcomes questions from shareholders at any time and these will be answered within the confines of information that is already in the public domain and is not market sensitive.

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Shareholder communication and investor relations are conducted in accordance with the HCD Continuous Disclosure Policy and Shareholder Communication Policy, both of which are published on the HCD website.

HCD also makes available various communication avenues (including electronic form) for shareholders to make enquiries of HCD and to receive updates on important developments (including email alerts).

The following documents that address corporate governance are available within the Corporate Governance section of HCD's website:

- Corporate Governance Statement;
- Board Charter;
- Audit Committee Charter;
- Remuneration and Nomination Committee Charter;
- Code of Conduct and Ethics;
- Risk Management Policy;
- Shareholder Communications Policy;
- Securities Trading Policy;
- Environmental Management, Health and Safety Policy; and
- Whistleblower Policy

Where possible, HCD will arrange for advance notification to shareholders of significant Group briefings. Presentations to be made at such briefings, which contain information not previously released to shareholders, will be released via the ASX and published on the Group's website. The Group will also keep a summary record (for internal use) of the issues discussed at briefings with investors and analysts.

**PRINCIPLE SEVEN: RECOGNISE AND MANAGE RISK**

The Audit Committee is responsible for financial risk management and has not separately established a risk committee. The Board as a whole is responsible for risk oversight and risk management.

The Board is responsible for establishing and reviewing policies on risk management and internal control and acknowledges the importance of effective risk management to the long-term success of HCD. HCD has a Board approved Risk Management Policy, published on the website, that assists the Group in identifying and managing risk in accordance with best practice.

The Board has implemented the following control framework:

- **Financial reporting:** a comprehensive budget is approved by the Board. Monthly results are reported against budget and revised forecasts are prepared regularly;
- **Special functional reporting:** the Board has identified a number of key areas which are subject to regular reporting to the Board such as safety, environmental, insurance and operational matters; and
- **Investment appraisal:** the Board has set clearly defined guidelines for capital expenditure. These include annual budgets, detailed appraisal and review procedures, and levels of authority and due diligence requirements. Capital expenditure and revenue commitments that exceed a delegated authority will require prior Board approval. Procedures have been established to ensure business transactions are properly authorised and executed. Compliance with these procedures may be scrutinised by the external auditor.

Due to the size and scale of operations of HCD, there is no separate internal audit function. The Executive Director and principal accountant monitor and give an appraisal of the adequacy and effectiveness of HCD's risk management and internal control system. This is independent of the external auditor. In addition, the Board reviews and discusses current and emerging material risks at each Board Meeting. The Board did not conduct a review of the risk management and internal control system during the year, as the Board considered operational risk at each meeting and it was not considered necessary to conduct a formal review.

Management is responsible for designing and implementing the risk management framework. Management identifies and reviews the major risks impacting each area of the business and develops strategies to effectively mitigate risks.

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As recommended by the ASX Principles, Management will report to the Board on the effectiveness of HCD's management of its material business risks with respect to future reporting periods. The Board considers it is subject to the following material exposures to risks:

- **Economic:** the demand for, and price of, oil and natural gas is highly dependent on a variety of factors, including international supply and demand, the level of consumer product demand, weather conditions, the price and availability of alternative fuels, actions taken by governments and international cartels, and global economic and political developments. International oil and gas prices have fluctuated widely in recent years and may continue to fluctuate significantly in the future. Fluctuations in oil and gas prices and, in particular, a material decline in the price of oil or gas may have a material adverse effect on the Group's business, financial condition and results of operations.
- **Environmental:** the Group's activities are subject to the environmental risks inherent in the oil and gas industry. The Group is subject to environmental laws and regulations in connection with operations it may pursue in the oil and gas industry; such operations are currently in Kentucky. The Group intends to conduct its activities in an environmentally responsible manner and in accordance with all applicable laws. However, the Group may be the subject of accidents or unforeseen circumstances that could subject the Group to extensive liability. Further, the Group may require approval from the relevant authorities before it can undertake activities that are likely to impact the environment. Failure to obtain such approvals will prevent the Group from undertaking its desired activities. The Group is unable to predict the effect of additional environmental laws and regulations that may be adopted in the future, including whether any such laws or regulations would materially increase the Group's cost of doing business or affect its operations in any area. The Board mitigates the economic and environmental risks by discussing the economic conditions and environmental risks at every board meeting and where necessary it will engage experts to assist with the management of these risks.
- **Intellectual Property:** The Group's activities are focussed on the use of its key products, significantly HCD Multi-Flow®. The Group constantly monitors the products of competitors in the industry to ensure its technology has not been replicated or superseded. If this occurred, it would have a material adverse effect on the Group's business, financial condition and results of operations.
- **Social sustainability:** The Group does not consider it is subject to material social sustainability risks.

**PRINCIPLE EIGHT: REMUNERATE FAIRLY AND RESPONSIBLY**

As described previously, the Remuneration & Nomination Committee has been established to review all remuneration and performance related matters of HCD and to operate in accordance with its Charter, as outlined on HCD's website.

The Committee will assist the Board in fulfilling its responsibilities with respect to establishing appropriate remuneration levels and incentive policies for employees.

All directors are invited to attend Committee meetings; however, "interested directors" do not vote on related matters. Senior executives are not directly involved in determining their remuneration.

In relation to remuneration issues, the Board has established a policy to ensure that it remunerates fairly and responsibly. The remuneration policy of the Board is designed to ensure that the level and composition of remuneration is competitive, reasonable and appropriate for the results delivered and to attract and maintain talented and motivated directors and employees. The structure of executive remuneration is distinctly different to that of Non-executive Directors which is detailed in the Remuneration Report. The policy is designed for:

- (a) decisions in relation to the constituents of executive and Non-executive remuneration policy;
- (b) decisions in relation to executive remuneration packages;
- (c) decisions in relation to merit recognition arrangements and termination arrangements; and
- (d) ensuring that any equity-based executive remuneration is made in accordance with the thresholds set in plans approved by shareholders.

The HCD Personnel Securities Trading Policy states that executives are not permitted to enter into transactions in financial products, securities or derivatives which limit the economic risk of participating in unvested entitlements under equity-based remuneration schemes.

The Remuneration Report for the 2019 year and further details about the Remuneration Policy of HCD are set out in the 2019 Directors' Report.

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**DIRECTORS' REPORT**

In accordance with a resolution of directors, the directors present their report together with the Annual Report of HCD Energy Limited (HCD) and its wholly owned subsidiaries (together referred to as the 'Group') for the financial year ended 31 December 2019 and the Independent Audit Report thereon. In order to comply with the provisions of the *Corporations Act 2001*, the directors report as follows:

**1. INFORMATION ON DIRECTORS**

The directors of HCD at any time during or since the end of the financial year were:

**(a) STEPHEN MITCHELL**

Director (appointed 12 January 2016)

**Special responsibilities:**

Executive Chairman (non-executive from 1 April 2020)

**Experience:**

Mr Mitchell has a Masters Degree in International Economics and Foreign Policy from John Hopkins University in Washington DC. following which he spent 10 years as a natural resources specialist at investment banks and advisory firms in the US and Australia. From 1999-2011 Stephen was the Managing Director of Molopo Energy Ltd, an ASX-listed oil and gas Company that held assets in Australia, Canada, USA, China, India and South Africa. Under his stewardship, Molopo generated a 10 fold increase in shareholder value and expanded its market capitalisation from less than \$1 million into an ASX 200 company.

**Directorships held in other listed entities in the last three years:**

None

Stephen is also a partner of Mitchell Peterson Capital Partners, a Melbourne based corporate advisory firm. He is also a director of several private companies, including Lowell Resources Funds Management Pty Ltd, Lowell Accounting Services and Afton Energy Pty Ltd.

**(b) NICK CASTELLANO**

Executive Director (appointed 6 April 2017)

**Special responsibilities:**

Member of the Remuneration and Nomination Committee  
Chairman of the Technical Advisory Board

**Experience:**

Nick is a Hydrocarbon Dynamics founder and is the inventor of the HCD Multi-Flow<sup>®</sup> technology. Nick spent a decade in the nuclear power program of the United States Navy, ultimately becoming the leading chief of the reactor laboratory division of the nuclear powered aircraft carrier the Dwight D. Eisenhower, where he assumed responsibilities for chemistries in the reactor plants. After leaving, Nick developed cutting edge chemistry and patented processes in the industrial water and oil industries. In the industrial water industry Nick founded an industrial water treatment company with clients such as Pepsi Cola, Coca Cola and United Dairymen. In the oil industry Nick focused on oil well chemistry, developing and founding the technology of HCD.

He completed his MA PHD at Canterbury University. Nick is passionate and committed to providing ongoing input into expanding the application of HCD's technology.

**Directorships held in other listed entities in the last three years:**

None.

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**(c) RAY SHORROCKS**

Non-Executive Director (appointed 12 January 2016)

**Special responsibilities:**

Chairman of the Remuneration and Nomination Committee  
Chairman of the Audit Committee (resigned 11 September 2019)  
Member of the Audit Committee (appointed 12 September 2019)

**Experience:**

Mr Shorrocks has more than 22 years' experience in corporate finance and has advised a diverse range of mining and resource companies during his career at Patersons Securities Limited, one of Australia's largest full-service stockbroking and financial services firms. He has been instrumental in managing and structuring equity capital raisings as well as having advised extensively in the area of mergers and acquisitions.

**Directorships held in other listed entities in the last three years:**

He also holds, or has held, directorships in the following ASX listed companies in the last three years:

- Auteco Minerals (appointed 28 January 2020)
- Galilee Energy Limited (appointed 2 December 2013).
- Bellevue Gold Limited (resigned 9 September 2019); and
- Estrella Resources Limited (resigned 1 February 2019).

**(d) ALLAN RITCHIE**

Non-Executive Director (appointed 6 April 2017)

**Special responsibilities:**

Member of the Audit Committee

**Experience:**

Allan has served as a director of several private and public listed companies and is a principal of his own firm where he focuses on asset acquisitions and off-take arrangements in the energy, resources and infrastructure space. Allan is an investment banking professional with a career spanning 30 years of origination and structuring. He held senior positions at Westpac, ANZ Bank, HSBC and BNP Paribas in London, New York and Asia Pacific. He engages with the chief executives of major corporations and state-owned enterprises spanning the global resources, energy and infrastructure sectors. He was previously voted number one in the BRW Magazine poll of Financial Markets, bankers in Australia.

Allan graduated from the University of Technology Sydney with a Bachelor of Business and has a post graduate Diploma in Applied Finance from FINSIA.

**Directorships held in other listed entities in the last three years:**

He also holds, or has held, directorships in the following ASX listed companies in the last three years:

- Adavale Resources Limited (resigned 10 December 2019).

**(e) ANDREW SEATON**

Non-Executive Director (appointed 16 August 2019)

**Special Responsibilities:**

Chairman of Audit Committee (appointed 12 September 2019)  
Member of Audit Committee (from 16 August 2019 to 11 September 2019)  
Member of the Remuneration and Nomination Committee (appointed 16 August 2019)

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**Experience:**

Andrew is an experienced energy executive with a background in finance, project management and investment banking. Andrew was a senior executive with Santos Limited for twelve years, the last six of which he served as Chief Financial Officer. Prior to joining Santos, Andrew worked in investment banking with Merrill Lynch in Melbourne and New York. His early career included 10 years as a process engineer and project manager across a range of upstream oil and gas projects and operating plants. Andrew has an Honours Degree in Chemical Engineering and a Graduate Diploma in Business Administration.

**Directorships held in other listed entities in the last three years:**

He also holds, or has held, directorships in the following ASX listed companies in the last three years:

- Strike Energy Limited (appointed 18 August 2017).

**2. COMPANY SECRETARY**

Ms Julie Edwards was appointed Company Secretary on 1 July 2016 and continues in office at the date of this report.

Ms Julie Edwards holds a Bachelor of Commerce degree, is a member of CPA Australia and holds a Public Practice Certificate. Ms Edwards is a director and manager of Lowell Accounting Services and also provides company secretarial services for a number of other ASX listed companies and unlisted companies.

**3. DIRECTORS' MEETINGS:**

The number of meetings of the Board and of each Board Committee held during the year (while each Director was a Director or committee member) and the number of meetings attended by each director are set out below:

	Board Of Directors		Audit Committee		Remuneration & Nomination Committee	
	Held	Attended	Held	Attended	Held	Attended
Stephen Mitchell	12	12	-	-	-	-
Nicholas Castellano	12	10	-	-	1	1
Ray Shorrocks	12	12	3	3	1	1
Allan Ritchie	12	10	3	3	-	-
Andrew Seaton	5	5	1	1	1	1

This disclosure is made in accordance with s.300(10)(c) of the *Corporations Act 2001*.

**4. REMUNERATION REPORT - AUDITED**

The directors of the Group present the Remuneration Report, prepared in accordance with section 300A of the *Corporations Act 2001*, AASB124 *Related Party Disclosures* and Principle 8 of the ASX Corporate Governance Principles and Recommendations. This report outlines the remuneration arrangements in place for the Non-executive Directors, Executive Directors and other Key Management Personnel of the Group.

This report has been audited, as required by section 308(3C) of the *Corporations Act 2001*.

**Remuneration Committee**

The Board has established a Remuneration Committee which provides advice and specific recommendations on the remuneration packages and other terms of employment for Executive Directors, other senior executives; and Non-executive Directors including:

- the level of Non-executive Director fees;
- the amount and nature of remuneration arrangements for Executive Directors and other executives; and
- the type and nature of incentive arrangements including key performance targets effecting the remuneration of the executive team.

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The objective of the Remuneration Committee is to ensure that the remuneration policies and arrangements are designed to ensure that the level and composition of remuneration is competitive, reasonable and appropriate for the results delivered and to attract and maintain talented and motivated directors and employees.

The level of remuneration and other terms and conditions of employment for Executive Directors and Company executives are reviewed annually having regard to performance and relevant comparative information, and are approved by the Board after the Remuneration Committee has sought independent professional advice, as required. In this respect, consideration is given to normal commercial rates of remuneration for similar levels of responsibility.

The Corporate Governance Statement provides further information on the role of this Committee.

**Key Management Personnel**

Key Management Personnel includes:

Stephen Mitchell	Executive Chairman
Nicholas Castellano	Executive Director
Ray Shorrocks	Non-executive Director
Allan Ritchie	Non-executive Director
Andrew Seaton	Non-executive Director
Bill Tarantino	CEO – Chemical Division (appointed 2 January 2020)
Douglas Hamilton	Business Development Manager (ceased 31 July 2019)
Julie Edwards <sup>1</sup>	Company Secretary and Financial Controller

1. Julie Edwards is remunerated via an external accounting firm, Lowell Accounting Services Pty Ltd

**Non-executive Director Remuneration**

The Board's policy is to remunerate Non-executive Directors at market rates for time, commitment and responsibilities. The Remuneration Committee determines payments to the Non-executive Directors and reviews their remuneration annually, based on market practice, duties and accountability. Independent external advice is sought when required. No advice was sought during the 2019 financial year.

The maximum aggregate amount of fees that can be paid to Non-executive Directors is subject to approval by shareholders at the Annual General Meeting. The latest determination was in the ASX announcement on 4 February 2016 when the Directors approved an aggregate pool limit of \$300,000.

Fees for Non-executive Directors include a base director fee, performance rights for service tenure, and performance rights based on the performance of the Group. Further, to align the Directors' interests with shareholder interests, the Directors are encouraged to hold shares in the Group. There is no minimum holding prescribed in the Constitution.

Non-executive Directors' fees (inclusive of superannuation) have generally been paid on the following basis:

<b>Director fees</b>	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
Base fees	<b>30,000</b>	30,000
Chair of the Board	<b>72,000</b>	72,000
Chair of a committee	<b>12,000</b>	12,000
Member of a committee	<b>6,000</b>	6,000

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**Executive Remuneration Policy**

The objective of the executive remuneration policy is to ensure that the Group's remuneration arrangements are competitive and reasonable, enabling it to attract and retain the right calibre of staff and to align the remuneration of Executive Directors and other executives with shareholder and business objectives. Executive remuneration arrangements comprise a fixed remuneration component and may also include specific long-term incentives based on key performance areas affecting the Group's financial and/or operational results as follows:

- (a) a base salary (which is based on factors such as length of service, qualifications and experience), superannuation, fringe benefits and performance incentives;
- (b) short-term performance incentives in the form of cash or equity bonuses which are paid only when predetermined key performance indicators have been met. These reflect the achievement of a number of short term goals established on an annual basis;
- (c) executives engaged through professional service entities are paid fees based on an agreed market based hourly rate for the services provided and may also be entitled to short term performance based incentives; and
- (d) long-term performance-based incentives comprising performance rights which are designed to align the remuneration of executives with the business objectives of the Group and its shareholders. LTIs may be delivered in an equity award(s), which is granted upon the satisfaction of performance conditions/key performance indicators.

The Remuneration Committee reviews executive remuneration arrangements annually by reference to the Group's performance, executive performance and comparable information from industry sectors. Such a review may include, but not limited to, changing the total proportion of executive remuneration which is 'at-risk', the payment of short term/long term incentives and the proportion of the risk remuneration between short term/long term incentives.

Executive and Non-executive Directors and other employed executives receive the superannuation guarantee contribution required by the Commonwealth Government. For the year ended 31 December 2019 the rate was 9.5% up to a maximum contribution of \$21,003. Executive and Non-executive Directors and other employed executives do not receive any other retirement benefits, however, some individuals may choose to sacrifice part of their salary to increase payments towards superannuation.

All remuneration paid is valued at either cost or the fair value to the Group and expensed.

**Summary of Executive Remuneration**

Name / position	Contract	Terms per annum	Total remuneration per annum
Stephen Mitchell Executive Chairman	Yes	Executive Director \$200,000 plus super. Agreed reduction from \$365,284 per annum to \$200,000 per annum from 1 May 2019.  Short-term incentive terms: Where the VWAP exceeds the VWAP in June of the preceding year by between 40% and 100%, the bonus increases between 25% and 100% of the yearly salary, depending on the VWAP percentage increase achieved.  The Company has the right to terminate the employee's employment at any time during the term provided a severance payment equal to six months remuneration plus accrued STI bonuses and other leave entitlements is paid to the employee.	\$200,000
Nicholas Castellano Executive Director	Yes	Executive Director US\$180,000 (contract expires 6 April 2020).  No termination notice or benefit terms.	US\$180,000

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William Tarantino CEO Chemical Division	Yes	CEO – Chemical Division US\$230,000 Employment may be terminated at any time by the Company without Cause or by voluntary resignation by the employee, provided that 90 days' notice is given. Employee is entitled to 3 months of base salary plus unreimbursed expenses, accrued leave or other entitlements.	US\$230,000
Douglas Hamilton Business Development Manager	Yes	Business Development Manager \$300,000.	\$300,000

**Total Reward Mix**

The amount of remuneration 'at-risk' is generally expressed as a proportion of fixed remuneration and is related to the agreement on remuneration between the Group and the executive, the Group's expectations of executive performance, and the executive's position in the Group. The proportion of fixed remuneration will generally not change on a year to year basis, but may be reviewed and modified by the Board.

Fixed remuneration (including the superannuation levy payable as employer contribution) is set with reference to market data, reflecting the scope of the role and the performance of the person in the role.

The mix of short term and long term incentives offered to executives will depend on their position in the Group. Generally, long term incentives are only offered to members of the senior executive team and short term incentives are only offered to other employees. Short and long term incentives are classified as 'at-risk' remuneration.

The Board believes that remuneration arrangements for executives should typically incorporate an at-risk component which is performance related and rewards employees for the achievement of goals which contribute to shareholder wealth. The Board believes that such arrangements should both incentivise and reward performance of executives that adds value to the Group for all shareholders.

**Share Trading Policy**

Shares issued under any of the Group's employee equity plans are subject to, and conditional upon, compliance with the Group's Securities Trading Policy. Executives are prohibited from limiting risk attached to those instruments by use of derivatives or other means. The Group's equity plan participants are required to confirm that they have not entered into any such prohibited transactions.

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**Details of Remuneration**

Details of remuneration of each of the Key Management Personnel of the Group during the financial year are set out in the following table:

	YEAR	SHORT TERM BENEFITS			LONG TERM BENEFITS	POST EMPLOYMENT	EQUITY BASED PAYMENTS <sup>2</sup>	TOTAL	PERFORMANCE RELATED <sup>3</sup>
		CASH, SALARY & FEES	RELATED PARTY FEES <sup>1</sup>	BONUS		SUPER-ANNUATION	OPTIONS		
		\$	\$	\$		\$	\$		\$
<b>NON-EXECUTIVE DIRECTORS</b>									
Donald Beard <sup>4</sup>	2019	-	-	-	-	-	-	-	-
	2018	14,612	24,000	-	-	1,388	-	40,000	-
Ray Shorrocks	2019	-	50,518	-	-	-	3,054	53,572	6%
	2018	-	73,000	-	-	-	-	73,000	-
Allan Ritchie	2019	-	62,000	-	-	-	2,290	64,290	4%
	2018	-	90,000	-	-	-	-	90,000	-
Andrew Seaton	2019	19,800	-	-	-	-	3,054	22,854	13%
	2018	-	-	-	-	-	-	-	-
<b>EXECUTIVES</b>									
Stephen Mitchell	2019	247,005	-	-	1,655	16,973	5,345	270,978	2%
	2018	341,285	-	-	764	20,257	-	362,305	-
Nicholas Castellano	2019	-	259,518	-	-	-	2,290	261,808	1%
	2018	-	242,210	-	-	-	-	242,210	-
<b>OTHER KEY MANAGEMENT</b>									
Douglas Hamilton <sup>3</sup>	2019	-	160,000	-	-	-	-	160,000	-
	2018	-	300,000	-	-	-	8,167	308,167	-
<b>TOTAL</b>	<b>2019</b>	<b>266,805</b>	<b>532,036</b>	<b>-</b>	<b>1,655</b>	<b>16,973</b>	<b>16,033</b>	<b>833,502</b>	<b>-</b>
<b>TOTAL</b>	<b>2018</b>	<b>355,897</b>	<b>729,210</b>	<b>-</b>	<b>764</b>	<b>21,645</b>	<b>8,167</b>	<b>1,115,683</b>	<b>-</b>

1. Remuneration paid via Director related entities.

2. All performance-related incentives are long term.

3. Douglas Hamilton resigned on 31 July 2019.

4. Donald Beard resigned on 30 April 2018.

**Comparison of Key Management Personnel Remuneration to Group Performance**

The table below shows the total remuneration cost of the Key Management Personnel, earnings per ordinary share (EPS), dividends paid or declared, and the closing price of ordinary shares on ASX at year end for the current year and previous four years.

Relation to performance	2019	2018	2017	2016	2015
Total remuneration (\$)	832,502	1,115,683	1,273,905	493,128	1,598,996
EPS (loss) cents	(1.26)	(2.09)	(2.50)	(1.26)	(2.97)
Dividends paid	-	-	-	-	-
Share price at year end (cents)	0.09	0.04	0.14	0.08	0.08

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**Director Interests**

The relevant interest of each director in the shares, debentures, interests in registered schemes and rights or options over such instruments issued by the companies within the Group, as notified by the directors to the Australian Securities Exchange in accordance with *S205G(1) of the Corporations Act 2001 and Reg. 2M.3.03(1) of the Corporations Regulations 2001*, at balance date and the date of this report is as follows:

Director	Ordinary shares	Performance rights (expiring 1-Sept-21)
Stephen Mitchell	18,500,002	3,500,000
Nicholas Castellano	5,668,140	1,500,000
Ray Shorrocks	3,035,500	2,000,000
Allan Ritchie	2,756,753	1,500,000
Andrew Seaton	2,225,350	2,000,000

There are no contracts to which a director is a party or under which a director is entitled to a benefit that confer a right for the director to call for shares in HCD.

*Options*

The terms and conditions of each grant of options during the year affecting remuneration in the current or a future period with respect to Key Management Personnel are shown in the table below.

KMP	Grant date	# of options	Expiry date	Vesting date	Exercise price	Fair value (cents)	Performance condition	Vested %
Stephen Mitchell	18-May-16	2,000,000	1-Apr-19	18-May-17	\$0.10	\$0.04	12 months service to 18 May 2017.	100%
Donald Beard	18-May-16	1,500,000	1-Apr-19	18-May-17	\$0.10	\$0.04	12 months service to 18 May 2017.	100%
Ray Shorrocks	18-May-16	1,500,000	1-Apr-19	18-May-17	\$0.10	\$0.04	12 months service to 18 May 2017.	100%
Douglas Hamilton	1-Mar-17	1,750,000	1-Mar-20	1-Mar-18	\$0.14	\$0.03	12 months service to 1 March 2018.	100%
Allan Ritchie	6-Apr-17	1,342,628	6-Apr-19	N/A	\$0.25	\$0.01	Nil.	0%
Nicholas Castellano	6-Apr-17	3,853,527	6-Apr-19	N/A	\$0.25	\$0.01	Nil.	0%

The movements in the current year of the number of options granted to Key Management Personnel are as follows:

KMP	Grant date	Vesting date	Number at beginning of year	Granted during the year	Number of options exercised	Number of options expired	Other <sup>1</sup>	Number at end of year
Stephen Mitchell	18-May-16	18-May-17	2,000,000	-	-	(2,000,000)	-	-
Donald Beard	18-May-16	18-May-17	1,500,000	-	-	(1,500,000)	-	-
Ray Shorrocks	18-May-16	18-May-17	1,500,000	-	-	(1,500,000)	-	-
Douglas Hamilton	1-Mar-17	1-Mar-18	1,750,000	-	-	-	(1,750,000)	-
Allan Ritchie	6-Apr-17	6-Apr-19	1,342,628	-	-	(1,342,628)	-	-
Nicholas Castellano	6-Apr-17	6-Apr-19	3,853,527	-	-	(3,853,527)	-	-

1. Douglas Hamilton left the Company during the year and is no longer classified as a KMP.

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*Performance Rights*

The terms and conditions of each grant of performance rights outstanding during the year affecting remuneration in the current or a future period with respect to Key Management Personnel are shown in the table below.

KMP	Grant date	# of PRs	Expiry date	Vesting date	Exercise price	Fair value	Performance condition	Vested %
Allan Ritchie	6-Apr-17	3,119,062	31-Mar-19	31-Mar-19	\$nil	\$nil	HCD EBITDA of US\$8,000,000 at 31 March 2019, vesting 10 shares for every US\$1 above US\$3,000,000.	0%
Nicholas Castellano	6-Apr-17	8,952,135	31-Mar-19	31-Mar-19	\$nil	\$nil	HCD EBITDA of US\$8,000,000 at 31 March 2019, vesting 10 shares for every US\$1 above US\$3,000,000.	0%
Stephen Mitchell	11-Dec-19	1,750,000	1-Sep-21	1-Sep-21	\$nil	\$0.02	Share price exceeding 15 cents for any consecutive 3 month prior to 1 Sept 2021.	0%
Stephen Mitchell	11-Dec-19	1,750,000	1-Sep-21	1-Sep-21	\$nil	\$0.08	Sales revenue from the sale of Multi-Flow® exceeding US\$900,000 over any 3 consecutive months prior to 1 Sept 2021.	0%
Nicholas Castellano	11-Dec-19	750,000	1-Sep-21	1-Sep-21	\$nil	\$0.02	Share price exceeding 15 cents for any consecutive 3 month prior to 1 Sept 2021.	0%
Nicholas Castellano	11-Dec-19	750,000	1-Sep-21	1-Sep-21	\$nil	\$0.08	Sales revenue from the sale of Multi-Flow® exceeding US\$900,000 over any 3 consecutive months prior to 1 Sept 2021.	0%
Ray Shorrocks	11-Dec-19	1,000,000	1-Sep-21	1-Sep-21	\$nil	\$0.02	Share price exceeding 15 cents for any consecutive 3 month prior to 1 Sept 2021.	0%
Ray Shorrocks	11-Dec-19	1,000,000	1-Sep-21	1-Sep-21	\$nil	\$0.08	Sales revenue from the sale of Multi-Flow® exceeding US\$900,000 over any 3 consecutive months prior to 1 Sept 2021.	0%
Allan Ritchie	11-Dec-19	750,000	1-Sep-21	1-Sep-21	\$nil	\$0.02	Share price exceeding 15 cents for any consecutive 3 month prior to 1 Sept 2021.	0%
Allan Ritchie	11-Dec-19	750,000	1-Sep-21	1-Sep-21	\$nil	\$0.08	Sales revenue from the sale of Multi-Flow® exceeding US\$900,000 over any 3 consecutive months prior to 1 Sept 2021.	0%
Andrew Seaton	11-Dec-19	1,000,000	1-Sep-21	1-Sep-21	\$nil	\$0.02	Share price exceeding 15 cents for any consecutive 3 month prior to 1 Sept 2021.	0%
Andrew Seaton	11-Dec-19	1,000,000	1-Sep-21	1-Sep-21	\$nil	\$0.08	Sales revenue from the sale of Multi-Flow® exceeding US\$900,000 over any 3 consecutive months prior to 1 Sept 2021.	0%

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The movements in the current year of the number of performance rights granted to Key Management Personnel are as follows:

KMP	Grant date	Vesting date	Number at beginning of year	Granted during the year	Number of rights vested	Number of rights lapsed	Number at end of year
Stephen Mitchell	11-Dec-19	1-Sep-21	-	3,500,000	-	-	3,500,000
Nicholas Castellano	11-Dec-19	1-Sep-21	-	1,500,000	-	-	1,500,000
Nicholas Castellano	6-Apr-17	31-Mar-19	8,952,135	-	-	(8,952,135)	-
Ray Shorrocks	11-Dec-19	1-Sep-21	-	2,000,000	-	-	2,000,000
Allan Ritchie	11-Dec-19	1-Sep-21	-	1,500,000	-	-	1,500,000
Allan Ritchie	6-Apr-17	31-Mar-19	3,119,062	-	-	(3,119,062)	-
Andrew Seaton	11-Dec-19	1-Sep-21	-	2,000,000	-	-	2,000,000

*Key Management Personnel Shareholdings*

The number of ordinary shares in the Group held by each of the Key Management Personnel of the Group is as follows:

KMP	Balance at beginning of the year	Shares purchased	Shares sold	Other <sup>1</sup>	Balance at end of the year
Stephen Mitchell	10,827,500	7,672,502	-	-	18,500,002
Nicholas Castellano	5,668,140	-	-	-	5,668,140
Ray Shorrocks	2,785,500	330,000	(80,000)	-	3,035,500
Allan Ritchie	2,597,253	159,500	-	-	2,756,753
Andrew Seaton	-	2,225,350	-	-	2,225,350
Douglas Hamilton	500,000	-	-	(500,000)	-
Julie Edwards	50,000	-	-	-	50,000

1. Douglas Hamilton left the Company during the year and is no longer classified as a KMP.

**Related Party Transactions**

During the year, the Group paid the following amounts to related party entities:

- \$50,518 of board fees to Spring Street Holdings Pty Ltd, a company associated with Ray Shorrocks.
- \$62,000 of consulting fees (in lieu of board fees) to True Success Pty Ltd, a company associated with Allan Ritchie.
- \$259,518 of salaries and wages and \$277,249 of royalties to NC2 LLC, a company associated with Nicholas Castellano.
- \$160,000 of consulting fees to Yurpal Australia Pty Ltd, a company associated with Douglas Hamilton.

\$150,000 was also paid to Lowell Accounting Services for accounting and secretarial services and rent, an entity of which Stephen Mitchell and Julie Edwards are Directors.

Transactions between related parties are on normal commercial terms and conditions no more favourable than those available to other parties unless otherwise stated.

**END OF AUDITED REMUNERATION REPORT**

## **5. PRINCIPAL ACTIVITIES**

The principal activities of the Group during the year under review were evaluating, exploring and developing oil prospects and technologies in North America and internationally and the sale of new clean oil technology products.

There have been no significant changes in the nature of the Group's principal activities during the financial year.

## **6. REVIEW OF OPERATIONS AND FINANCIAL POSITION/RESULTS**

### **Projects and Activities**

The Group has an exceptional new oil technology (HCD Multi-Flow®) that allows for the swift, clean and cost effective treatment of heavy, asphaltenic and paraffinic oils. The technology can be applied to 1) lowering the temperature at which paraffin that occurs naturally in some crude oils solidifies (or crude oil pour point), 2) improve oil flow rates in wells and pipelines producing or transporting viscous crudes, 3) reduce the requirement of expensive light crude oil (diluent) traditionally mixed in with the viscous crudes to enable them to be pumped from the reservoir and to meet pipeline viscosity and gravity specifications, and 4) recover saleable oil from sludge in storage facilities.

The Group has continued to develop market opportunities with its own sales team as well as working with Agents and Distributors across several regions including Canada, China, the Middle East, Colombia, India, parts of Europe and the USA. Work was also conducted on its self-owned projects in Kentucky and Utah.

During the 2019 Financial Year, activities were focussed in two major areas:

1. Sales and marketing activities of key products to the oil industry.
2. Appraisal of self-owned projects.

### **1. Sales and Marketing Activities**

The Group's sales and marketing efforts led to various field and laboratory tests around the world including Canada, USA, China, Colombia, India and the Middle East.

#### Texas Production Success

HCD received a follow-up order from a producer in a field in the East Texas Basin for use in a "continuous drip" to maintain increased production and to keep the wellbore clear of paraffin. The order follows the successful treatment of 3 wells where substantial and sustained production increases were reported.

The small Texas producer had reported to HCD that after treating 3 low productivity wells in an oilfield in the East Texas Basin, the average increase in production over the first three months has been 125%.

These wells produce from the Lower Cretaceous Rodessa Formation and carry very high paraffin levels. The customer performed a Tri-Phase Squeeze with HCD Multi-Flow® on each well to boost production and then maintain higher production with a continual low level HCD Multi-Flow® feed of 200-300 parts per million (PPM) to the backside of the well to keep the wells free from paraffin.

#### Gulf of Mexico

On 10 October HCD announced that its key product, HCD Multi-Flow®, would be used in a pilot on an offshore platform in the US Gulf of Mexico to clean up wax and asphaltene deposition in a subsea transfer pipeline and prevent them from recurring. The line is owned by a significant oil producer concentrating largely on deep-water US Gulf of Mexico assets.

In the trial the producer has recommended a platform where HCD Multi-Flow® will be applied to a circa 1,000 barrel of oil/day transfer line at dosage rates from 250 PPM up to 1,000 PPM. The objective of the trial will be to reduce the pressure in the line by cleaning the paraffin and asphaltene deposition and to prevent build-up of waxes and paraffins in the future. The benefits to the producer will be flow assurance in the line, cost reductions associated with replacing numerous chemicals currently used and improved Health, Safety & Environment outcomes. The producer has purchased ~US\$12,000 of HCD Multi-Flow® for the pilot.

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### Oil India Production Boost

During December HCD commenced a field trial in India for one of India's pre-eminent producers, Oil India, using HCD's key product HCD Multi-Flow®. After treating a well in the Baghewala oil field in northern India using HCD Multi-Flow®, the well responded quickly demonstrating a circa 65% boost in production during the first week post treatment. The well was later shut-in for maintenance and has subsequently been placed back on production with results not yet provided to the Group.

### Pipeline trial in India

In December HCD commenced a trial to test the efficacy of HCD Multi-Flow® for one of India's largest pipelines. In a staged trial HCD Multi-Flow® was applied to a circulation pipeline and storage tank containing 2,400 barrels of oil within a terminal associated with a 175,000 barrel/day pipeline operated by a major producer in India. The objective of the trial was to reduce the pour point and wax appearance temperature (WAT) in order to reduce the substantial costs of transporting and managing the waxy oil produced.

The effect of Multi-Flow® on pour point, WAT and viscosity was inconclusive. The HCD technical team believe that most of the Multi-Flow was absorbed cleaning sludge in the tank (as the product works on the largest molecules first). The tank in question had not been cleaned in 7 years and consequently had significant sludge accumulation. HCD is now concentrating on securing a second trial in an environment where the product can demonstrate its capabilities directly associated with its intended use being flow assurance in this instance.

### Canada

Work continued in Canada on securing further field trials for several producers. Significant effort was directed toward opportunities to use HCD Multi-Flow to reduce diluent usage within the Canadian oil sands and heavy oil industries where large quantities of diluent (often light oil, condensate, naphtha, syncrude etc.) are used to assist in the production, handling and transport of Alberta's viscous oils. Typically, producers of these heavy oils require a diluent to native crude ratio of 30%:70%.

Based on previously reported success of Multi-Flow in reducing diluent in heavy oil production in California and China, HCD has been testing its product in independent laboratories alongside several Canadian oil sand producers with early results suggesting Multi-Flow®, when used with a carrier fluid such as low sulphur diesel, has the potential to reduce diluent requirements by up to 50%.

Further lab testing with three Canadian producers is planned. HCD also expects to publish a short report on the Canadian diluent industry and the opportunities it presents for HCD Multi-Flow.

### China

HCD's distributor in China reported slow progress despite excellent field trial results, but they remain in discussions with CNPC for both additional field trials and also a pipeline trial.

### Middle East

HCD and its Middle East distributor, Gulf Green Crude Dynamics (GGCD), have continued to work on converting successful laboratory tests to field trials and tank cleans with oil producers in the UAE, Kuwait, Iraq and Oman.

In Kuwait, several drums of HCD Multi-Flow were delivered to Kuwait Oil Company and HCD's distributor reports a proposal for a down-hole treatment in the Greater Burgan field has been agreed (trial switched from the Abduliyah Oilfield).

### Colombia

HCD's agent in Colombia continued to work towards converting highly encouraging independent laboratory tests into field pilots with two companies. It had been noted that the heavy crude oils of Colombia consistently respond well to treatment with HCD Multi-Flow® in laboratory tests with meaningful uplifts in API gravity and reductions in viscosity. Given the significant viscosity issues associated with these crudes, the laboratory results strongly indicate substantial cost savings could be achieved by producers in both enhanced oil recovery, and especially for diluent replacement.

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**2. HCD Energy Oil Projects**

The Group has an interest in two projects located in the USA, one in each of Kentucky and Utah.

Kentucky Project (100% WI; 81.25% NRI)

HCD is seeking a partner for its Kentucky project and has fully impaired the asset.

Utah Project (100% WI; 81.25% NRI)

The Group has signed two Memoranda of Understanding (“MOU”) with Valkor Technologies LLC (“Valkor”) whereby Valkor can earn an interest in HCD’s Utah project by funding the next two phases of exploration, appraisal and development.

In the first MOU Valkor will initially fund the drilling and production testing of three vertical wells or one vertical well and one horizontal well, utilising HCD Multi-Flow® as part of the trial. Should Valkor complete this within twelve months, they will have the right earn up to a 65% interest by funding a continuous drilling programme of an additional two vertical wells or one horizontal well per quarter. The MOU relates to the deeper oil sands within HCD’s leases.

In the second MOU Valkor can earn up to an 87.5% interest in the shallow (“mineable”) oil sands in HCD’s Utah leases by initially completing a preliminary study to determine the feasibility to mine the oil sands within the leases. Valkor will also spend a minimum of US\$250,000 assessing the applicability of HCD Multi-Flow® in the mining process. To earn its interest Valkor will then need to engineer, install and operate the oil sands mining and processing facilities. The MOU’s are not binding and require formal agreements to be negotiated and signed.

The Group has the following tenement interests at the date of this report:

Project	Location	Gross acreage owned by HCD	Net acreage owned by HCD	Working Interest held as at 31 December 2019
Kentucky	Butler and Warren Counties, Kentucky	1,844	1,786	100%
Utah	Uintah, County	3,458	3,458	100%

**7. SIGNIFICANT AFFAIRS**

There have not been any significant changes in the state of affairs of the Group for the financial year ended 31 December 2019.

**8. LIKELY DEVELOPMENTS**

The Group intends to continue its principle activities of acquiring, disposing, exploring and developing oil prospects and related technologies and to continue to sell and market its HCD products.

**9. DIVIDENDS PAID OR RECOMMENDED**

The Directors recommend that no dividend be paid or declared at this point in time. No amounts have been paid or declared by way of dividend during the financial year.

**10. ENVIRONMENTAL REGULATIONS AND PERFORMANCE**

The Group is subject to various environmental regulations in relation to its permits and licences in the United States of America.

The Board believes that the Group has adequate systems in place for the management of its environmental requirements and is not aware of any breach of those environmental requirements as they apply to the Group. The Board is not aware of any breaches of the Group’s licence or permit conditions and no government agency has notified the Group of any environmental breaches during the period ended 31 December 2019.

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**11. UNISSUED SHARES UNDER OPTION**

The Group has the following unissued shares under option outstanding at the date of the Directors' Report:

Description	Grant date	# of options	Expiry date	Vesting date	Exercise price	Fair value	Performance condition	Vested %
Share options	1-Mar-17	1,750,000	1-Mar-20	1-Mar-18	\$0.14	\$0.03	12 months service to 1 March 2018.	100%

The unissued shares under option do not carry voting rights.

This disclosure is made in accordance with s.300(1)(e) of the Corporations Act 2001.

Refer to note 13 for further information.

**12. INDEMNIFICATION AND INSURANCE OF OFFICERS AND AUDITORS**

Directors, executives and the company secretaries are indemnified by the Group against any liability incurred in their capacity as an officer of the Group or a related body corporate to the maximum extent permitted by law. The Group has not paid any premiums in respect of any contract insuring the directors of the Group against a liability for legal costs.

The Group has not paid any premiums in respect of any contract insuring its auditor against a liability incurred in that role as an auditor of the Group. In respect of non-audit services, Pitcher Partners have the benefit of an indemnity to the extent they reasonably rely on information provided by the Group which is false, misleading or incomplete. No amount has been paid under this indemnity during the financial year ending 31 December 2019 or to the date of this Report.

**13. NON-AUDIT SERVICES**

The Group may decide to employ the auditor on assignments additional to their statutory audit duties where the auditor's expertise and experience with the Group are important.

The following fees were paid or payable for services provided by Pitcher Partners, the auditor of the Group:

	2019	2018
	\$	\$
Auditing or reviewing the financial statements	50,000	50,000
Non-audit services	-	4,000
	50,000	54,000

This disclosure is made in accordance with s.300(2A)(11B(a)) and (11C(b)) of the Corporations Act 2001.

The Board of Directors will continuously consider the position and, in accordance with advice received from the Audit Committee, ensure that the provision of the non-audit services is compatible with the general standard of independence for auditors imposed by the Corporations Act 2001. The Directors are satisfied that the provision of non-audit services (where applicable) by the auditor, does not compromise the auditor independence requirements of the Corporations Act 2001 for the following reasons:

- all non-audit services will be reviewed to ensure they do not impact the impartiality and objectivity of the auditor; and
- none of the services (where applicable) undermine the general principles relating to auditor independence as set out in APES 110 Code of Ethics for Professional Accountants (including Independence Standards).

The auditor's independence declaration under section 307C of the Corporations Act 2001 set out in the Annual Report forms a part of the Annual Report for the year ended 31 December 2019.

**HYDROCARBON DYNAMICS LIMITED**  
(ABN 75 117 387 354)

**14. PROCEEDINGS ON BEHALF OF THE GROUP**

No person has applied for leave of Court under section 237 of the Corporations Act 2001 to bring proceedings on behalf of the Group or intervene in any proceedings to which the Group is a party for the purpose of taking responsibility on behalf of the Group for all or any part of those proceedings. The Group was not a party to any such proceedings during the year.

**15. ROUNDING OFF**

The Group is of a kind referred to in *ASIC Corporations (Rounding in Financial / Directors' Reports) Instrument 2016/191* and in accordance with that instrument, amounts in the financial report and directors' report have been rounded off to the nearest dollar, unless otherwise stated.

**16. EVENTS SUBSEQUENT TO REPORTING DATE**

Mr. William Tarantino joined the group on 2 January 2020 as CEO of HCD's chemical business. Mr Tarantino is a very experienced energy executive with a strong background in oilfield chemical sales, operations and marketing. Mr. Tarantino will be responsible for the overseeing the marketing, sales, production and development of HCD's chemical business centred around the Company's key product, HCD Multi-Flow®.

The directors note that the recent events surrounding COVID-19 and the dramatic recent drop in oil prices may have deleterious effects the Company, albeit effects that are difficult to quantify. The Company noted three trials with oil producers have been postponed as these, and many other oil producers, grapple with the challenges low oil prices and the Covid-19 pandemic present. The full effects on the Group cannot be foreseen, however it is expected that more trials and thus sales may be delayed and negative investor sentiment will restrict capital availability.

The Group announced on 27 March 2020 that it will undertake a 1 for 5 non-renounceable Rights Issue at \$0.015/share to raise up to \$850,000. The issue price of the Rights Issue is a 25% discount to the prevailing share price of \$0.02. Cost saving measure have also been introduced to reduce fixed costs by approximately \$1million/year. These measures include directors Stephen Mitchell, Ray Shorrocks and Allan Ritchie agreeing to forgo all director and consulting fees until further notice, and executive director Nick Castellano accepting a reduced salary from US\$180,000 to US\$120,000. Reflecting his more recent appointment to the board, non-executive director Andrew Seaton has agreed to forgo cash fees in favour of share based payments (subject to shareholder approval).

Other than that noted above, in the opinion of the directors, there has not arisen in the interval between the end of the financial year and the date of the report any other matter or circumstance that has significantly affected, or may significantly affect the Group's operations, results or the state of affairs in future financial years.

This report is signed in accordance with a resolution of the directors.



Stephen Mitchell  
Chairman  
Melbourne, Victoria  
31 March 2020

**AUDITOR'S INDEPENDENCE DECLARATION  
TO THE DIRECTORS OF HYDROCARBON DYNAMICS LIMITED**

In relation to the independent audit for the year ended 31 December 2019, to the best of my knowledge and belief there have been:

- (i) No contraventions of the auditor independence requirements of the *Corporations Act 2001*; and
- (ii) No contraventions of APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)*.

This declaration is in respect of Hydrocarbon Dynamics Limited and the entities it controlled during the year.

PITCHER PARTNERS



JASON EVANS  
Partner

Brisbane, Queensland  
31 March 2020

Brisbane Sydney Newcastle Melbourne Adelaide Perth

**Pitcher Partners is an association of independent firms.**

An Independent Queensland Partnership ABN 84 797 724 539. Liability limited by a scheme approved under Professional Standards Legislation.  
Pitcher Partners is a member of the global network of Baker Tilly International Limited, the members of which are separate and independent legal entities.



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[pitcher.com.au](http://pitcher.com.au)

KEVIN OGDEN  
NIGEL FISHER

MARK NICHOLSON  
PETER CAMENZULI

JASON EVANS  
KYLIE LANFRETCH

NORMAN THURBCHT  
BRETT HEADRICK

WARWICK FACE  
NIGEL BAYTERS

COLE WILKINSON  
SIMON CHUN

JEREMY JONES  
TOM SPILATT

JAMES FIELD  
DANIEL COLWELL

ROBYN COOPER  
FELICITY CRIBSTON

**HYDROCARBON DYNAMICS LIMITED**  
(ABN 75 117 387 354)

**CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME**  
**FOR THE YEAR ENDED 31 DECEMBER 2019**

	Note	Group	
		2019	2018
		\$	\$
<b>REVENUE AND OTHER INCOME</b>			
Revenue from contracts with customers	5	180,555	45,569
Other income	5	21,907	24,737
		<u>202,462</u>	<u>70,306</u>
<b>EXPENSES</b>			
Director and employee related costs	5	(877,296)	(882,747)
Depreciation and impairment costs	5	(547,077)	(546,787)
Professional consultant and contractor fees		(527,553)	(1,013,099)
General and administration costs		(352,403)	(508,658)
Royalties	20	(277,249)	(257,135)
Travel and accommodation costs		(260,740)	(290,266)
Accounting and audit fees		(184,395)	(164,643)
Production costs		(171,805)	(88,027)
Development and testing fees		(102,435)	(147,352)
Bad and doubtful debts		-	(65,335)
Finance expenses		(4,352)	(34,146)
		<u>(3,305,305)</u>	<u>(3,998,195)</u>
<b>LOSS BEFORE INCOME TAX</b>		<b>(3,102,843)</b>	<b>(3,927,889)</b>
Income tax benefit/(expense)	6	-	-
<b>LOSS FOR THE YEAR</b>		<b>(3,102,843)</b>	<b>(3,927,889)</b>
<b>OTHER COMPREHENSIVE INCOME, NET OF INCOME TAX</b>			
<b>Items that may be reclassified subsequently to profit or loss:</b>			
Exchange differences on translation of foreign operations		2,775	56,555
<b>TOTAL OTHER COMPREHENSIVE LOSS, NET OF INCOME TAX</b>		<b>2,775</b>	<b>56,555</b>
<b>TOTAL COMPREHENSIVE LOSS FOR THE YEAR</b>		<b>(3,100,068)</b>	<b>(3,871,334)</b>
Loss attributable to owners of the parent		<u>(3,102,843)</u>	<u>(3,927,889)</u>
Comprehensive loss attributable to owners of the parent		<u>(3,100,068)</u>	<u>(3,871,334)</u>
Basic loss per share from continuing operations (cents)	16	(1.26)	(2.09)
Diluted loss per share from continuing operations (cents)	16	(1.26)	(2.09)

The above Consolidated Statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes.

**HYDROCARBON DYNAMICS LIMITED**  
 (ABN 75 117 387 354)  
**CONSOLIDATED STATEMENT OF FINANCIAL POSITION**  
**AS AT 31 DECEMBER 2019**

	Note	Group 2019 \$	2018 \$
<b>ASSETS</b>			
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	7	1,627,595	2,206,515
Trade and other receivables	8	73,779	60,284
Other current assets		61,926	37,842
Inventory	9	414,586	539,412
<b>TOTAL CURRENT ASSETS</b>		<b>2,177,886</b>	<b>2,844,053</b>
<b>NON-CURRENT ASSETS</b>			
Exploration and evaluation expenditure	10	239,048	578,598
Plant and equipment		4,016	5,505
Intangible assets	11	3,968,484	3,960,920
<b>TOTAL NON-CURRENT ASSETS</b>		<b>4,211,548</b>	<b>4,545,023</b>
<b>TOTAL ASSETS</b>		<b>6,389,434</b>	<b>7,389,076</b>
<b>CURRENT LIABILITIES</b>			
Trade and other payables	12	175,572	502,554
Provisions		38,163	38,873
Borrowings		6,462	-
<b>TOTAL CURRENT LIABILITIES</b>		<b>220,197</b>	<b>541,427</b>
<b>NON-CURRENT LIABILITIES</b>			
Provisions		3,266	1,610
<b>TOTAL NON-CURRENT LIABILITIES</b>		<b>3,266</b>	<b>1,610</b>
<b>TOTAL LIABILITIES</b>		<b>223,463</b>	<b>543,037</b>
<b>NET ASSETS</b>		<b>6,165,971</b>	<b>6,846,039</b>
<b>EQUITY</b>			
Issued capital	13	62,857,124	60,453,157
Reserves	13	(670,321)	(461,087)
Accumulated losses		(56,020,832)	(53,146,031)
<b>TOTAL EQUITY</b>		<b>6,165,971</b>	<b>6,846,039</b>

The above Consolidated Statement of Financial Position should be read in conjunction with the accompanying notes.

**HYDROCARBON DYNAMICS LIMITED**  
 (ABN 75 117 387 354)  
**CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**  
**FOR YEAR ENDED 31 DECEMBER 2019**

<b>Consolidated</b>	<b>Issued capital</b>	<b>Foreign currency translation reserve</b>	<b>Share based payments reserve</b>	<b>Accumulated losses</b>	<b>Total</b>
<b>Balance at 1 January 2018</b>	57,805,330	(821,684)	277,875	(49,218,142)	8,043,379
Loss for the year	-	-	-	(3,927,889)	(3,927,889)
Other comprehensive loss for the year	-	56,555	-	-	56,555
Total comprehensive loss for the year	-	56,555	-	(3,927,889)	(3,871,334)
<b>Transactions with owners in their capacity as owners</b>					
Contributions of equity net of transaction costs	2,647,827	-	-	-	2,647,827
Share based payments	-	-	26,167	-	26,167
	2,647,827	-	26,167	-	2,673,994
<b>Balance at 31 December 2018</b>	60,453,157	(765,129)	304,042	(53,146,031)	6,846,039
<b>Balance at 1 January 2019</b>	60,453,157	(765,129)	304,042	(53,146,031)	6,846,039
Loss for the year	-	-	-	(3,102,843)	(3,102,843)
Other comprehensive loss for the year	-	2,775	-	-	2,775
Total comprehensive loss for the year	-	2,775	-	(3,102,843)	3,100,068
<b>Transactions with owners in their capacity as owners</b>					
Contributions of equity net of transaction costs	2,403,967	-	-	-	2,403,967
Expiry of options	-	-	(228,042)	228,042	-
Share based payments	-	-	16,033	-	16,033
	2,403,967	-	(212,009)	228,042	2,420,000
<b>Balance at 31 December 2019</b>	62,857,124	(762,354)	92,033	(56,020,832)	6,165,971

The above Consolidated Statement of Changes in Equity should be read in conjunction with the accompanying notes.

**HYDROCARBON DYNAMICS LIMITED**  
**(ABN 75 117 387 354)**  
**CONSOLIDATED STATEMENT OF CASH FLOWS**  
**FOR YEAR ENDED 31 DECEMBER 2019**

	Note	Group	
		2019	2018
		\$	\$
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Receipts from customers		165,839	41,374
Payments to suppliers and employees		(2,963,543)	(2,955,924)
Interest received		23,614	25,215
Interest paid		(4,352)	(2,904)
<b>NET CASH USED IN OPERATING ACTIVITIES</b>	7(a)	<u>(2,778,442)</u>	<u>(2,892,239)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Payment for property, plant and equipment		(98)	(3,610)
Payment for exploration and evaluation assets		(205,686)	(509,233)
Payment for intangible assets		(7,564)	(4,901)
<b>NET CASH USED IN INVESTING ACTIVITIES</b>		<u>(213,348)</u>	<u>(517,744)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Repayment of loan by director		-	27,034
Proceeds from borrowings		118,292	-
Repayment of borrowings		(111,830)	-
Proceeds from issue of shares		2,468,194	2,748,352
Share issue costs		(64,227)	(109,525)
<b>NET CASH PROVIDED BY FINANCING ACTIVITIES</b>		<u>2,410,429</u>	<u>2,665,861</u>
Net decrease in cash held		(581,361)	(744,122)
Cash at beginning of financial year		2,206,515	2,947,442
Effect of exchange rate movement		2,441	3,195
<b>CASH AT THE END OF THE YEAR</b>	7	<u>1,627,595</u>	<u>2,206,515</u>

The above Consolidated Statement of Cash Flows should be read in conjunction with the accompanying notes.

## **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

### **NOTE 1 Statement of Significant Accounting Policies**

The Annual Report is a general purpose financial report that has been prepared in accordance with Australian Accounting Standards, and Interpretations, issued by the Australian Accounting Standards Board and the *Corporations Act 2001*.

This Annual Report covers the consolidated financial statements and notes of Hydrocarbon Dynamics Limited and its controlled entities ('Consolidated Group' or 'Group'). Hydrocarbon Dynamics Limited is a listed public company, incorporated and domiciled in Australia. The Group is a for-profit entity for the purpose of preparing the consolidated financial statements.

The Group's registered office is: Level 6, 412 Collins Street, Melbourne VIC 3000.

### **NOTE 2 BASIS OF PREPARATION**

#### **Compliance with accounting standards**

These general purpose financial statements have been prepared in accordance with Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board and the *Corporations Act 2001*. The consolidated financial statements of the Group also comply with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standard Board (IASB).

#### **Historical cost convention**

The consolidated financial statements have been prepared on an accruals basis and are based on historical costs modified, where applicable, by the measurement at fair value of selected financial assets and financial liabilities.

#### **Comparatives**

When required by Accounting Standards, comparative figures have been adjusted to conform to changes in presentation for the current financial year.

#### **Going concern**

The consolidated financial statements have been prepared on a going concern basis which contemplates that the Group will continue to meet its commitments and can therefore continue normal business activities and the realisation of assets and settlement of liabilities in the ordinary course of business.

The ability of the Group to continue to adopt the going concern assumption will depend upon a number of matters including the successful raising in the future of necessary funding through debt, equity or farm-out, the successful exploration and subsequent exploitation of the Group's working interests, or the commercialisation of the Group's HCD product. The Group's ability to enact its strategy to develop its exploration and evaluation assets and commercialise its HCD product is dependent upon the effectiveness of ongoing liquidity management activities.

The Group continually monitors its cash flow requirements to ensure that it has sufficient funds to meet its contractual commitments and adjusts its spending, particularly with respect to discretionary exploration activity and corporate overhead, accordingly.

In the absence of the above matters being successful, there exists a material uncertainty that may cast significant doubt on the Group's ability to continue as a going concern with the result that the Group may have to realise its assets and extinguish its liabilities other than in the ordinary course of business, and at amounts different from those stated in the consolidated financial statements. No adjustments for such circumstances have been made in the consolidated financial statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### NOTE 3 SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies adopted in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all of the years presented unless otherwise stated.

#### (a) Principles of consolidation

##### *Subsidiaries*

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date that control ceases.

The acquisition method of accounting is used to account for the acquisition of subsidiaries by the Group.

Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of the impairment of the asset transferred.

Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group. The financial statements of subsidiaries are prepared for the same reporting period as the parent entity. Investments in subsidiaries are accounted for at cost in the separate financial statements of Hydrocarbon Dynamics Limited.

##### *Changes in ownership interests*

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised in a separate reserve within equity attributable to owners of the parent entity.

When the Group ceases to have control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, jointly controlled entity or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This means that any amounts previously recognised in other comprehensive income are reclassified to profit or loss.

If the ownership interest in a jointly-controlled entity or an associate is reduced but joint control or significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income are reclassified to profit or loss where appropriate.

#### (b) Income tax

The income tax expense (revenue) for the year comprises current income tax expense (income) and deferred tax expense (income).

Current income tax expense charged to the profit or loss is the tax payable on taxable income calculated using applicable income tax rates enacted, or substantially enacted, as at reporting date. Current tax liabilities (assets) are therefore measured at the amounts expected to be paid to (recovered from) the relevant taxation authority.

Deferred income tax expense reflects movements in deferred tax asset and deferred tax liability balances during the year as well as unused tax losses.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### Income tax (continued)

Current and deferred income tax expense (income) is charged or credited directly to equity instead of the profit or loss when the tax relates to items that are credited or charged directly to equity.

Deferred tax assets and liabilities are ascertained based on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax assets also result where amounts have been fully expensed but future tax deductions are available. No deferred income tax will be recognised from the initial recognition of an asset or liability, excluding a business combination, where there is no effect on accounting or taxable profit or loss.

Deferred tax assets and liabilities are calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates enacted or substantively enacted at reporting date. Their measurement also reflects the manner in which management expects to recover or settle the carrying amount of the related asset or liability.

Deferred tax assets relating to temporary differences and unused tax losses are recognised only to the extent that it is probable that future taxable profit will be available against which the benefits of the deferred tax asset can be utilised.

Current tax assets and liabilities are offset where a legally enforceable right of offset exists and it is intended net settlement or simultaneous realisation and settlement of the respective asset and liability will occur. Deferred tax assets and liabilities are offset where a legally enforceable right of setoff exists, the deferred tax assets and liabilities related to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities, where it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liabilities will occur in future periods in which significant amounts of deferred tax assets or liabilities are expected to be recovered or settled.

### (c) Foreign currency translation

#### *Functional and presentation currency*

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in Australian dollars, which is the Group's functional and presentation currency.

#### *Transactions and balances*

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the Consolidated Statement of Profit or Loss and Other Comprehensive Income, except when they are deferred in equity as qualifying cash flow hedges and qualifying net investment hedges or are attributable to part of the net investment in a foreign operation.

Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. Translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognised in profit or loss as part of the fair value gain or loss. Translation differences on non-monetary assets such as equities classified as available-for-sale financial assets are included in the fair value reserve in equity.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### Foreign currency translation (continued)

#### *Group companies*

The results and financial position of all the Group entities (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each Statement of Financial Position presented are translated at the closing rate at the date of that Statement of Financial Position;
- income and expenses for each Statement of Profit or Loss and Other Comprehensive Income are translated at average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
- all resulting exchange differences are recognised in other comprehensive income.

On consolidation, exchange differences arising from the translation of any net investment in foreign entities, and of borrowings and other financial instruments designated as hedges of such investments, are recognised in other comprehensive income and accumulated as a separate component of equity. When a foreign operation is sold or any borrowings forming part of the net investment are repaid, a proportionate share of such exchange differences that have been accumulated in equity are recognised in the Consolidated Statement of Profit or Loss and Other Comprehensive Income, as part of the gain or loss on sale where applicable.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

#### (d) Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Tax Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense.

Receivables and payables in the balance sheet are shown inclusive of GST.

Cash flows are presented in the Consolidated Statement of Cash Flows on a gross basis, except for the GST component of investing and financing activities, which are disclosed as operating cash flows.

#### (e) Revenue and other Income

##### *Sale of goods*

Revenue from the sale of goods is recognised when the performance obligation is satisfied. This is the point in time when the customer obtains control of the goods, which is generally at the time of delivery.

Revenue is recognised at amounts that reflect the consideration to which the entity is expected to be entitled in exchange for transferring goods to a customer.

##### *Interest*

Interest revenue is recognised as interest accrues using the effective interest method. This is a method of calculating the amortised cost of a financial asset and allocating the interest income over the relevant period using the effective interest rate, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the net carrying amount of the financial asset.

##### *Other revenue*

Other revenue is recognised when it is received or when the right to receive payment is established.

All revenue is stated net of the amount of goods and services tax (GST).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### (f) Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts. Bank overdrafts are shown within short-term borrowings in current liabilities on the Consolidated Statement of Financial Position.

### (g) Financial instruments

#### Recognition and initial measurement

Financial instruments, incorporating financial assets and financial liabilities, are recognised when the entity becomes a party to the contractual provisions of the instrument. Trade date accounting is adopted for financial assets that are delivered within timeframes established by marketplace convention.

Financial instruments are initially measured at fair value plus transactions costs. Financial instruments are subsequently classified and measured as set out below.

#### Classification and subsequent measurement

##### Financial assets:

Financial assets are classified as current assets except for those with maturities greater than 12 months after the reporting period which are classified as non-current assets. Financial assets are subsequently classified and measured at amortised cost. All of the Group's financial assets are measured at amortised cost.

##### *Financial assets at amortised cost*

A financial asset shall be measured at amortised cost if both of the following conditions are met:

(a) the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows and

(b) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at amortised cost using the effective interest rate method.

The Group establishes an allowance for impairment of trade receivables using the simplified approach permitted by AASB 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables. The Group has not modified or renegotiated the contractual cash flows of any financial assets during the year.

Refer to note 15 for further information on the Group's credit risk management policies and practices.

##### Financial liabilities:

Financial liabilities include trade payables, other creditors and accruals, loans and other amounts due, are subsequently measured at amortised cost using the effective interest rate method. Financial liabilities are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months reporting date.

##### Derecognition

Financial assets are derecognised where the contractual rights to receipt of cash flows expires or the asset is transferred to another party whereby the entity no longer has any significant continuing involvement in the risks and benefits associated with the asset. Financial liabilities are derecognised where the related obligations are either discharged, cancelled or expire. The difference between the carrying value of the financial liability extinguished or transferred to another party and the fair value of consideration paid, including the transfer of non-cash assets or liabilities assumed, is recognised in profit or loss.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### (h) Trade and other receivables

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. Trade receivables are generally due for settlement within 30 days. They are presented as current assets unless collection is not expected more than 12 months after reporting date.

Collectability of receivables is reviewed on an ongoing basis. Debts which are known to be uncollectible are written off by reducing the carrying amount directly. An allowance account (provision for impairment of receivables) is used when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered indicators that the receivable is impaired. The amount of the impairment allowance is the difference between the asset's carrying amount and the present value of the estimated future cash flows, discounted at the original effective interest rate. Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.

The amount of the impairment loss is recognised in profit or loss as part of other expenses. When a trade receivable for which an impairment allowance has been recognised becomes uncollectible in a subsequent period, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against other expenses in profit or loss.

The Group establishes an allowance for impairment of trade receivables using the simplified approach permitted by AASB 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

### (i) Inventories

The cost of inventory includes all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. The Group's cost generally includes the purchase price and the cost of transferring the inventory to the warehouse. Inventory is purchased from a third party. Inventories are measured at the lower of cost and net realisable value.

### (j) Exploration and evaluation expenditure

#### **Cost**

Exploration and evaluation costs, including the costs of acquiring licences, are capitalised as exploration and evaluation assets on an area of interest basis. Costs incurred before the Group has obtained the legal rights to explore an area are expensed in the profit or loss.

The recoupment of costs carried forward in relation to areas of interest in the exploration and evaluation phase is dependent on successful development and commercial exploitation, or alternatively, sale of the respective areas of interest.

#### **Recognition**

Exploration and evaluation assets are only recognised if the rights to the area of interest are current and either:

- (i) the expenditures are expected to be recouped through successful development and exploitation of the area of interest or by its sale; or
- (ii) activities in the area of interest have not at the reporting date reached a stage which permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, and active and significant operations in, or in relation to, the area of interest are continuing.

Once the technical feasibility and commercial viability of the area of interest are demonstrable, exploration and evaluation assets attributable to that area of interest are first tested for impairment and then reclassified from exploration and evaluation assets to property and development assets within property, plant and equipment.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### Exploration and evaluation expenditure (continued)

The accumulated costs for the relevant area of interest is then amortised over the life of the area according to the rate of depletion of the economically recoverable reserves.

The timing and amount of restoration costs that are expected to be incurred are estimated, and the net present value is included as part of the cost of the exploration and evaluation activity that gives rise to the need for restoration. A corresponding provision for restoration and rehabilitation is also recognised. Finance charges arising from the unwinding of the liability are recognised as an expense in the profit or loss. Site restoration costs include the dismantling and removal of mining equipment and facilities, waste removal, and rehabilitation of the site in accordance with clauses of the petroleum permits.

### Impairment

The Group assesses the carrying value of the exploration and evaluation asset on an annual basis, in accordance with the indicators set out in AASB136, being:

- (a) the period for which the entity has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- (b) substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned;
- (c) exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the entity has decided to discontinue such activities in the specific area; and
- (d) sufficient data exists to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development of by sale.

### (k) Plant and equipment

Each class of plant and equipment is carried at cost less accumulated depreciation and impairment losses.

### Plant and equipment

Plant and equipment are measured on the cost basis. The carrying amount of plant and equipment is reviewed annually by directors to ensure it is not in excess of the recoverable amount from these assets. The recoverable amount is assessed on the basis of the expected net cash flows that will be received from the asset's employment and subsequent disposal. The expected net cash flows have been discounted to their present values in determining recoverable amounts.

### Depreciation

The depreciable amount of all fixed assets is depreciated on a straight-line basis over the asset's useful life to the Group commencing from the time the asset is held ready for use.

The depreciation rates used for each class of depreciable assets are:

Class of fixed asset	Depreciation rate
Plant and equipment	20 - 25%

The residual values and useful lives of assets are reviewed, and adjusted if appropriate, at each balance sheet date. The carrying amount of an asset is written down immediately to its recoverable amount if the assets' carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains and losses are included in the Consolidated Statement of Profit or Loss and Other Comprehensive Income.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### (l) Intangible assets

#### *Goodwill*

Goodwill represents the future economic benefits arising from other assets acquired in a business combination that are not individually identifiable or separately recognised. Goodwill is not amortised but is tested annually for impairment, or more frequently if events or changes in circumstances indicate that it might be impaired. Goodwill is carried at cost less any accumulated impairment losses.

#### *Intangible assets*

Indefinite useful life intangible assets are not amortised but are tested annually for impairment.

### (m) Impairment of assets

Goodwill and intangible assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or Groups of assets (cash-generating units). Non-financial assets other than goodwill that suffered impairment are reviewed for possible reversal of impairment at each reporting date.

### (n) Trade and other payables

These amounts represent liabilities for goods and services provided to the entity prior to the end of the financial year and which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition. Trade payables are included in current liabilities except for those with maturities greater than 12 months after the reporting period which are classified as non-current liabilities.

### (o) Provisions

#### *Short term obligations*

Liabilities for salary and wages, including non-monetary benefits, annual leave and accumulating sick leave expected to be settled within 12 months after the end of the period in which the employees render the related service are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liability for annual leave and accumulating sick leave is recognised in the provision for employee benefits.

#### *Long term obligations*

Liabilities for long service leave and annual leave which is not expected to be settled within 12 months after the end of the period in which the employees render the related service is recognised in the provision for employee benefits and measured as the present value of estimated future cash outflows to be made for those benefits. The obligations are presented as current liabilities if there is not an unconditional right to defer settlement for at least 12 months after the reporting date, regardless of when the actual settlement is expected to occur.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### Provisions (continued)

#### *Defined contribution superannuation plan*

The consolidated entity makes superannuation contributions (currently 9.50% of the employee's average ordinary salary) to the employee's defined contribution superannuation plan of choice in respect of employee services rendered during the year. These superannuation contributions are recognised as an expense in the same period when the related employee services are received. The Group's obligation with respect to employee's defined contributions entitlements is limited to its obligation for any unpaid superannuation guarantee contributions at the end of the reporting period. All obligations for unpaid superannuation guarantee contributions are measured at the (undiscounted) amounts expected to be paid when the obligation is settled and are presented as current liabilities in the Consolidated Statement of Financial Position.

#### *Equity-settled compensation*

The Group operates equity-settled share-based payment employee share and option schemes. The fair value of the equity to which employees become entitled is measured at grant date and recognised as an expense over the vesting period, with a corresponding increase to an equity account. The fair value of shares is ascertained as the market bid price. The fair value of options is ascertained using a Black-Scholes pricing model which incorporates all market vesting conditions. The number of shares and options expected to vest is reviewed and adjusted at each reporting date such that the amount recognised for services received as consideration for the equity instruments granted shall be based on the number of equity instruments that eventually vest.

The share-based payments reserve is used to record the expense associated with options and performance rights granted to employees under equity-settled share-based payment arrangements. It is also used to record fair value of options granted for other goods and services as well as acquisition of other assets.

### (p) Contributed equity

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Incremental costs directly attributable to the issue of new shares or options for the acquisition of a business are not included in the cost of acquisition as part of the purchase consideration.

### (q) Leases

#### **Accounting policy applied to the information presented for the current period under AASB 16 Leases:**

At the commencement date of a lease (other than leases of 12-months or less and leases of low value assets), the group recognises a lease asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments.

#### *Lease assets*

Lease assets are initially recognised at cost, comprising the amount of the initial measurement of the lease liability, any lease payments made at or before the commencement date of the lease, less any lease incentives received, any initial direct costs incurred by the group, and an estimate of costs to be incurred by the group in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

Subsequent to initial recognition, lease assets are measured at cost (adjusted for any remeasurement of the associated lease liability), less accumulated depreciation and any accumulated impairment loss.

Lease assets are depreciated over the shorter of the lease term and the estimated useful life of the underlying asset, consistent with the estimated consumption of the economic benefits embodied in the underlying asset.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### **Leases (continued)**

#### *Lease liabilities*

Lease liabilities are initially recognised at the present value of the future lease payments (i.e., the lease payments that are unpaid at the commencement date of the lease). These lease payments are discounted using the interest rate implicit in the lease, if that rate can be readily determined, or otherwise using the group's incremental borrowing rate.

Subsequent to initial recognition, lease liabilities are measured at the present value of the remaining lease payments (i.e., the lease payments that are unpaid at the reporting date). Interest expense on lease liabilities is recognised in profit or loss (presented as a component of finance costs). Lease liabilities are remeasured to reflect changes to lease terms, changes to lease payments and any lease modifications not accounted for as separate leases.

Variable lease payments not included in the measurement of lease liabilities are recognised as an expense when incurred.

#### *Leases of 12-months or less and leases of low value assets*

Lease payments made in relation to leases of 12-months or less and leases of low value assets (for which a lease asset and a lease liability has not been recognised) are recognised as an expense on a straight-line basis over the lease term.

Leases of exploration and mining tenements are exempt and accounted for under AASB 6 *Exploration for and Evaluation of Mineral Resources*.

### **Accounting policy applied to the information presented for the prior period under AASB 117 Leases:**

Leases are classified at their inception as either operating or finance leases based on the economic substance of the agreement so as to reflect the risks and benefits incidental to ownership.

#### *Operating leases*

Lease payments for operating leases are recognised as an expense on a straight-line basis over the term of the lease.

Lease incentives received under operating leases are recognised as a liability and amortised on a straight-line basis over the life of the lease term.

## **(r) EPS**

### ***Basic earnings per share***

Basic earnings per share is determined by dividing the profit attributable to equity holders of the Group, excluding any costs of servicing equity other than ordinary shares, by the weighted average number of ordinary shares outstanding during the year, adjusted for bonus elements in ordinary shares issued during the year.

### ***Diluted earnings per share***

Diluted earnings per share adjusts the amounts used in determination of basic earnings per share to take in to account the after income tax effect of interest and other financing costs associated with dilutive potential ordinary shares and the weighted average number of shares assumed to have been issued for no consideration in relation to dilutive potential ordinary shares.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### (s) Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker who is responsible for allocating resources and assessing performance of the operating segments has been identified as the Board of Directors.

Segment revenues and expenses are those directly attributable to the segments. Segment assets include all assets used by a segment and consist principally of cash, receivables, inventory, intangibles and plant and equipment, net of accumulated depreciation and amortisation. While most such assets can be directly attributed to individual segments, the carrying amount of certain assets used jointly by two or more segments is allocated to the segments on a reasonable basis. Segment liabilities consist principally of payables, employee benefits and accrued expenses. Segment assets and liabilities do not include deferred income taxes.

### (t) Changes in accounting policies

The Group adopted AASB 16 *Leases* on 1 January 2019.

AASB 16 replaces AASB 117 *Leases* and introduces a single lessee accounting model that requires a lessee to recognise right-of-use assets and lease liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. Right-of-use assets are initially measured at cost and lease liabilities are initially measured on a present value basis. Subsequent to initial recognition:

(a) right-of-use assets are accounted for on a similar basis to non-financial assets, whereby the right-of-use asset is accounted for on a cost basis unless the underlying asset is accounted for on a revaluation basis, in which case if the underlying asset is:

- i. investment property, the lessee applies the fair value model in AASB 140 *Investment Property* to the right-of-use asset; or
- ii. property, plant or equipment, the applies the revaluation model in AASB 116 *Property, Plant and Equipment* to all of the right-of-use assets that relate to that class of property, plant and equipment; and

(b) lease liabilities are accounted for on a similar basis to other financial liabilities, whereby interest expense is recognised in respect of the lease liability and the carrying amount of the lease liability is reduced to reflect the principal portion of lease payments made.

AASB 16 substantially carries forward the lessor accounting requirements of the predecessor standard, AASB 117. Accordingly, under AASB 16 a lessor continues to classify its leases as operating leases or finance leases subject to whether the lease transfers to the lessee substantially all of the risks and rewards incidental to ownership of the underlying asset, and accounts for each type of lease in a manner consistent with the current approach under AASB117.

The Group is party to a number of leases which are exempt under the standard as they have a term of less than 12 months, are low value (less than US\$5,000) or are leases of exploration and mineral tenements. The application of the standard therefore did not have a material effect on the consolidated financial statements for the year ended 31 December 2019.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### (u) New accounting standards and interpretations for application in future periods

A number of Australian Accounting Standards and Interpretations have been issued or amended but are not yet mandatory for the 31 December 2019 annual reporting period and have not been early adopted by the Group for the preparation of these consolidated financial statements. The Group's assessment of the impact of these new or amended Standards and Interpretations, most relevant to the Group, are set out below:

#### **AASB 2018-7 Amendments to Australian Accounting Standards – Definition of Material (applicable to annual reporting period, beginning on or after 1 January 2020)**

This Standard amends AASB 101 *Presentation of Financial Statements* and AAS 108 *Accounting Policies, Changes in Accounting Estimates and Errors* to align the definition of 'material' across the standards and to clarify certain aspects of the definition. The amendments clarify that materiality will depend on the nature or magnitude of information. An entity will need to assess whether the information, either individually or in combination with other information, is material in the context of the consolidated financial statements. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users.

The impact of this standard has been fully assessed and adoption of this standard from 1 January 2020 is not expected to have a material impact on the Group.

### NOTE 4 CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

The preparation of the Annual Report requires the use of certain critical accounting estimates. It also requires management to exercise its judgement when applying the Group's accounting policies. These estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that may have a financial impact on the Group and that are believed to be reasonable under the circumstances.

The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities in future years.

The critical estimates and judgements applied in the preparation of the Annual Report are as follows:

#### **(a) Recoverability of exploration and evaluation expenditure**

Exploration expenditure for each area of interest is carried forward as an asset based on the provisions in *AASB 6: Exploration for and Evaluation of Mineral Resources*. Exploration expenditure which fails to meet at least one of the conditions outlined in AASB 6 is written off. Expenditure is not carried forward in respect of an area of interest unless the Group's rights of tenure are current. The ultimate recoupment of exploration and evaluation expenditure is dependent on the successful development and commercial exploitation, or alternatively, the sale of the respective area.

The Group assesses the recoverability of the carrying value of capitalised exploration and evaluation expenditure at each reporting date (or during the year should the need arise). In completing this assessment, regard is given to the Group's intentions with respect to proposed future exploration and development plans for individual areas, to the success or otherwise of activities undertaken in individual areas, to the likely success of future planned exploration activities, and to any potential plans for divestment of individual areas. Any required impairment of capitalised exploration and evaluation expenditure is completed based on the results of the assessment. Furthermore, for various areas of interest, exploration and evaluation activities may not have reached a stage to allow a reasonable assessment to be made regarding the existence of economically recoverable reserves. Accordingly, exploration and evaluation assets may be subject to further impairment in the future.

During the year, management made an assessment that the carrying value of the Kentucky asset would not be recovered through its exploitation or sale and therefore impaired 100% of the carrying value. This resulted in an impairment expense of \$545,490.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### NOTE 4 CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS (CONTINUED)

#### **(b) Recoverability of goodwill and other intangible assets**

The Group acquired 100% of the issued shares in Hydrocarbon Dynamics ("HCD") in April 2017, upon which the goodwill, intellectual property and patents were acquired. The intangible assets are indefinite useful life assets and are not amortised. The Board views the Group as having two Cash Generating Units "CGUs", being Exploration and HCD. Goodwill of \$3,282,899 (2018: \$3,282,899) and identifiable intangible assets of \$685,585 (2018: \$678,021) have been allocated to the HCD CGU.

The goodwill and identifiable intangible assets are required to be assessed for impairment annually (or earlier if impairment indicators exist) by comparing the carrying value of the CGU to which they have been allocated to its recoverable amount. The Board has determined the recoverable amount of the HCD CGU by assessing the fair value less costs of disposal (FVLCD) of the underlying CGU. This market approach is based on the market capitalisation (number of shares multiplied by the quoted market price per share) of the Group on the Australian Securities Exchange (ASX) at balance date as a proxy for enterprise value. The recoverable amount uses both Level 1 and Level 3 inputs.

The Group's market capitalisation at balance date of \$23,976,570 (282,077,290 shares multiplied by the share price of \$0.085/share) has been allocated to each of the Group's CGUs based on the relative fair value of the CGU, adjusted for unallocated financial assets.

As at 31 December 2019, the recoverable amount of the HCD CGU exceeded the carrying value of the non-financial assets of the CGU, resulting in no impairment being recognised.

A reasonable change in any of the assumptions applied would not result in the carrying value of goodwill and identifiable intangible assets being impaired.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****NOTE 5 REVENUE AND EXPENDITURE**

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
Loss before income tax includes the following specific expenses:		
<b>(a) Revenue from contracts with customers</b>		
Recognised at a point in time (sale of goods)	<b>180,555</b>	45,569
	<b>180,555</b>	45,569
<b>(b) Other income</b>		
Interest income	<b>21,907</b>	24,737
	<b>21,907</b>	24,737
<b>(c) Director and employee related costs</b>		
Salaries and wages expense	<b>(844,289)</b>	(834,935)
Share based payments expense	<b>(16,033)</b>	(26,167)
Defined contribution superannuation expense	<b>(16,974)</b>	(21,645)
	<b>(877,296)</b>	(882,747)
<b>(d) Depreciation and impairment costs</b>		
Depreciation expense	<b>(1,587)</b>	(2,464)
Impairment expense – exploration and evaluation expenditure	<b>(545,490)</b>	(544,323)
	<b>(547,077)</b>	(546,787)
<b>(e) Auditor's remuneration</b>		
During the year the following fees were paid or payable for services provided by Pitcher Partners, the auditor of the Group:		
- Auditing or reviewing the consolidated financial statements	<b>(50,000)</b>	(50,000)
- Non-audit services	-	(4,000)
	<b>(50,000)</b>	(54,000)

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**NOTE 6 INCOME TAX EXPENSE**

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
<b>(a) Recognised in the Consolidated Statement of Profit or Loss and Other Comprehensive Income</b>		
Current tax expense	-	-
Deferred tax expense	-	-
Income tax expense	-	-
<b>(b) Numerical reconciliation of income tax expense to prima facie tax on accounting profit</b>		
Loss before income tax	<b>(3,102,843)</b>	(3,927,889)
Tax benefit at the Australian tax rate of 27.5% (2018: 27.5%)	<b>853,282</b>	1,080,128
Tax effect of amounts which are not deductible/(taxable) in calculating taxable income:		
Share options expensed	<b>4,409</b>	7,196
Section 40-800 deductions	<b>(22,987)</b>	(54,501)
Other non-deductible items	<b>(2,047)</b>	(1,008)
Capital and tax losses not recognised in deferred tax assets	<b>(832,657)</b>	(1,031,815)
	-	-
The deductible temporary differences and tax losses do not expire under current tax legislation. Deferred tax assets have not been recognised in respect of these items because it is not probable that future taxable profit will be available against which the Group can utilise the benefits from the deferred tax assets.		
<b>(c) Reconciliation of deferred tax assets/(liabilities)</b>		
Deferred tax asset	-	-
The balance of deferred tax asset comprises:		
<b>Deferred tax assets</b>		
Tax losses	<b>9,477,480</b>	8,586,496
Provisions	<b>11,393</b>	17,629
	<b>9,488,873</b>	8,604,125
<b>Deferred tax liabilities</b>		
Exploration and evaluation expenditure	<b>65,738</b>	159,114
	<b>65,738</b>	159,114

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****NOTE 6 INCOME TAX EXPENSE (CONTINUED)**

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
<b>Net deferred tax asset</b>	<b>9,423,135</b>	8,445,011
Deferred tax asset not recognised	<b>(9,423,135)</b>	(8,445,011)
Deferred tax asset recognised in accounts	-	-
<b>Movements in deferred tax asset</b>		
Opening balance	-	-
Deferred tax (credited) to profit or loss	-	-
Closing balance	-	-
<b>(d) Franking tax credits</b>		
Franking credits available for subsequent financial years based on a tax rate of 27.5% (2018: 27.5%)	-	-

The above amounts represent the balance of the franking account as at the end of the financial year, adjusted for:

- (i) franking credits that will arise from the payment of the amount of the provision for income tax;
- (ii) franking debits that will arise from the payment of dividends recognised as a liability at the reporting date; and
- (iii) franking credits that will arise from the receipt of dividends recognised as receivable at the reporting date.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****NOTE 7 CASH AND CASH EQUIVALENTS**

	<b>2019</b>	<b>2018</b>
	\$	\$
Cash at bank	<b>119,147</b>	498,468
Cash on deposit	<b>1,508,448</b>	1,708,047
	<b>1,627,595</b>	2,206,515

The effective interest rate on short-term bank deposits was 1.54% (2018: 1.95%).

**(a) Reconciliation of cash flow from operations**

Loss for the year	<b>(3,102,843)</b>	(3,927,889)
Depreciation expense	<b>1,587</b>	2,464
Share-based payments expense	<b>16,033</b>	26,167
Foreign exchange /loss	-	6,101
Impairment expense	<b>545,490</b>	544,323
Bad and doubtful debts	-	65,335
Change in assets and liabilities		
(Increase)/decrease in trade and other receivables	<b>(13,009)</b>	67,703
(Increase)/decrease in inventories	<b>124,826</b>	18,925
(Increase)/decrease in other assets	<b>(24,084)</b>	22,777
Increase/(decrease) in trade and other payables	<b>(320,926)</b>	272,923
Increase/(decrease) in provisions	<b>946</b>	8,932
<b>Net cash used in operating activities</b>	<b>(2,771,980)</b>	(2,892,239)

**(b) Non-cash financing and investing activities**

There were no non-cash financing and investing activities during the year (2018: \$9,000 fair value of shares issued for no consideration).

**(c) Credit standby arrangements**

There are no credit or standby arrangements with financiers as at 31 December 2019 (2018: Nil).

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****NOTE 8 TRADE AND OTHER RECEIVABLES**

	2019	2018
	\$	\$
Trade receivables	20,339	-
GST receivable	17,961	28,314
Deposits	31,544	8,106
Other receivables	3,935	23,864
	<u>73,779</u>	<u>60,284</u>

**NOTE 9 INVENTORIES**

	2019	2018
	\$	\$
Stock on hand	415,414	551,943
Provision for obsolete stock	(828)	(12,531)
	<u>414,586</u>	<u>539,412</u>

**NOTE 10 EXPLORATION AND EVALUATION EXPENDITURE**

	2019	2018
	\$	\$
Exploration and evaluation expenditure	784,538	2,156,602
Less provision for impairment	(545,490)	(1,578,004)
	<u>239,048</u>	<u>578,598</u>

**The carrying value of each working interest is as follows:**

Kentucky	-	492,266
Utah	239,048	86,332
	<u>239,048</u>	<u>578,598</u>

**Movements in exploration and evaluation:**

Balance at the beginning of the year	578,598	549,335
Exploration and evaluation expenditure during the year	209,025	518,233
Impairment expense	(545,490)	(544,323)
Foreign currency adjustment	(3,085)	55,353
Balance at the end of the year	<u>239,048</u>	<u>578,598</u>

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****NOTE 11 INTANGIBLE ASSETS**

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
Goodwill	<b>3,282,899</b>	3,282,899
Intellectual property	<b>663,218</b>	663,218
Patents	<b>22,367</b>	14,803
	<b>3,968,484</b>	3,960,920

**Movements in intangible assets:**

Balance at the beginning of the year	<b>3,960,920</b>	3,956,019
Additions	<b>7,564</b>	4,901
Balance at the end of the year	<b>3,968,484</b>	3,960,920

The goodwill, intellectual property and patents were acquired as part of a business combination on 6 April 2017.

**NOTE 12 TRADE AND OTHER PAYABLES**

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
Trade creditors	<b>85,638</b>	139,303
Accrued expenses	<b>70,025</b>	187,548
Other payables	<b>26,371</b>	175,703
	<b>182,034</b>	502,554

**NOTE 13 EQUITY****Issued capital**

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
Issued capital	<b>66,601,943</b>	64,133,749
Capital raising costs	<b>(3,744,819)</b>	(3,680,592)
	<b>62,857,124</b>	60,453,157

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

Ordinary shares entitle the holder to participate in dividends and the proceeds on winding up of the Group in proportion to the number of and amounts paid on the shares held. On a show of hands, every holder of ordinary shares present at a meeting in person or by proxy, is entitled to one vote, and upon a poll, each share is entitled to one vote.

**HYDROCARBON DYNAMICS LIMITED**

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**NOTE 13 EQUITY (CONTINUED)**

	2019		2018	
	No.	\$	No.	\$
<b>Movement in number of shares:</b>				
Balance at the beginning of the year	<b>211,557,944</b>	<b>64,133,749</b>	174,318,106	61,376,397
<i>Movements during the year:</i>				
Entitlement offer (i)	<b>70,519,834</b>	<b>2,468,194</b>	36,802,000	2,723,352
Private placement (ii)	-	-	337,838	25,000
Consulting services (iii)	-	-	100,000	9,000
	<b>70,519,834</b>	<b>2,468,194</b>	37,239,838	2,757,352
Balance at the end of the year	<b>282,077,778</b>	<b>66,601,943</b>	211,557,944	64,133,749

(i) Shares issued under an entitlement offer and shortfall placement on 28 June 2019 and 30 July 2019 at an issue price of 3.5 cents per share. The capital raising in 2018 relates to shares issued under a private placement to sophisticated investors on 7 September 2018 at an issue price of 7.4 cents per share.

(ii) Shares issued under a private placement to a sophisticated investor on 7 September 2018 at an issue price of 7.4 cents per share.

(iii) shares issued to John Zetzman as consideration for consultancy services for nil consideration. The market value of the shares was 9 cents per share at the date of issue.

**Reserves**

	2019	2018
	\$	\$
Foreign currency translation reserve	<b>(762,354)</b>	(765,129)
Share based payments reserve	<b>92,033</b>	304,042
	<b>(670,321)</b>	(461,087)

**Movement in foreign currency translation reserve:**

Balance at the beginning of the year	<b>(765,129)</b>	(821,684)
Foreign currency adjustment	<b>2,775</b>	56,555
Balance at the end of the year	<b>(762,354)</b>	(765,129)

**Movement in share based payments reserve:**

Balance at the beginning of the year	<b>304,042</b>	277,875
Share based payments during the year	<b>16,033</b>	26,167
Share based payments expired and transferred to accumulated losses during the year	<b>(228,042)</b>	-
Balance at the end of the year	<b>92,033</b>	304,042

*Foreign currency translation reserve*

The foreign currency translation reserve records exchange differences arising on translation of foreign controlled entities.

*Share based payments reserve*

The share-based payments reserve is used to record the expense associated with options and performance rights granted to employees under equity-settled share-based payment arrangements. It is also used to record fair value of options granted for other goods and services as well as acquisition of other assets.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**NOTE 13 EQUITY (CONTINUED)**

**Share based payments**

The share based payments expense included in the consolidated financial statements with respect to performance rights issued during the year and already issued in prior years is as follows:

	2019	2018
	\$	\$
<i>Consolidated Statement of Profit or Loss and Other Comprehensive Income</i>		
Share-based payments expense included in director and employee costs	<b>(16,033)</b>	(26,167)

*Performance Rights*

The terms and conditions of each grant of performance rights during the year affecting remuneration in the current or a future period are shown in the table below.

Description	Grant date	No. of rights	Expiry date	Vesting date	Exercise price	Fair value	Performance condition
HCD performance rights – tranche 2	6-Apr-17	30,000,000	31-Mar-19	31-Mar-19	\$nil	\$nil	HCD EBITDA of US\$8,000,000 at 31 March 2019, vesting 10 shares for every US\$1 above US\$3,000,000.
Incentive rights	11-Dec-19	5,250,000	1 Sept 21	1-Sep-21	\$nil	\$0.02	Share price exceeding 15 cents for any consecutive 3 months prior to 1 Sept 2021.
Incentive rights	11-Dec-19	5,250,000	1 Sept 21	1-Sep-21	\$nil	\$0.08	Sales revenue from the sale of Multi-Flow exceeding US\$900,000 over any 3 consecutive months prior to 1 Sept 2021

The movements in the current year of the number of performance rights granted are as follows:

Description	Grant date	Vesting date	Number at beginning of year	Granted during the year	Number of rights vested	Number of rights lapsed	Number at end of year
HCD performance rights – tranche 2	6-Apr-17	31-Mar-19	30,000,000	-	-	(30,000,000)	-
Incentive rights	11-Dec-19	1-Sep-21	-	5,250,000	-	-	5,250,000
Incentive rights	11-Dec-19	1-Sep-21	-	5,250,000	-	-	5,250,000

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 13 EQUITY (CONTINUED)

*Options*

There is no formal employee share option plan. The number of options issued, the strike price of options issued and all other relevant terms have been set having regard to the persons position in the Group and level of experience. Such options vest according to the terms that are agreed at the time of grant between HCD and the employee. However, options normally vest either immediately upon grant or progressively within 12 months. Upon termination by either HCD or by the employee, all vested options remain the property of the employee, with no change to the life of the option. Upon termination by either HCD or the employee, all unvested options lapse.

The terms and conditions of each grant of performance rights during the year affecting remuneration in the current or a future period are shown in the table below.

Description	Grant date	No. of rights	Expiry date	Vesting date	Exercise price	Fair value	Performance condition
Shares options – tranche 1	18-May-16	5,000,000	1-Apr-19	18-May-17	\$0.10	\$0.04	12 months service to 18 May 2017.
Share options – tranche 2	1-Mar-17	1,750,000	1-Mar-20	1-Mar-18	\$0.14	\$0.03	12 months service to 1 March 2018.
HCD acquisition options	6-Apr-17	33,200,000	6-Apr-19	N/A	\$0.25	\$0.01	Nil.
Share options – tranche 3	22-Sep-17	750,000	1-Mar-20	22-Sep-18	\$0.14	\$0.04	12 months service to 22 September 2018.

The movements in the current year of the number of options granted are as follows:

Description	Grant date	Vesting date	Number at beginning of year	Granted during the year	Number of options exercised	Number of options lapsed	Number at end of year
Share options – tranche 1	18-May-16	18-May-17	5,000,000	-	-	(5,000,000)	-
Share options – tranche 2	1-Mar-17	1-Mar-18	1,750,000	-	-	-	1,750,000
HCD acquisition options	6-Apr-17	N/A	33,200,000	-	-	(33,200,000)	-
Share options – tranche 3	22-Sep-17	22-Sep-18	750,000	-	-	-	750,000

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**NOTE 14 SEGMENT INFORMATION**

**Operating segments**

The Group comprises the following two operating segments defined by business units:

- operations comprising exploration, development and production of oil and gas projects in the US; and
- operations comprising clean oil technology and business (HCD) worldwide.

Unallocated amounts include administrative operations undertaken in Australia to support the exploration, development and production of oil and gas projects worldwide and clean oil technology which includes the recharging of such costs via management fees.

<b>2019</b>	<b>HCD</b>	<b>Exploration</b>	<b>Total</b>
<b>Income</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Sales	175,781	4,774	180,555
Other	9	-	9
<b>Expenditure</b>			
Director and employee related expenses	(321,518)	(204,563)	(526,081)
Other benefits/(expenses)	(1,227,699)	(414,646)	(1,642,345)
<b>Segment result</b>	<b>(1,373,427)</b>	<b>(614,435)</b>	<b>(1,987,862)</b>
Profit/(loss) attributable to discontinued operations	-	-	-
<b>Profit/(loss) for the period</b>	<b>(1,373,427)</b>	<b>(614,435)</b>	<b>(1,987,862)</b>
<b>Assets as at 31 December 2019</b>	<b>1,944,733</b>	<b>402,428</b>	<b>2,347,161</b>
<b>Liabilities as at 31 December 2019</b>	<b>6,578,566</b>	<b>48,023,646</b>	<b>54,602,212</b>
<b>2018<sup>1</sup></b>			
<b>Income</b>			
Sales	257,683	-	257,683
Other	-	148	148
<b>Expenditure</b>			
Director and employee related expenses	(332,210)	(49,064)	(381,274)
Other benefits/(expenses)	(1,772,843)	3,861,424	2,088,581
<b>Segment result</b>	<b>(1,847,370)</b>	<b>3,812,508</b>	<b>1,965,138</b>
Profit/(loss) attributable to discontinued operations	-	-	-
<b>Profit/(loss) for the period</b>	<b>(1,847,370)</b>	<b>3,812,508</b>	<b>1,965,138</b>
<b>Assets as at 31 December 2018<sup>1</sup></b>	<b>1,859,591</b>	<b>620,958</b>	<b>2,480,549</b>
<b>Liabilities as at 31 December 2018<sup>1</sup></b>	<b>5,084,163</b>	<b>47,580,127</b>	<b>52,664,290</b>

1. the 2018 comparative has been restated for a change in the representation of the segment disclosure in the current year.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**NOTE 14 SEGMENT INFORMATION (CONTINUED)**

Reconciliation of reportable segment revenue, profit or loss, assets and liabilities and other material items:

	<b>2019</b>	<b>2018<sup>1</sup></b>
	\$	\$
<b>Revenue:</b>		
Total revenue for reportable segments	<b>180,555</b>	257,683
Elimination of inter-segment revenue	-	(212,114)
<b>Consolidated revenue from contracts with customers</b>	<b>180,555</b>	45,569
<b>Other income:</b>		
Total other income for reportable segments	<b>9</b>	148
Unallocated amounts: interest income	<b>21,898</b>	24,589
<b>Consolidated other income</b>	<b>21,907</b>	24,737
<b>Director and employee related expenses:</b>		
Total director and employee related expenses for reportable segments	<b>(526,081)</b>	(381,274)
Unallocated amounts: corporate costs	<b>(351,215)</b>	(501,473)
<b>Consolidated director and employee related expenses</b>	<b>(877,296)</b>	(882,747)
<b>Other expenses:</b>		
Total other (expenses)/benefits for reportable segments	<b>(1,642,345)</b>	2,088,581
Unallocated amounts: corporate costs	<b>(785,664)</b>	(5,204,029)
<b>Consolidated other expenses</b>	<b>(2,428,009)</b>	(3,115,448)
<b>Profit/(loss):</b>		
Total profit/(loss) for reportable segments	<b>(1,987,862)</b>	1,965,138
Elimination of inter-segment revenue	-	(212,114)
Unallocated amounts: interest income	<b>21,898</b>	24,589
Unallocated amounts: corporate costs	<b>(1,136,879)</b>	(5,705,502)
<b>Consolidated profit/(loss)</b>	<b>(3,102,843)</b>	(3,927,889)
<b>Assets:</b>		
Total assets for reportable segments	<b>2,347,161</b>	2,480,549
Unallocated amounts: corporate assets	<b>58,530,001</b>	57,234,796
Elimination of inter-segment assets	<b>(54,487,728)</b>	(52,326,269)
<b>Consolidated assets</b>	<b>6,389,434</b>	7,389,076
<b>Liabilities:</b>		
Total liabilities for reportable segments	<b>54,602,212</b>	52,664,290
Unallocated amounts: corporate liabilities	<b>108,983</b>	205,016
Elimination of inter-segment liabilities	<b>(54,487,732)</b>	(52,326,269)
<b>Consolidated liabilities</b>	<b>223,463</b>	543,038

1. the 2018 comparative has been restated for a change in the representation of the segment disclosure in the current year.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 15 FINANCIAL RISK MANAGEMENT

**Overview**

The Group's principal financial instruments comprise cash and cash equivalents, trade and other receivables, loans to and from subsidiaries, and trade and other payables. The main risks arising from the Group's financial assets and liabilities are interest rate risk, price risk, foreign currency risk, credit risk and liquidity risk. This note presents information about the Group's exposure to each of the above risks, its objectives, policies and processes for measuring and managing risk.

The Group regularly analyse financial risk exposure and evaluate treasury management strategies in the context of the most recent economic conditions and forecasts. Key risks are monitored and reviewed as circumstances change (e.g. acquisition of new entity or project) and policies are created or revised as required. The overall objective of the Group's financial risk management policy is to support the Group in meeting its financial targets, whilst minimizing potential adverse effects on financial performance.

Given the nature and size of the business and uncertainty as to the timing and amount of cash inflows and outflows, the Group does not enter into derivative transactions to mitigate the financial risks. In addition, the Group's policy is that no trading in financial instruments shall be undertaken for the purpose of making speculative gains. As the Group's operations change, the Directors will review this policy.

The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework. The Board reviews and agrees policies for managing the Group's financial risks as summarised below.

The Group holds the following financial instruments which are carried at amortised cost unless otherwise stated:

	2019	2018
	\$	\$
<b>Financial assets</b>		
Cash and cash equivalents	1,627,595	2,206,515
Trade and other receivables	55,818	31,970
	<u>1,683,413</u>	<u>2,238,485</u>
<b>Financial liabilities</b>		
Trade and other payables	112,009	315,006
	<u>112,009</u>	<u>315,006</u>

**Interest rate risk**

Exposure to interest rate risk arises on cash and cash equivalents recognised at reporting date whereby a future change in interest rates will affect future cash flows or the fair value of fixed rate financial instruments.

A forward business cash requirement estimate is made, identifying cash requirements for the following period (generally up to one year) and interest rate term deposit information is obtained from a variety of banks over a variety of periods (usually one month up to six month term deposits) accordingly. The funds to invest are then scheduled in an optimised fashion to maximise interest returns.

**Interest rate sensitivity**

A sensitivity of 1% interest rate has been selected as this is considered reasonable given the current market conditions. A 1% movement in interest rates at the reporting date would have increased/(decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant. The analysis is performed on the same basis for 2018.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 15 FINANCIAL RISK MANAGEMENT (CONTINUED)

	Profit or Loss		Equity	
	1% increase	1% decrease	1% increase	1% decrease
<b>2019</b>	\$	\$	\$	\$
Cash and cash equivalents	16,276	(16,276)	16,276	(16,276)
<b>2018</b>				
Cash and cash equivalents	22,065	(22,065)	22,065	(22,065)

**Liquidity risk**

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Board's approach to managing liquidity is to ensure, as far as possible, that the Group will always have sufficient resources to meet its obligations when due.

Ultimate responsibility for liquidity risk management rests with the Board of Directors. The Group manages liquidity risk by monitoring forecast cash flows and ensuring that adequate funds from capital raising are maintained for future expenditure on working interest assets. This involves the monitoring of actual cash flows and matching the maturity profiles of financial assets and liabilities. This is based on the undiscounted cash flows of the financial liabilities based on the earliest date on which they are required to be paid.

The following table details the remaining contractual maturity for non-derivative financial liabilities.

	Total Contractual		Carrying Amount
	<1 year	Cash Flows	
<b>2019</b>	\$	\$	\$
Trade and other payables	112,009	112,009	112,009
	<b>112,009</b>	<b>112,009</b>	<b>112,009</b>
<b>2018</b>			
Trade and other payables	315,006	315,006	315,006
	315,006	315,006	315,006

**Foreign exchange risk**

The Group is exposed to fluctuations in foreign currencies arising from the sale and purchases of goods and services in currencies other than the Group's presentation currency. The Group is also exposed to transactional currency movements. Such exposures arise from transactions which are denominated in currencies other than the functional currency of the Group. The Group's exposure to foreign currency risk primarily arises from the Group's operations overseas, namely in the United States.

The Group is also exposed to fluctuations in foreign currencies arising from the loans advanced by the Australian-based parent entity (denominated in AUD) to its United States based subsidiaries. Foreign currency gains/losses are recorded by the subsidiaries and are eliminated on consolidation via the foreign currency translation reserve.

The Group currently does not engage in any hedging or derivative transactions to manage foreign currency risk. The Group's policy is to generally convert its local currency to US dollars at the time of transaction.

Based on financial instruments held in a foreign currency at 31 December 2019 and 31 December 2018, had the Australian dollar strengthened/weakened by 10% there an increase/decrease in the US net assets by \$37,419 and an increase/decrease in the Canadian net assets by \$4,675. The exposure to foreign exchange is considered to be immaterial as the majority of the foreign liabilities relate to related party payables which are eliminated on consolidation.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### NOTE 15 FINANCIAL RISK MANAGEMENT (CONTINUED)

#### Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. This arises principally from cash and cash equivalents and trade and other receivables. The Group exposure and the credit ratings of its counterparties are continuously monitored by the Board of Directors.

The maximum exposure to credit risk at the reporting date is the carrying amount of the financial assets as summarised in the table above.

#### Credit risk exposures

##### *Trade and other receivables*

Trade and other receivables comprise receivables from the sale of products and services to predominantly unrelated entities. All potential customers are rated for credit worthiness, taking into account their size, market position and financial standing. The receivable balances are monitored on an ongoing basis. The Group's exposure to bad debts is not significant. At 31 December 2019 \$nil, (2018: \$nil) of the Group's receivables were past due.

##### *Cash and cash equivalents, restricted cash and term deposits*

The Group has a significant concentration of credit risk with respect to cash deposits with banks. However, significant cash deposits are invested across three to four banks to mitigate credit risk exposure to a particular bank. AAA rated banks are mostly used and non AA banks are utilised where commercially attractive returns are available.

The Group does not have any material credit risk exposure to any single receivable or Group of receivables under arrangements entered into by the Group.

#### Price risk

Price risk relates to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices.

The Group is exposed to commodity price risk. Commodity prices can be volatile and are influenced by factors beyond the Group's control. As the Group is currently engaged in exploration, no sales of commodities are forecast for the next 12 months, and accordingly, no hedging or derivative transactions have been used to manage commodity price risk.

#### Capital risk management

When managing capital, management's objective is to ensure the Group continues as a going concern and to maintain a structure that ensures the lowest cost of capital available and to ensure adequate capital is available for exploration and evaluation of tenements. In order to maintain or adjust the capital structure, the Group may seek to issue new shares.

Consistent with others in the industry, the Group monitors capital on the basis of forecast exploration and evaluation expenditure required to reach a stage which permits a reasonable assessment of the existence or otherwise of an economically recoverable reserve. Total capital is calculated as 'equity' as shown in the Consolidated Statement of Financial Position.

There were no changes in the Group's approach to capital management during the year. The Group is not subject to externally imposed capital requirements.

#### Fair value measurement

The fair value of financial assets and financial liabilities must be estimated for recognition and measurement and for disclosure purposes.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 15 FINANCIAL RISK MANAGEMENT (CONTINUED)

## Fair value hierarchy

AASB 7 *Financial Instruments: Disclosures* requires disclosure of fair value measurements by level as determined by the following fair value measurement hierarchy:

- (a) Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- (b) Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices); and
- (c) Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

## Other fair value disclosures

The Directors consider that the carrying amount of trade and other receivables and trade and other payables recorded in the consolidated financial statements approximates their fair values due to their short-term nature.

The recoverable amount of the HCD CGU has been calculated using the fair value less costs of disposal method, which has been assessed using both Level 1 and Level 3 inputs. Refer to note 4(b) for further information.

## NOTE 16 EARNINGS PER SHARE

	2019	2018
	\$	\$
<b>(a) Reconciliation of earnings used in calculating basic and diluted earnings per share:</b>		
Loss for the year	<b>(3,102,843)</b>	(3,927,889)
Loss used in the calculation of the basic and dilutive earnings per share	<b>(3,102,843)</b>	(3,927,889)
<b>(b) Weighted average number of ordinary shares used as the denominator:</b>		
Weighted average number of ordinary shares used in calculating basic earnings per share	<b>245,164,182</b>	187,613,369
<i>Adjustments for the calculation of diluted earnings per share:</i>		
Option / performance rights	-	-
	-	-
Weighted average number of ordinary shares used in calculating dilutive earnings per share	<b>245,164,182</b>	187,613,369

(c) Options and performance rights are considered to be “potential ordinary shares” and have been included in the determination of diluted earnings per share to the extent to which they are dilutive. Details relating to options and performance rights are set out in note 13.

## NOTE 17 COMMITMENTS

There are no commitments as at 31 December 2019 (2018: Nil).

## **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

### **NOTE 18 CONTINGENT LIABILITIES**

The Group is party to a royalty agreement with Director Mr Nicholas Castellano, whereby the Group is obliged to pay a monthly royalty equal to the greater of:

- (a) US\$20,000; subject to adjustment as described below; or
- (b) 5% of net revenue (gross revenue minus taxes and commissions) from the HCD business.

Until the amount of US\$19.5 million is paid in full.

The minimum royalty instalment described in point (i) above was adjusted due to a material change in the business, in which a customer (“the Customer”) elected to stop using Multi-Flow, causing a reduction in ongoing revenue. The parties agreed that the minimum royalty instalment be reduced from USD\$20,000 per month to USD\$16,000 per month, until HCD has entered into a firm contract with either:

- (a) the Customer and/or a related party of the Customer for the sale by HCD of at least 140 drums of Multi-Flow per month for a minimum period of 6 months; or
- (b) one or more credible third parties other than the Customer and/or a related party of the Customer for the sale by the Group of at least 35 drums of Multi-Flow per month for a minimum period of 6 months.

The royalty agreement is non-recourse and may be terminated by either party at any time without penalty. Royalty payments to date have been expensed as incurred.

### **NOTE 19 SUBSEQUENT EVENTS**

Mr. William Tarantino joined the group on 2 January 2020 as CEO of HCD’s chemical business. Mr Tarantino is a very experienced energy executive with a strong background in oilfield chemical sales, operations and marketing. Mr. Tarantino will be responsible for the overseeing the marketing, sales, production and development of HCD’s chemical business centred around the Company’s key product, HCD Multi-Flow®.

The directors note that the recent events surrounding COVID-19 an “oil shock”, upon which Russia and Saudi Arabia have cut prices and boosted production leading to a 30% fall in the price of crude oil in March 2020, may have an effect on the company. The full effects on the Group are unknown, however it is expected that trials may be delayed and the ability to raise capital may be reduced.

The Group announced on 27 March 2020 that it will undertake a 1 for 5 non-renounceable Rights Issue at \$0.015/share to raise up to \$850,000. The issue price of the Rights Issue is a 25% discount to the prevailing share price of \$0.02. Cost saving measure have also been introduced to reduce fixed costs by approximately \$1million/year. These measures include directors Stephen Mitchell, Ray Shorrocks and Allan Ritchie agreeing to forgo all director and consulting fees until further notice, and executive director Nick Castellano accepting a reduced salary from US\$180,000 to US\$120,000. Reflecting his more recent appointment to the board, non-executive director Andrew Seaton has agreed to forgo cash fees in favour of share based payments (subject to shareholder approval).

Other than that noted above, in the opinion of the directors, there has not arisen in the interval between the end of the financial year and the date of the report any other matter or circumstance that has significantly affected, or may significantly affect the Group’s operations, results or the state of affairs in future financial years.

## **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

### **NOTE 20 RELATED PARTY DISCLOSURE**

#### **Related party transactions**

##### *Parent entity*

The legal parent entity is Hydrocarbon Dynamics Limited. Details of the controlled entities are set out in note 21.

##### *Transactions with related parties*

During the year, the Group paid the following amounts to related party entities:

- \$50,518 of board fees to Spring Street Holdings Pty Ltd, a company associated with Ray Shorrocks.
- \$62,000 of consulting fees (in lieu of board fees) to True Success Pty Ltd, a company associated with Allan Ritchie.
- \$259,519 of salaries and wages and \$277,249 of royalties to NC2 LLC, a company associated with Nicholas Castellano.
- \$160,000 of consulting fees to Yurpal Australia Pty Ltd, a company associated with Douglas Hamilton.

\$150,000 was also paid to Lowell Accounting Services for accounting and secretarial services and rent, an entity of which Stephen Mitchell and Julie Edwards are Directors.

Transactions between related parties are on normal commercial terms and conditions no more favourable than those available to other parties unless otherwise stated.

##### *Transactions with controlled entities*

Transactions between Hydrocarbon Dynamics Limited and its subsidiaries during the year included:

- loans advanced to/repayments from subsidiaries; and
- investments in subsidiaries.

The loans and investments have been impaired so that the net assets of the parent do not exceed the net assets of the Group. The loans to subsidiaries are interest free, repayable in cash at call and are unsecured.

#### **Key management personnel**

Key management personnel includes:

Stephen Mitchell	Executive Chairman
Nicholas Castellano	Executive Director
Ray Shorrocks	Non-executive Director
Allan Ritchie	Non-executive Director
Andrew Seaton	Non-executive Director
Bill Tarantino	CEO – Chemical Division (appointed 2 January 2020)
Douglas Hamilton	Business Development Manager (ceased 31 July 2019)
Julie Edwards <sup>1</sup>	Company Secretary

1. Julie Edwards is remunerated via an external accounting firm, Lowell Accounting Services Pty Ltd

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****NOTE 20 RELATED PARTY DISCLOSURE (CONTINUED)**

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
Short-term benefits	<b>798,841</b>	1,085,107
Long-term benefits	<b>1,655</b>	764
Post-employment benefits	<b>16,973</b>	21,645
Equity-based payments	<b>16,033</b>	8,167
	<b>833,502</b>	1,115,683

Refer to the Remuneration Report in the Directors' Report for further information.

**Parent entity disclosures****ASSETS**

Current assets	<b>1,609,043</b>	2,213,533
Non-current assets	<b>4,665,770</b>	10,249,954
<b>TOTAL ASSETS</b>	<b>6,274,813</b>	12,463,487

**LIABILITIES**

Current liabilities	<b>105,576</b>	215,931
Non-current liabilities	<b>3,266</b>	1,611
<b>NON-CURRENT LIABILITIES</b>	<b>108,842</b>	217,542
<b>NET ASSETS</b>	<b>6,165,971</b>	12,245,945

**EQUITY**

Issued capital	<b>62,857,124</b>	60,453,157
Reserves	<b>92,033</b>	304,042
Accumulated losses	<b>(56,783,186)</b>	(48,511,254)
<b>TOTAL EQUITY</b>	<b>6,165,971</b>	12,245,945

**COMPREHENSIVE LOSS FOR THE YEAR**

Loss for the year	<b>(8,499,974)</b>	(1,068,846)
<b>TOTAL COMPREHENSIVE LOSS FOR THE YEAR</b>	<b>(8,499,974)</b>	(1,068,846)

## HYDROCARBON DYNAMICS LIMITED

(ABN 75 117 387 354)

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### NOTE 21 GROUP STRUCTURE

The consolidated financial statements incorporate the assets, liabilities and results of the following subsidiaries in accordance with the accounting policy described in note 3(a).

Name of entity	Country of incorporation	Class of shares	Equity holding % <sup>1</sup>	
			2019	2018
HCD Brazil Pty Ltd	Australia	Ordinary	100	100
Hydrocarbon Dynamics Australia Pty Ltd	Australia	Ordinary	100	100
HCD Canada Ltd	Canada	Ordinary	100	100
HCDI Holdings Ltd	Hong Kong	Ordinary	100	100
Hydrocarbon Dynamics Ltd	Hong Kong	Ordinary	100	100
HCD Offshore SDN BND	Malaysia	Ordinary	100	100
Hydrocarbon Dynamics UK Ltd	Canada	Ordinary	100	100
HCD Blending LLC	USA	Ordinary	100	100
Indago Oil and Gas Inc	USA	Ordinary	100	100
TOC LLC dba Triopco LLC	USA	Ordinary	100	100
Trimissco LLC	USA	Ordinary	100	100

1. percentage of voting power is in proportion to ownership interest.

## **DIRECTORS' DECLARATION**

In the Directors' opinion:

1. the attached consolidated financial statements and notes are in accordance with the *Corporations Act 2001*, including:
  - a. complying with Australian Accounting Standards (including the Australian Accounting Interpretations) and the *Corporations Regulations 2001*; and
  - b. giving a true and fair view of the financial position as at 31 December 2019 and of the performance for the year ended on that date of the Group.
2. As stated in Note 1, the consolidated financial statements also comply with International Financial Reporting Standards.
3. There are reasonable grounds to believe that the Group will be able to pay its debts as and when they become due and payable.

The Directors have been given the declarations by the Managing Director and Financial Controller required by section 295A of the *Corporations Act 2001*.

This declaration is made in accordance with a resolution of the Board of Directors.



Stephen Mitchell  
Chairman  
Melbourne, Victoria  
31 March 2020

**INDEPENDENT AUDITOR'S REPORT  
TO THE MEMBERS OF HYDROCARBON DYNAMICS LIMITED****Report on the Audit of the Financial Report***Opinion*

We have audited the financial report of Hydrocarbon Dynamics Limited ("the Company") and its controlled entities ("the Group"), which comprises the consolidated statement of financial position as at 31 December 2019, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the *Corporations Act 2001*, including:

- (a) giving a true and fair view of the Group's financial position as at 31 December 2019 and of its financial performance for the year then ended; and
- (b) complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

*Basis for Opinion*

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* ("the Code") that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of the Group, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

*Material Uncertainty Related to Going Concern*

We draw attention to note 2 in the financial report which states that the ability of the Group to continue as a going concern is dependent on the its ability to successfully raise funds through debt, equity or farm-out, the successful exploration and subsequent exploitation of its working interests, or the commercialisation of the its HCD product. As stated in note 2, these events or conditions indicate that a material uncertainty exists that may cast significant doubt on the Group's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

*Emphasis of Matter – Subsequent Events (COVID-19 and Subsequent Oil Shock)*

We draw attention to Note 19, which describes the impact of the Coronavirus (COVID-19) and the oil shock on the Group. Our opinion is not modified in respect of this matter.

### Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How our audit addressed the matter
<b>IMPAIRMENT OF EXPLORATION AND EVALUATION ASSET</b> <b><i>Refer to Note 10: Exploration and evaluation expenditure</i></b>	
<p>The Group is involved in exploration and evaluation activities with the aim of identifying, evaluating and subsequently developing new sources of oil and gas. The Group holds exploration and evaluation tenements in Kentucky (the Illinois project) and Utah (the Asphalt Ridge project).</p> <p>Exploration and evaluation assets totalling \$239,048 as disclosed in Note 10 represent a significant balance recorded in the consolidated statement of financial position.</p> <p><i>AASB 6 Exploration for and Evaluation of Mineral Resources</i> require the exploration and evaluation asset to be assessed for impairment when facts and circumstances suggest that the carrying amount may exceed its recoverable amount.</p> <p>Management performed an impairment assessment at 31 December 2019 that require management to make key assumptions in determining whether impairment indicators exist, including:</p> <ul style="list-style-type: none"> <li>▪ Reserve certification;</li> <li>▪ Testing and analysis results to date;</li> <li>▪ Fluctuations in oil prices; and</li> <li>▪ Capital expenditure estimates.</li> </ul> <p>An impairment expense of \$545,490 was recognised during the year.</p>	<p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> <li>▪ Understanding and evaluating the controls pertaining to exploration and evaluation expenditure;</li> <li>▪ Testing a sample of additions to the exploration and evaluation asset for the year ending 31 December 2019;</li> <li>▪ Assessing the adequacy of the Group's disclosures;</li> <li>▪ Testing the compliance with the lease terms of each tenement;</li> <li>▪ Evaluating management's methodologies and the basis for key assumptions utilised in the impairment assessment; and</li> <li>▪ Assessing the adequacy of the Group's disclosures and impairment assessment methodology disclosed in note 10 to the financial report.</li> </ul>

## IMPAIRMENT OF INTANGIBLE ASSETS

*Refer to Note 11: Goodwill and Intangible assets*

The Group acquired HCDI Holdings Limited ('HCD') in 2017 resulting in the recognition of goodwill and intellectual property with the carrying value recognised in the Group's consolidated statement of financial position as at 31 December 2019 of \$3,282,899 and \$663,218 respectively.

As these balances constitute 61.4% of the total assets of the Group and the use of key estimates and judgments in the assessment of any potential impairment, this is a key area of audit focus.

Our procedures included, amongst others:

- Understanding and evaluating the controls pertaining to goodwill and intellectual property;
- Assessing management's determination of the Group's Cash Generating Units ("CGUs") based on our understanding of the Group's business and internal reporting;
- Evaluating management's impairment assessment of goodwill and other identifiable intangible assets by challenging the key estimates and assumptions used by management;
- Challenging the appropriateness of the market approach (fair value less costs of disposal) valuation method used to determine the fair value in accordance with AASB 13 *Fair Value*;
- Assessing the carrying value of the Group's CGU to which goodwill and identifiable intangible assets have been allocated with regard to the Group's enterprise value at 31 December 2019; and
- Assessing the adequacy of the Group's disclosures and impairment assessment methodology disclosed in note 11 to the financial report.

### *Other Information*

The directors are responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended 31 December 2019, but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

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 in this regard.

### *Responsibilities of the Directors for the Financial Report*

The directors of the Group are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error. In preparing the financial report, the directors are responsible for assessing the ability of the Group 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 Group or to cease operations, or has no realistic alternative but to do so.

#### *Auditor's Responsibilities for the Audit of the Financial Report*

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's 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 the Australian Auditing Standards 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 this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the financial report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the financial report of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

## REPORT ON THE REMUNERATION REPORT

### *Opinion on the Remuneration Report*

We have audited the Remuneration Report included on pages 12 to 19 of the directors' report for the year ended 31 December 2019. In our opinion, the Remuneration Report of Hydrocarbon Dynamics Limited, for the year ended 31 December 2019, complies with section 300A of the *Corporations Act 2001*.

### *Responsibilities*

The directors of the Group are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the *Corporations Act 2001*. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

*Pitcher Partners*

PITCHER PARTNERS

*J. Evans*

JASON EVANS

Partner  
Brisbane, Queensland  
31 March 2020

## HYDROCARBON DYNAMICS LIMITED

(ABN 75 117 387 354)

### SHAREHOLDER INFORMATION

Additional information required by the Australian Securities Exchange Ltd Listing Rules and not disclosed elsewhere in this report is as follows. The information is current as at 30 March 2020.

#### 1. Substantial shareholders

The number of securities held by substantial shareholders and their associates are set out below:

##### Fully paid Ordinary Shares

Name	Number	%
Sterling McGregor Super Pty Ltd	26,485,658	9.39
Stephen Mitchell	18,500,002	6.56
Equity Trustees Limited ACF Lowell Resources Fund	14,531,756	5.15

#### 2. Number of security holders and securities on issue

Indago has issued the following equity securities:

282,077,778 fully paid ordinary shares held by 1,521 shareholders;  
14,050,000 unlisted Incentive Rights held by 10 rights holders

#### 3. Voting rights

##### Ordinary shares

The voting rights attached to ordinary shares are that on a show of hands, every member present, in person or proxy, has one vote and upon a poll, each share shall have one vote.

##### Incentive Rights

The holders of Incentive Rights do not have any voting rights on the Rights held by them.

#### 4. Distribution of security holders

##### Quoted securities

##### Fully paid ordinary shares

Category	Fully paid ordinary shares		
	Holders	Shares	%
1 - 1,000	419	199,814	0.07
1,001 - 5,000	333	891,208	0.32
5,001 - 10,000	111	828,733	0.29
10,001 - 100,000	396	15,014,372	5.32
100,001 and over	259	265,143,651	94.00
<b>Total</b>	<b>1,511</b>	<b>282,077,778</b>	<b>100.00</b>

## HYDROCARBON DYNAMICS LIMITED

(ABN 75 117 387 354)

### Unquoted securities

#### Incentive Rights

Category	Incentive Rights		
	Holders	Options	%
1 - 1,000	0	0	0.00
1,001 - 5,000	0	0	0.00
5,001 - 10,000	0	0	0.00
10,001 - 100,000	0	0	0.00
100,001 and over	10	14,050,000	100.00
<b>Total</b>	<b>10</b>	<b>14,050,000</b>	<b>100.00</b>

#### 5. Unmarketable parcel of shares

The number of security investors holding less than a marketable parcel of securities is 1086 with a combined total of 6,178,470 securities.

#### 6. Twenty largest shareholders of quoted equity securities

##### Fully paid ordinary shares

Details of the 20 largest shareholders by registered shareholding are:

	Name	No. of shares	%
1	STIRLING MCGREGOR SUPER PTY LTD<STIRLING MCGREGOR SUPER A/C>	26,485,658	9.39%
2	EQUITY TRUSTEES LIMITED <LOWELL RESOURCES FUND A/C>	14,531,756	5.15%
3	WHEELBARROW INVESTMENTS PTY LTD <WILLIAM BURRELL FAMILY A/C>	8,768,890	3.11%
4	MR AMIN TALIB KHAN	8,608,096	3.05%
5	HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	7,852,534	2.78%
6	STEPHEN MITCHELL	7,500,000	2.66%
7	MUTUAL TRUST PTY LTD	6,769,152	2.40%
8	CHAG PTY LTD	6,250,000	2.22%
9	BUDERIM PANORAMA PTY LTD	6,019,170	2.13%
10	MAWALLOK PASTORAL COMPANY PTY LTD	6,000,001	2.13%
11	G & J SUPER FUND PTY LTD <G & J SUPER FUND A/C>	5,991,419	2.12%
12	TITUS ENERGY LIMITED	5,668,140	2.01%
13	MR STEPHEN PETER MITCHELL &MRS SERENA CLARE MITCHELL <S P MITCHELL SUPER FUND A/C>	5,000,001	1.77%
14	GXB PTY LTD	5,000,000	1.77%
15	YAVERN CREEK HOLDINGS PTY LTD	4,700,000	1.67%
16	MR CHARLES TULLOCH ARTHUR	4,000,000	1.42%
17	FIRST GROWTH FUNDS LIMITED	3,500,000	1.24%
18	SAYERS INVESTMENTS (ACT) PTY LIMITED <THE SAYERS INVEST NO 2 A/C>	3,450,900	1.22%
19	PHILEL PTY LTD <D & E SKAZAS FAMILY A/C>	3,210,979	1.14%
20	MR PETER ANDREW PROKSA	3,150,000	1.12%
	<b>Total</b>	<b>142,456,696</b>	<b>50.50%</b>

## HYDROCARBON DYNAMICS LIMITED

(ABN 75 117 387 354)

### CORPORATE DIRECTORY

#### Registered and Principal Office

Hydrocarbon Dynamics Limited  
Level 6, 412 Collins Street  
Melbourne VIC 3000

**Phone:** +61 3 9642 2899

**Fax:** +61 3 9642 5177

**Website:** [www.hydrocarbodynamics.com](http://www.hydrocarbodynamics.com)

#### Share Registry

Automic  
Level 5, 126 Phillip Street  
SYDNEY NSW 2000

**Phone:** 1300 288 664

**Fax:** +61 2 9698 5414

#### Auditors

Pitcher Partners  
Level 38, Central Plaza,  
345 Queen Street  
Brisbane QLD 4000

#### Stock Exchanges

Australian Securities Exchange Limited (ASX)

**Code:** HCD

International OTC Pink (United States)

**Code:** POGLY

#### Australian Company Number

117 387 354

#### Australian Business Number

75 117 387 354