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# ANNUAL REPORT

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## 2019

Empire Energy Group Limited  
and its controlled entities  
ABN 29 002 148 361

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**CORPORATE DIRECTORY**

<b>Directors</b>	Paul Espie AO (Chairman) Alexander Underwood (Managing Director) John Gerahty Prof John Warburton (appointed 6 February 2019) David Sutton (resigned 30 June 2019) Linda Tang (until 6 February 2019)
<b>Executives</b>	David Evans (Chief Operating Officer) Ben Johnston (Vice President – Business Development) Alex Bruce (Chief Geoscientist)
<b>Financial Controller</b>	Kylie Arizabaleta
<b>Company Secretary</b>	Julian Rockett
<b>Registered Office</b>	Level 19, 20 Bond Street Sydney NSW 2000
<b>Australian Auditors</b>	Nexia Sydney Level 16, 1 Market Street, Sydney NSW 2000
<b>US Auditors</b>	Schneider Downs & Co. Inc One PPG Place, Suite 1700, Pittsburgh PA 15222
<b>Australian Solicitors</b>	Clifford Chance Level 16, 1 O’Connell Street, Sydney NSW 2000
<b>US Solicitors</b>	Depew Rathbun & Gillen McInteer, LC 8301 East 21st Street North, Suite 450, Wichita, KS 67206-2936
<b>Bankers</b>	Macquarie Bank Limited 50 Martin Place, Sydney NSW 2000  Australia & New Zealand Banking Group Limited 1 Chifley Plaza, Sydney NSW 200  PNC Bank 249 Fifth Avenue, One PNC Plaza, Pittsburgh PA 15222
<b>Share Registry</b>	Computershare Investors Services Pty Limited Level 3, 60 Carrington Street, Sydney NSW 2000 Telephone: 1300 85 05 05
<b>Stock Exchange Listings</b>	Empire Energy Group Limited shares are listed on the: <ul style="list-style-type: none"> <li>- Australian Securities Exchange (ASX code: EEG)</li> <li>- New York OTC Market (Code: EEGNY) OTC#: 452869103</li> </ul> Sponsor: Bank of New York 1 ADR for 20 Ordinary Shares
<b>Website</b>	<a href="http://www.empireenergygroup.net">www.empireenergygroup.net</a>

## LETTER TO SHAREHOLDERS FROM THE CHAIRMAN AND THE MANAGING DIRECTOR

Dear Shareholders,

We are pleased to present you with Empire's 2019 Annual Report.

In 2019 we made significant progress executing our strategy for value creation, which is focused on:

1. Debt reduction and the optimisation of our US assets to focus on our world-class Northern Territory McArthur and Beetaloo Basin position;
2. Building upon our Northern Territory asset base focused on upstream oil and gas through strategic investment in the exploration, appraisal and development of our McArthur and Beetaloo Basin assets and potentially others consistent with the capital capacity of Empire Energy and its partners; and
3. Building a Board of Directors and management team with the experience and capability to guide Empire through what we believe will be a significant and sustained period of growth.

Having repositioned the Company since 2018, the Board and management team have established a platform for longer term growth notwithstanding poor capital market conditions caused by COVID-19 and oil market instability. We consider the future of the Beetaloo and McArthur Basins to have very high value.

### Balance Sheet Strength

In 2018, debt was reduced from \$38m to \$26m.

In 2019, debt was further reduced to \$7.5m, a reduction of 70% over the course of this year. This was achieved through free cash flow generation, from the sale of our Kansas oil production assets in September 2019 for \$19.25m.

We carried out a capital raising in November 2019 which raised A\$12m.

We increased our cash balance from \$4.1m to \$9.9m over the course of the year. This placed the company in a net cash position for the first time since 2011.

These improvements through the course of 2019 have allowed Empire to continue making investments in our Northern Territory assets, including the 2D seismic program in EP187 and drilling approvals, and to build a skilled management team to take the company through the next phase of growth.

Empire's remaining US gas production assets in New York State and Pennsylvania had another strong year of operational performance with minimal production decline from the existing wells which contributed to free cash flow for much of the year. The US gas market is currently experiencing significant pressure as many States across the US reduce industrial activity due to economic curtailment designed to prevent the further transmission of COVID-19.

Empire has hedging in place over 80% of forecast production for 2020 and additional hedges in place until 2023. These hedges have floor prices of \$2.50 / mcf. This is a substantial premium to current spot prices of ~\$1.60 / mcf, which are the lowest in 25 years. These hedges will allow the company to benefit from any market price increments above \$2.50 / mcf once market conditions improve.

Despite the hedging program, the company anticipates that the US business will continue to face profit margin challenges while low market prices persist.

In order to protect the balance sheet from the risk of ongoing gas market weakness, Empire has sought and received waivers of existing and potential breaches of the credit agreement from Macquarie Bank Limited until 31 December 2020 (inclusive). In consideration for this, the company has recently made principal prepayments of \$825,000 from existing US dollar cash balances. This has reduced remaining debt to \$6.675m.

Whilst we could not have anticipated the dramatic impact that COVID-19 has had on the global economy, our efforts to strengthen the balance sheet and build our liquidity mean that we are well positioned now. We are minimising non-essential expenditures, so that we can preserve cash holdings in preparation for value-adding work in the Northern Territory when conditions improve.

#### Building upon the Northern Territory Asset Base

During the year Empire made value-accretive investments in its Northern Territory properties, including a 231-line km seismic program in EP187 which was carried out in November 2019.

We were pleased with the results of the seismic program which demonstrated that the Velkerri and Kyalla Shales extend into Empire's EP187 tenement at depths and thicknesses ideal for petroleum development and on trend with our neighbours Santos and Origin. We have identified an un-faulted 40,000 acre Phase 1 Work Program Area on the Western side of EP187 in which the Velkerri Shale is approximately 500m thick, and the Kyalla Shale is approximately 100m thick.

In January 2020, we received drilling approvals for our first well, Carpentaria-1, which will target these shales in the Phase 1 Work Program area.

We have engaged Netherland Sewell & Associates, a respected petroleum consulting firm based in Dallas, Texas, which is generating an independent prospective resource report for release in the second quarter. We believe it will demonstrate that a substantial petroleum resource exists in Empire's Northern Territory properties which cover over 14.5m acres in the Beetaloo and McArthur Basins.

The recent outbreak of COVID-19 in Australia has necessitated Government restrictions on travel through large parts of the country, including our work program areas. Consequently, the Board of Directors has decided to defer its investment decision regarding the timing of the drilling of Carpentaria-1, until we are confident that we will be able to drill the well appropriately and minimise the risk of transmission of COVID-19. Our obligation to, and relationships with, the Northern Territory communities in which we operate is of the highest importance.

Our neighbours in these basins, Santos and Origin, have had encouraging early results as their Beetaloo Basin work programs ramp up. Santos carried out a vertical fracture stimulation on the existing Tanumbirini-1 well in the tenement adjacent to our EP187 in January 2020 and reported "better than expected" flow rates of up to 1.2 mmcf / day. This result bodes well for further horizontal appraisal drilling activities in the Beetaloo Basin. The next phase of Santos' appraisal program will be the drilling and fracture stimulation of two horizontal wells targeting the Velkerri formation.

Northern Australia is a key focus for growth for Santos. In late 2019, Santos announced that it had acquired a majority working interest in the Darwin LNG plant from ConocoPhillips. This plant has substantial expansion capacity and provides a route to Asian markets for Santos' Beetaloo Basin gas.

Origin recently drilled the first horizontal well targeting the Kyalla formation on its Beetaloo Basin properties. Its joint venture partner, Falcon Oil & Gas, reported a gross Kyalla Shale thickness of 900m and, encouragingly, elevated C3, C4 and C5 (liquid hydrocarbons) readings as the well drilled through the Kyalla Shale. Origin intends to carry out a fracture stimulation of the Kyalla Shale in the horizontal section of this well once COVID-19 risks subside later this year.

### Building the Empire Team

During 2019, Empire further built the strength of the Board of Directors with the appointment of John Warburton who was a pioneer in the identification of the potential of the Northern Territory's shale basins. The pegging of Empire's commanding holdings in the Beetaloo and McArthur Basins followed in 2010. John's relationships with stakeholders in the Northern Territory continue to be of value to the company. John's story of the founding years of the company in the Northern Territory is reproduced at the back of this report.

In recent months, the management team has been reinforced with the appointments of David Evans, formerly of Drillsearch, as Chief Operating Officer, Alex Bruce as Chief Geoscientist formerly of Bridgeport Energy and Drillsearch, and Ben Johnston, formerly of Commonwealth Bank of Australia and Royal Bank of Canada, as Vice President - Business Development. This reinforcement of the team's experience and skills is essential for the optimisation of our exploration and development programs in the Beetaloo and McArthur Basins.

Our staff in Australia and the United States of America have performed at a high level during changing circumstances in both countries and we are grateful to them for this.

The health and safety of our people is our highest priority. We have enacted robust COVID-19 management policies to protect their health and minimise the risk of COVID-19 transmission while we continue to operate.

### Looking Ahead

Despite the unprecedented economic disruptions that COVID-19 has caused to the global economy, Empire is well positioned for growth as conditions normalise.

We have received Ministerial consent for our EP187 drilling program. The well design and operational planning are well advanced. The Carpentaria-1 well has been designed to allow for further appraisal activities including fracture stimulation, flow testing and ultimately horizontal development and production.

Planning to carry out a vertical fracture stimulation after the well is drilled has commenced. This will generate important technical information and add value to our properties.

While the restrictions imposed by the Australian and Northern Territory Governments to protect their populations from COVID-19 transmission risks will cause some delays to our work programs and those of our neighbours in these basins, we remain committed to the addition of value to our Northern Territory properties and are confident that when current risks subside, the future for these basins and the company will grow later in the year and beyond.

Yours sincerely,

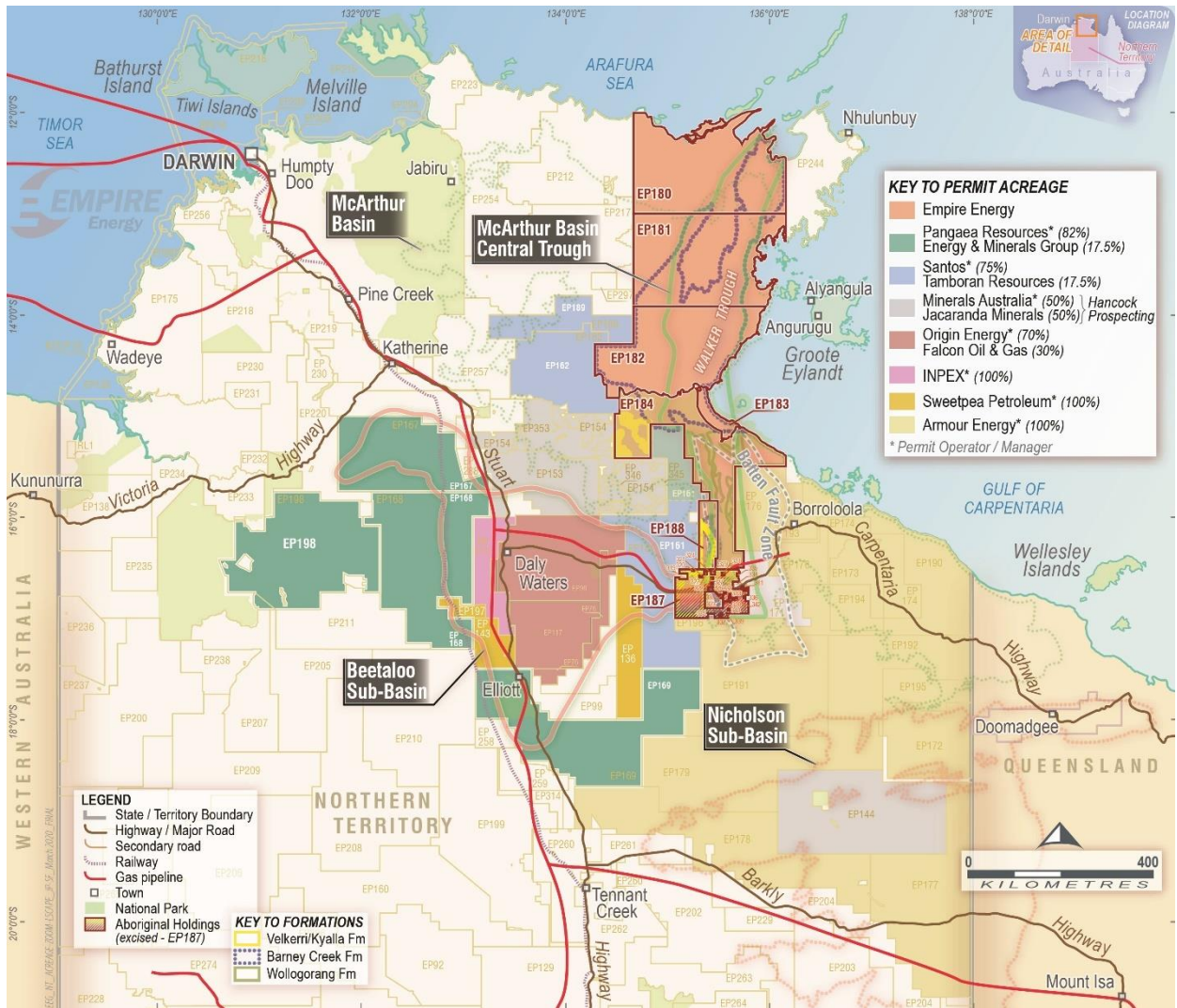


Paul Espie AO  
Chairman  
Empire Energy Group Limited



Alex Underwood  
Managing Director  
Empire Energy Group Limited

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Map detailing major operators in Beetaloo and McArthur Basins

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## OPERATIONS REVIEW

### A. 2019 OVERVIEW & HIGHLIGHTS

Empire Group's functional currency is in United States Dollars. All references to dollars are United States Dollars unless otherwise stated.

#### GROUP FINANCIAL HIGHLIGHTS

- Group Revenue<sup>1</sup> \$10.8m (2018: \$14.3m)
- Net production 1,054 boe per day (2018: 1,185 boe per day)
- Outstanding debt \$7.5m (2018: \$26.0m)
- Cash at bank \$9.9m (2018: \$4.1m)
- Net cash flows from operating activities -\$0.8m (2018: -\$0.3m)
- Total comprehensive loss -\$16.1m (2018: -\$16.0m).
- This result was impacted by a \$4.2m loss in relation to the Kansas assets which were sold during the year<sup>2</sup> and \$9.1m of non-cash balance sheet impairments and write-offs<sup>3</sup>, while the continuing operations generated an operating loss of \$2.8m.

#### AUSTRALIA – NORTHERN TERRITORY

- Empire holds a 100% working interest in over 14.5m acres of tenements across the McArthur and Beetaloo Basins, Northern Territory, Australia
- A Prospective Resource P (50) ("**PRP (50)**") of ~2.1 billion Boe or ~12.4Tcfe was announced in February 2016 for the Company's Northern Territory Assets. The PRP (50) covers approximately 5.5m acres of the total 14.5m acres held by the Company and with an average shale thickness of 330 feet. In most of the area reviewed, the shale thickness can be considerably thicker than that used for the PRP (50) estimate. (Refer to page 12 for definition of Prospective Resource)
- In November 2019, the Company acquired 231 line km of high quality 2D seismic in EP187 on the Eastern margin of the Beetaloo Basin. The seismic program demonstrated that Empire has a material Velkerri Shale and Kyalla Shale resource in EP187 on trend with discoveries made by Santos and Origin Energy in neighbouring properties.
- In January 2020, Empire received Ministerial consent from the Northern Territory Environment Minister for the drilling of a well in EP187 targeting the Velkerri and Kyalla Shales.
- Well design and planning for the drilling of Carpentaria-1 is well advanced.

<sup>1</sup> Including revenue from discontinued operations in Kansas

<sup>2</sup> See Note 20 to the Financial Statements

<sup>3</sup> See Note 28 and Note 30 to the Financial Statements. The following non-cash charges were incurred in relation to the Appalachia operations: \$3.9m impairment of the carrying value of the assets due to a decline in gas prices, \$2.6m impairment of the value of Asset Retirement Obligations due to a decrease in the discount rate applied to those obligations, \$1.4m of depreciation and amortisation and \$1.2m of non-cash financing costs.

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## OPERATIONS REVIEW (CONTINUED)

- The Company has recommenced the process of securing landholder, Traditional Owner and Government approvals to progress its Exploration Permit Applications (EP(A)'s 180, 181, 182, 183 and 188) to granted Exploration Permit status. Recommencement of these activities reflects increasing confidence given that the Northern Territory Government's decision to support the onshore shale petroleum industry has provided greater investment certainty.
- Parts of EP184 which cover the Limmen National Park and the St Vidgeon Management Area were declared Reserved Blocks in accordance with Government policies that accepted the recommendations of the Independent Inquiry into Fracture Stimulation in the Northern Territory. Reserved Blocks are areas in which oil and gas exploration and development cannot occur. Empire is negotiating with the Northern Territory Government regarding access to these areas, or compensation for past expenditures if access is not granted.

### USA – APPALACHIA & MIDCON

- In September 2019, Empire completed the sale of its Kansas oil production assets to Mai Oil Operations, Inc for \$19.25m. The proceeds of the sale were used to reduce debt and increase working capital.
- Empire's Appalachia operations had a strong operational performance throughout 2019 with minimal production declines across the asset base despite minimal capital investment. The Appalachia operations contributed to free cash flow for most of the year although more recently poor gas market conditions have reduced revenues.
- USA operations continued to trade in challenging market conditions throughout the 2019 characterised by gas prices remaining below \$3/mcf for most of the year and oil prices experiencing significant volatility throughout the year. Following the sale of Empire's Kansas properties, it has minimal direct exposure to oil prices (<1% of total US production).
- Gross oil production was 131,000 Bbls (Net 88,000 Bbls) (2018: Gross 190,000 Bbls). Empire sold its Kansas oil production operations in September 2019 which negatively impacted total oil production volumes compared to the prior year.
- Gross natural gas production was 2.11 Bcf (Net 1.78 Bcf) (2018: Gross 2.30 Bcf). Gas production in 2019 experienced natural field decline compared to the prior year and some wells were temporarily shut in during periods of low spot gas prices.
- The Company's credit facility was refinanced during the year with a new 5-year \$7.5m facility which commenced in September 2019 and which matures in September 2024. The balance reduced from \$26m to \$7.5m over the course of the year due to principal repayments made from free cash flow and the sale of the Kansas assets.
- In March 2020, in consideration for Macquarie granting waivers to the financial covenants under the credit facility until 31 December 2020 (inclusive), Empire made principal repayments of \$825,000 which reduced the remaining credit facility balance to \$6,675,000.

## B. OPERATIONS

The Company maintains a small head office in Australia and manages oil and gas production operations through its 100% owned USA subsidiary Empire Energy E&P, (Empire E&P). The exploration programs in the Beetaloo and McArthur Basins in the Northern Territory, are operated through its 100% owned subsidiary Imperial Oil & Gas Pty Ltd.

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## OPERATIONS REVIEW (CONTINUED)

## C. OPERATIONS REVIEW – USA

Operating Statistics	Notes	Dec 31, 2019	Dec 31, 2018	% change
<u>Gross Production:</u>				
Oil (MBbls)	1.1	131	190	-31%
Natural gas (MMcf)		2,113	2,299	-8%
<u>Net Production:</u>				
Oil (MBbls)		89	128	-31%
Natural gas (MMcf)		1,778	1,852	-4%
<b>Net Production (MBoe):</b>	1.2	<b>385</b>	<b>435</b>	<b>-12%</b>
<b>Net Daily Production (Boe/d):</b>				
		<b>1,054</b>	<b>1,185</b>	<b>-12%</b>
<u>Average sales price per unit (after hedging):</u>				
Oil (\$/Bbl)		\$59.76	\$59.71	0%
Natural gas (\$/Mcf)		\$2.72	\$3.25	-16%
Oil Equivalents (\$/Boe)		\$26.31	\$31.40	-16%
<u>Average sales price per unit (before hedging):</u>				
Oil (\$/Bbl)		\$52.07	\$59.71	-13%
Natural gas (\$/Mcf)		\$2.44	\$2.69	-9%
Oil Equivalents (\$/Boe)		\$23.23	\$29.02	-20%
<u>Lifting Costs (incl taxes):</u>				
	1.3			
Oil (\$/Bbl)		\$23.69	\$23.19	2%
Natural gas (\$/Mcf)		\$1.18	\$1.18	8%
Oil Equivalents (\$/Boe)		\$11.85	\$11.85	-4%
<b>2P Reserves (MMBoe):</b>	<b>1.4</b>	<b>6.1</b>	<b>13.8</b>	<b>-56%</b>

- 1.1 Note – oil production declined materially due to the sale of the Kansas oil production assets in September 2019.
- 1.2 BOE - based on SEC guidelines of an oil:gas ratio of 1:6.
- 1.3 Lifting Costs - includes lease operating expenses, production and ad valorem taxes but excludes nonrecurring expenses, G&A and field overhead.
- 1.4 Reduction in 2P reserves volumes was due to the sale of the Kansas oil production assets and reduction in undeveloped gas reserves in Appalachia due to reduced market gas prices

## OPERATIONS REVIEW (CONTINUED)

### D. OPERATIONS REVIEW – USA

#### Net Production by Region

Operating Statistics	Dec 31, 2019	Dec 31, 2018	% change
<b>Oil (MBbls)</b>			
Appalachia	3	3	-
Mid-Con	86	125	-31%
<b>Total (MBbls)</b>	<b>89</b>	<b>128</b>	<b>-30%</b>
<b>Natural gas (MMcf)</b>			
Appalachia	1,775	1,843	-4%
Mid-Con	3	9	-66%
<b>Total (MMcf)</b>	<b>1,778</b>	<b>1,852</b>	<b>-4%</b>

### E. CREDIT FACILITY

The Company has a Credit Facility with Macquarie Bank Limited. The facility has the following key terms:

Principal Amount	\$7.5m
Term	5 years
Interest Rate	LIBOR + 650 bps
Repayment Terms	No principal repayments for 2019, then 100% of Appalachia Net Operating Cashflow subject to minimum amortisation of \$550,000 per annum
Hedging	Empire shall maintain a rolling hedging program whereby 55% of forecast Proved Developed Producing Reserves shall be hedged for 3 years
Key Covenants	Net Debt > 1.3x Proved Developed Producing Reserves PV10 Net Debt > 1.5x Adjusted Proved Reserves PV10 Interest Coverage ratio > 1.3x

The draw down on the Macquarie Bank Limited Credit Facility as at December 31, 2019 was \$7.5m (cf \$26m at December 2018). Principal repayments made in 2019 were \$18.5m as a result of free cash flow generation and the sale of the Kansas assets.

As at 31 December 2019, the company breached the Adjusted Proved Reserves PV10 covenant as a result of weak gas market prices.

On 27 March 2020, Macquarie Bank Limited waived all past and existing defaults and any potential defaults up to and including 31 December 2019 in consideration for Empire making repayments of \$825,000. Those repayments were made on 27 March 2020 and reduced the debt balance to \$6.675m as at 31 March 2020.

## OPERATIONS REVIEW (CONTINUED)

### F. HEDGING

Due to the risk model implemented by Empire, a comprehensive hedging strategy has been adopted to mitigate commodity price risk.

A summary of the hedging contracts can be found at Note 14 of the Financial Statements.

The fair value (marked to market) of combined oil and gas hedges in place as at December 31, 2019 was \$0.7m. Oil and gas hedge contracts were valued based on NYMEX Henry Hub forward curves at market close on December 31, 2019.

### G. RESERVES – USA

The Company's reserves are reviewed annually by certified independent third-party reservoir engineers. The scope of the reviews is to prepare an estimate of the proved, probable and possible reserves attributable to Empire's ownership position in the subject properties.

#### INDEPENDENT REVIEW OF OIL & GAS RESERVES

#### Reserves as at December 31, 2019 – USA (NYMEX Strip Dec 31, 2019 including hedges)

Reserves - As of Dec 31, 2019	Oil (Mbbbls)	Gas (MMcf)	MBoe	Capex \$M	PV0 \$M	PV10 \$M
Reserves (Reserves)						
Proved Developed Producing	31	24,264	4,075	\$6	\$14,695	\$8,190
Proved Developed Non-producing	-	-	-	-	-	-
Proved Behind Pipe	-	-	-	-	-	-
Proved Undeveloped	-	-	-	-	-	-
<b>Total 1P</b>	<b>31</b>	<b>24,264</b>	<b>4,075</b>	<b>\$6</b>	<b>\$14,695</b>	<b>\$8,190</b>
Probable	310	10,137	2,000	\$12,474	\$29,212	\$3,640
<b>Total 2P</b>	<b>341</b>	<b>34,401</b>	<b>6,075</b>	<b>\$12,480</b>	<b>\$43,907</b>	<b>\$11,830</b>
Possible	1,230	3,791	1,862	\$22,911	\$45,825	\$4,261
<b>Total 3P</b>	<b>1,571</b>	<b>38,192</b>	<b>7,937</b>	<b>\$35,391</b>	<b>\$89,732</b>	<b>\$16,091</b>
Prospective Resource P(50) - Aust (NT)	222,000	11,076,000	2,068,000			

USA Reserves by: Graves & Co Consulting

Northern Territory Resources by: Muir & Associates P/L and Fluid Energy Consultants

#### Notes to Reserves

- "Prospective Resources" is the estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.
- The scope of the Reserve Studies reviewed basic information to prepare estimates of the reserves and contingent resources.
- The quantities presented are estimated reserves and resources of oil and natural gas that geologic and engineering data demonstrate are "In-Place" and can be recovered from known reservoirs.
- Oil prices are based on NYMEX West Texas Intermediate (WTI).

## OPERATIONS REVIEW (CONTINUED)

- Gas prices are based on NYMEX Henry Hub (HH).
- Prices were adjusted for any pricing differential from field prices due to adjustments for location, quality and gravity, against the NYMEX price. This pricing differential was held constant to the economic limit of the properties.
- All costs are held constant throughout the lives of the properties.
- The probabilistic method was used to calculate P50 reserves.
- The deterministic method was used to calculate 1P, 2P and 3P reserves.
- The reference point used for measuring and assessing the estimated petroleum reserves is the wellhead.
- "PV0" Net revenue is calculated net of royalties, production taxes, lease operating expenses and capital expenditures but before Federal Income Taxes.
- "PV10" is defined as the discounted Net Revenues of the company's reserves using a 10% discount factor.
- "1P Reserves" or "Proved Reserves" are defined as Reserves which have a 90% probability that the actual quantities recovered will equal or exceed the estimate.
- "Probable Reserves" are defined as Reserves that should have at least a 50% probability that the actual quantities recovered will equal or exceed the estimate.
- "Possible Reserves" are defined as Reserves that should have at least a 10% probability that the actual quantities recovered will equal or exceed the estimate.
- "Bbl" is defined as a barrel of oil.
- "Boe" is defined as a barrel of oil equivalent, using the ratio of 6 Mcf of Natural Gas to 1 Bbl of Crude Oil. This is based on energy conversion and does not reflect the current economic difference between the value of 1 Mcf of Natural Gas and 1 Bbl of Crude Oil.
- "M" is defined as a thousand.
- "MMBoe" is defined as a million barrels of oil equivalent.
- "Mcf" is defined as a thousand cubic feet of gas.
- All volumes presented are net volumes and have had subtracted associated royalty burdens.
- Utica shale gas potential resources have only been calculated for the region where drill data is available.
- Very few wells have been drilled into the Utica in Western NY and NW Pennsylvania. Estimates for GIP have been made were the few existing wells have been drilled. Empire holds additional acreage outside the current potential resource region. It is expected that as with shale characteristics, the shale formations will continue within the remaining acreage. The potential GIP should increase if more data was available.
- Reserve estimates have been prepared by the following independent reserve engineers:
  - New York & Pennsylvania (Appalachia)– Graves & Co Consulting.
  - Northern Territory - Muir & Associates P/L and Fluid Energy Consultants.
- The following NYMEX prices, as at December 31, 2019, were used to calculate reserves and cash flow:

Year	\$/Bbl	\$/Mcf
2020	59.80	2.29
2021	55.07	2.41
2022	52.64	2.42
2023	51.71	2.50
2024	51.70	2.49
2025	52.20	2.52
2026	52.62	2.55
2027	52.85	2.60
2028	52.85	2.64

## OPERATIONS REVIEW (CONTINUED)

### H. NORTHERN TERRITORY – A LARGE EMERGING PETROLEUM PROVINCE

Empire Energy Group Limited, through its 100% owned subsidiary Imperial Oil & Gas Pty Ltd (“Imperial”), holds a 100% interest in 59,000 square km (14.5m acres) of prospective shale oil and gas exploration acreage, in the central depositional trough of the Proterozoic McArthur Basin. The McArthur Basin is an underexplored petroleum frontier basin with a number of identified shale targets and abundant indications for the presence of gas and oil.

The Independent Prospective Resource estimates generated in 2013 are set out below for each of the key shale target formations in the Company’s Northern Territory tenements.

INDEPENDENTLY CERTIFIED ESTIMATED PROSPECTIVE RESOURCE (Unrisked)					
IDENTIFIED		AREA MM acres	P90	P50	P10
<b>Barney Creek Formation</b>	Bcf	2,982	3,304	8,699	20,172
	MMBO		66	174	403
<b>Velkerri Formation</b>	Bcf	635	383	1,192	3,086
	MMBO		8	24	62
<b>Wollogorang Formation</b>	Bcf	1,384	524	1,185	2,371
	MMBO		10	24	47
<b>TOTAL</b>	<b>MMBOE</b>		<b>786</b>	<b>2,068</b>	<b>4,783</b>

*Conversion Factor oil:gas is 1:6. Refer to page 12 for definition of Prospective Resource*

New data collected during the EP187 2D seismic program has not yet been incorporated into these Prospective Resource estimates.

At the time of the Independent Prospective Resource estimate the Kyalla Formation was considered to be too shallow in Empire’s acreage to be prospective for commercially recoverable petroleum. The 2019 seismic data acquired by Empire in EP 187 demonstrated the Kyalla Formation to be a potentially viable target and hence future updates will also include resource estimates for the Kyalla Formation.

A new prospective resource report is being prepared by Netherland, Sewell and Associates.

### I. BUSINESS RISK

**COVID-19** – As at the date of this report, border, movement and business operating restrictions are being established by the Australian Federal Government, the Northern Territory Government, the United States Government and the New York Government to mitigate the risk of transmission of the COVID-19 virus. These restrictions could impact Empire’s ability to operate in New York State, Pennsylvania and the Northern Territory. Empire continues to operate in New York State and Pennsylvania as the production of natural gas for power generation is considered an essential service by the relevant authorities, although there is a risk that the operations could be negatively impacted by the COVID-19 virus which would negatively impact revenue generation.

**Exploration Risk** - Empire and its subsidiaries have interests in assets at various stages of exploration, appraisal and development. Many leases have had very low levels of exploration undertaken to date and may not yield commercial quantities of hydrocarbons. Oil and gas exploration is inherently subject to numerous risks, including the risk that drilling will not result in commercially viable oil and gas production.

**Application Risk** – Several Empire’s Northern Territory assets are in application stage requiring native title and / or regulatory approvals to be granted as Leases capable of being explored on. Such approvals may or may not be granted which could adversely impact the value of the Company.

## OPERATIONS REVIEW (CONTINUED)

**Regulatory Risk** – Empire has operations spanning several States in the USA and the Northern Territory, Australia. Regulatory approvals are required to explore, appraise, develop and produce from the assets. Where such regulatory approvals are already in place, there is a risk that they could be revoked. Where such regulatory approvals are not in place, there is a risk that they may not be granted.

**Debt Facility Risk** – Empire, through its US subsidiaries, has debt facilities in place with Macquarie Bank Limited. Whilst Empire has financial flexibility and expects to generate sufficient cash flow to repay the debts in full, there is a risk in the future that financial and other covenants under the debt facilities, could be breached, which could result in Macquarie exercising its security rights under the facilities.

**Commodity Price Risk** – Empire, through its US subsidiaries, sells oil and gas at market prices to customers who price the products off US benchmark oil and gas markets. Empire is exposed to the risk of material declines in the prices of those commodities. Empire, through its Australian subsidiary, explores for oil and gas in Australia and maybe subject to domestic Australian gas price risk, LNG price risk and oil price risk.

**Reliance on Key Personnel** – Empire's success depends in large measure on certain key personnel. The loss of the services of such key personnel may have a material adverse effect on the business, financial condition, results of operation and prospects.

**Economic Risk** – General economic conditions, movements in interest rates, inflation rates and foreign exchange rates, investor sentiment, demand for, and supply of capital and other general economic conditions may have a negative impact on Empire and its subsidiaries ability to carry out its exploration, appraisal, development and production plans.

**Environmental Risk** – The upstream oil and gas industry is exposed to environmental risks, including the risk of oil and chemical spills, the risk of uncontrolled gas venting, and other material environmental risks. If an environmental incident was to occur, it may result in Empire's subsidiaries' licenses being revoked, its rights to carry on its activities suspended or cancelled, or significant legal consequences.

**Title Risk** – Interests in tenements in Australia are governed by the respective Territory legislation and are evidenced by the granting of licences or leases. Each licence or lease is for a specific term and carries with it annual expenditure and reporting commitments, as well as other conditions requiring compliance. Consequently, the Company could lose title to or its interest in the Tenements if licence conditions are not met or if insufficient funds are available to meet expenditure commitments. The Northern Territory Government has declared Reserved Blocks over parts of Empire's tenements which are likely to impact the Company's ability to carry out petroleum exploration and development activities on those areas.

**Native Title and Aboriginal Land** - The Tenements extend over areas in which legitimate common law native title rights of indigenous Australians exist. The ability of the Company to gain access to its Tenements and to conduct exploration, development and production operations remains subject to native title rights and aboriginal land rights and the terms of registration of such title agreements.

**Reserves Risk** – Reserves assessment is a subjective process that provides an estimate of the volume of recoverable reserves. Oil and gas estimates are not precise and are based on knowledge, experience, interpretation and industry practices. There is a risk that the Company's reserves do not generate the actual revenues and cashflows that are currently being budgeted which could adversely impact the Company.

**Services Risk** – Empire engages the services of third party service providers to carry out exploration, appraisal, development and operating activities. The cost of such services is subject to very high price volatility, particularly in remote areas. There is a risk that such services may not be able to be provided at a reasonable price, thereby preventing exploration, appraisal, development and operations activities from occurring.

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## OPERATIONS REVIEW (CONTINUED)

**Production Risk** – Empire has producing oil and gas assets in the USA. If these assets do not produce the level of production currently budgeted by Empire, then the cashflow they deliver will not materialise. The carrying values of these assets could also be adversely impacted. Production risk has the potential to adversely impact the Company.

**Insurance Risk** – The Company intends to insure its operations in accordance with industry practice. However, in certain circumstances, the Company's insurance may not be of a nature or level to provide adequate insurance cover. The occurrence of an event that is not covered or fully covered by insurance could have a material adverse effect on the business, financial condition and results of the Company. Insurance against all risks associated with mining exploration and production is not always available and where available the costs can be prohibitive.

**Acquisitions** – The Company may decide to pursue potential acquisitions in the future. This may give rise to various operational and financial risks, including, but not limited to, poor integration resulting in higher than expected integration costs, and financial underperformance of the acquired assets. There is also additional risk associated with the Company's inability to identify suitable acquisitions in the future that meet the Company's criteria. This may potentially have an adverse impact on the financial performance of the Company.

**Funding Risk** – The Company may need future capital in the future to progress the development of its acreage. There can be no guarantee that future capital, whether it be debt or equity, will be available or will be available on attractive terms. The inability to secure future capital, or in the ability to secure future capital on attractive terms, could adversely impact the value of the Company.

### J. COMPETENT PERSONS STATEMENT

The information in this report which relates to the Company's reserves is based on, and fairly represents, information and supporting documentation prepared by or under the supervision of the following qualified petroleum reserves and resources evaluators, all of whom are licensed professional petroleum engineer's, geologists or other geoscientists with over five years' experience and are qualified in accordance with the requirements of Listing Rule 5.42:

<u>Name</u>	<u>Organisation</u>	<u>Qualifications</u>	<u>Professional Organisation</u>
Mel Hainey	Graves & Co. Consulting LLC	BSc	SPE
Wal Muir	Muir and Associate P/L	BSc, MBA	PESA

\* SPE: Society of Petroleum Engineers

\*PESA: Petroleum Exploration Society of Australia

None of the above evaluators or their employers have any interest in Empire Energy E&P, LLC or the properties reported herein. The evaluators mentioned above consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

#### Note Regarding Forward- Looking Statements

Certain statements made and information contained in this press release are forward-looking statements and forward-looking information (collectively referred to as "forward-looking statements") within the meaning of Australian securities laws. All statements other than statements of historic fact are forward-looking statements.



## DIRECTORS' REPORT

### For the financial year ended 31 December 2019

In respect of the financial year ended 31 December 2019, the Directors of Empire Energy Group Limited ("Company") present their report together with the Financial Report of the Company and of the consolidated entity ("Empire Group"), being the Company and its controlled entities, and the Auditor's Report thereon.

#### DIRECTORS

The following persons held office as Directors of Empire Energy Group Limited at any time during or since the end of the financial year:

Paul Espie AO	Non-Executive Director Non-Executive Chairman (appointed 5 February 2019)
Alexander Underwood	Managing Director
John Gerahty	Non-Executive Director
David Sutton	Non-Executive Director (resigned 30 June 2019) Interim Chairman (until 5 February 2019)
Prof John Warburton	Non-Executive Director (appointed 6 February 2019)
Linda Tang	Non-Executive Director (until 6 February 2019)

All Directors have been in office since the start of the financial year unless otherwise stated.

#### PRINCIPAL ACTIVITIES

During the financial year the principal continuing activities of the consolidated entity consisted of:

The progression of exploration and appraisal work programs in Empire's wholly owned and operated EP187 permit located in the highly petroleum prospective Northern Territory McArthur Basin (Beetaloo Sub-Basin). Key activities completed during the year included the successful acquisition and interpretation of 231km of 2D seismic, Northern Territory Government Ministerial consent to conduct drilling operations and technical studies.

The acquisition, development, production, exploration and sale of oil and natural gas in the United States of America. The Empire Group sells its oil and gas products primarily to owners of domestic pipelines, utilities and refiners located in Pennsylvania and New York.

In September 2019, Empire sold its Kansas oil production assets for \$19.25m to Mai Oil Operations, Inc. The proceeds of the sale were utilised to reduce debt and increase working capital.

During 2019, Empire reviewed new exploration, development and business opportunities in the oil and gas sector to enhance shareholder value.

#### CONSOLIDATED RESULTS

The total comprehensive loss of the Empire Group for the financial year ended 31 December 2019 after providing for income tax was \$16,074,957 compared to a total comprehensive loss for the previous corresponding reporting period of \$15,968,093.

## Directors' Report for the year ended 31 December 2019

This result was impacted by a \$4.2m loss in relation to the Kansas assets which were sold during the year<sup>4</sup> and \$9.1m of non-cash balance sheet impairments and write-offs<sup>5</sup>, while the continuing operations generated an operating loss of \$2.8m.

### REVIEW OF OPERATIONS

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For information on a review of the Empire Group's operations refer to the Operations Review contained on pages 8 to 16 of this report.

### DIVIDENDS

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The Directors have not recommended the payment of a final dividend.

### SIGNIFICANT CHANGES IN STATE OF AFFAIRS

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There were no significant changes in the state of affairs of the consolidated entity during the financial period under review other than the sale of the Kansas oil production assets.

### LIKELY DEVELOPMENTS

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Except for information disclosed on certain developments and the expected results of those developments included in this report under review of operations, further information on likely developments in the operations of the consolidated entity and the expected results of those operations have not been disclosed in this report because the Directors believe it would be likely to result in unreasonable prejudice to the consolidated entity.

### MATTERS SUBSEQUENT TO BALANCE DATE

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- 1) On 23 January 2020, the Company announced the completion of processing and interpretation of the recently acquired (231-line kilometres) 2D seismic data set in its 100% owned Northern Territory EP187 permit, across the eastern sector of the Beetaloo Sub-Basin. The seismic data confirmed that the target shale sequences were present in the Company's EP187 tenement.
- 2) On 1 February 2020, the Company's Australian corporate headquarters moved office location. The Company will enter into a 5-year lease which had not been finalised as at the date of the report.
- 3) On 6 March 2020, the Company advised its shareholders that it had received Northern Territory Government Ministerial consent for the drilling of Carpentaria-1 in EP187.
- 4) As at 31 December 2019, the Company breached the Adjusted PV Ratio under the Macquarie Credit agreement. On 27 March 2020, Macquarie waived all existing / prior defaults under the credit agreement and waived any potential breaches up to and including 31 December 2020. In consideration for Macquarie granting those waivers, Empire made principal repayments totalling \$825,000 on 27 March 2020 which were funded from existing USD cash balances.

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<sup>4</sup> See Note 20 to the Financial Statements

<sup>5</sup> See Note 28 and Note 30 to the Financial Statements. The following non-cash charges were incurred in relation to the Appalachia operations: \$3.9m impairment of the carrying value of the assets due to a decline in gas prices, \$2.6m impairment of the value of Asset Retirement Obligations due to a decrease in the discount rate applied to those obligations, \$1.4m of depreciation and amortisation and \$1.2m of non-cash financing costs.

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## Directors' Report for the year ended 31 December 2019

- 5) At the date of completion of the Financial Report, the Group is continuing to monitor and respond to the effects of COVID-19. Empire has implemented robust COVID-19 policies designed to minimise the risk of transmission of COVID-19 among its workforce and local communities while minimising the risk of disruption to its ongoing business activities. Any potential financial effect of the virus on Empire's operations is currently unquantifiable.

### INFORMATION ON DIRECTORS

**Paul Espie AO, BSc, MBA**

Age 75

**Non-Executive Chairman**

Appointed Non-Executive Chairman 5 February 2019

Mr Paul Espie AO was the founding principal of Pacific Road Capital, a manager of private equity funds investing in the resources sector internationally, in 2006. He was Chairman of Oxiana Limited during the development of the Sepon copper/gold project in Laos (2000 to 2003) and prior to that Chairman of Cobar Mines Pty Ltd after a management buy-out in 1993. Mr Espie was previously responsible for Bank of America operations in Australia, New Zealand and Papua New Guinea and Chairman of the Australian Infrastructure Fund. He is the Chairman of the Menzies Research Centre, a Fellow of the Australian Institute of Company Directors, Trustee of the Australian Institute of Mining & Metallurgy and the Educational Endowment Fund.

**Special Responsibilities:**

Member of Remuneration Committee

**Other Current Listed Public Company Directorships:**

Nil

**Former Listed Public Company Directorships in Last 3 Years:**

Nil

**Alexander Underwood, LLB, BCom (Hons)**

Age 37

**Managing Director**

Mr Underwood has over fifteen years of specialist upstream oil and gas management, investing and financing experience. Previously he spent two years with the Commonwealth Bank of Australia, Singapore as Director of Natural Resources and spent nine years with Macquarie Bank in Sydney and Singapore as Associated Director of Energy Markets Division. He commenced his career at BHP Billiton Petroleum.

**Special Responsibilities:**

Chief Executive Officer of Imperial Oil & Gas Pty Limited

Managing Member of the Company's 100% wholly owned US subsidiaries

**Other Current Listed Public Company Directorships:**

Nil

**Former Listed Public Company Directorships in Last 3 Years:**

Nil

## Directors' Report for the year ended 31 December 2019

**John Gerahty, BCom, MBA**

Age 77

**Non-Executive Director**

Mr John Gerahty is a former investment banker and company director with wide experience in business and commerce. He was a Founding Director of Macquarie Bank and has served as a director of a considerable number of publicly listed companies, including roles as Chairman of AFP Group PLC and MPI Mines Ltd. He is currently Chairman of Associated Media Investments Pty Ltd and an associated company AMI Advertising Media Pty Ltd. He is also a Director of Kaplan Partners Pty Ltd and Kaplan Funds Management Pty Ltd, as well as his family owned Liangrove group companies. He was formerly a Director (and Chairman) of the Sydney Swans, a Director of Cricket NSW, and a Trustee of the SCG Trust.

**Special Responsibilities:**

Member of the Audit and Risk Committee

**Other Current Listed Public Company Directorships:**

Nil

**Former Listed Public Company Directorships in Last 3 Years:**

Nil

**David Sutton, B.Com ACIS**

Age 76

**Non-Executive Director**

Resigned 30 June 2019

Mr Sutton has many years' experience as a director of companies involved in share broking and investment banking in Australia and Hong Kong.

He is executive chairman of APC Securities Pty Ltd, a boutique financial services company focusing on the global resource sector.

Prior to his current role he was a partner and director of several ASX participant firms and a member of the Stock Exchange of Melbourne and subsequently Australian Securities Exchange Limited.

Apart from Empire Energy he has been a director of several ASX listed resource companies including Silver Mines Limited. He has also been a director of a number of private mineral exploration companies.

**Special Responsibilities:**

Member of Audit and Risk Committee

**Other Current Listed Public Company Directorships:**

Nil

**Former Listed Public Company Directorships in Last 3 Years**

Silver Mines Limited

Precious Metals Investments Limited

**Professor John Warburton, PhD, FGS, FPESA, MAICD**

Age 62

**Non-Executive Director**

John Warburton has 35 years of professional oil and gas experience in operated and non-operated conventional and unconventional petroleum discovery, development and in new business delivery. John has worked in Western Europe, West Africa, Central Asia, Middle East, Pakistan, Papua New Guinea and throughout the Asia Pacific Region including Australia and New Zealand. He has resided as an expatriate in a number of these regions and has a keen focus on people, safety, cultural heritage and environment.

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## Directors' Report for the year ended 31 December 2019

Prof Warburton's career includes 14 years of senior technical and leadership roles at BP. He was Executive General Manager for Exploration & New Business at Eni in Pakistan, and until March 2018 John was Chief of Geoscience & Exploration Excellence at Oil Search Ltd.

Prof Warburton has been a Director of Empire's wholly owned Northern Territory subsidiary, Imperial Oil & Gas Pty Limited ("Imperial"), since 2011 and was its Chief Executive Officer from 2011 to 2014. He continues to serve as a Non-Executive Director of Imperial. In addition, John is Visiting Professor in the School of Earth & Environment at Leeds University UK where he has served eight years on the External Advisory Board of 'Petroleum Leeds', the centre for excellence in Petroleum Engineering & Geoscience.

### Special Responsibilities

Non-Executive Director of Imperial Oil & Gas Pty Limited  
Member of the Remuneration Committee  
Member of the Audit and Risk Committee

### Other Current Listed Public Company Directorships:

Senex Energy Limited

### Former Listed Public Company Directorships in Last 3 Years:

Nil

## COMPANY SECRETARY

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### Julian Rockett

Mr Rockett was appointed Joint Company Secretary on 28 March 2019. Mr Rockett is employed by Boardroom Pty Limited in their Corporate Secretarial Services Division. Mr Rockett is a qualified corporate lawyer and an experienced Company Secretary for ASX Listed companies.

## EXECUTIVES

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**David Evans** BSc(Hons) Geology; PGDip. Petroleum Exploration Geology, MAppSc

### Chief Operating Officer

Mr Evans was appointed to the position of Chief Operating Officer on 30 October 2019. Mr. Evans has 30 years' global upstream oil & gas exploration, development and production experience in increasingly senior technical and managerial roles, with significant exposure to Australian and North American unconventional hydrocarbon plays. For the past 3 years, Mr Evans held the role of Chief Operating Officer at ASX listed, US focused, Elk Petroleum Limited. Prior to joining Elk, Mr. Evans held the positions of Chief Technical Officer and Acting Chief Operating Officer with ASX listed company Drillsearch Energy Limited for six years, a period of substantial growth for that company.

**Ben Johnston** BCom, CA, MBA

### Vice President Business Development

Mr Johnston was appointed to the position of Vice President Business Development on 1 November 2019. Mr Johnston qualified as a chartered accountant with KPMG and obtained his MBA at the Australian Graduate School of Management. Following his studies Mr Johnston has worked with leading financial institutions including RBC Capital Markets and Commonwealth Bank of Australia in London and Sydney. Throughout his banking career Mr Johnston focused on corporate advisory and lending to energy and natural resources clients across M&A, ECM and debt / project finance transactions.

**Kylie Arizabaleta** B.Bus (Acct) (Fin)

### Financial Controller

Ms Arizabaleta was appointed to the position of Financial Controller in March 2012. Before joining Empire Energy Group Limited she worked in Chartered Accounting firms specialising in Audit and Assurance Services and holds over 16 years' experience.

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## Directors' Report for the year ended 31 December 2019

### MEETINGS OF DIRECTORS

The number of Directors' meetings and committee meetings held and the attendance by each of the Directors of the Company at those meetings during the financial year were:

Director	Directors' Meetings		Remuneration Committee Meetings		Audit Committee Meetings	
	Attended	Held Whilst in Office	Attended	Held Whilst in Office	Attended	Held Whilst in Office
Mr A Underwood	9	9	-	-	-	-
Mr P Espie	9	9	4	4	-	-
Mr J Gerahty	9	9	-	-	3	3
Prof J Warburton	8	8	4	4	3	3
Mr D H Sutton	3	4	-	-	-	-
Ms L Tang	1	1	-	-	-	-

During the Financial Year, the Audit and Risk Committee comprised of Mr Gerahty and Prof Warburton. The Remuneration Committee comprised of Mr Espie and Prof Warburton.

### Retirement, Election and Continuation in Office of Directors

- Mr Sutton was appointed Interim Chairman 30 August 2018 until 5 February 2019, then returned to the role of Non-Executive Director following which he resigned from the Board on 30 June 2019.
- Mr Espie AO was appointed Non-Executive Chairman on 5 February 2019.
- Prof John Warburton was appointed Non-Executive Director on 5 February 2019.
- Ms Tang was removed from the Board by a resolution of shareholders at the Extraordinary General Meeting conducted on 6 February 2019.

### Remuneration Report – Audited

This report outlines the remuneration arrangements in place for Directors and Executives of the Empire Group.

### REMUNERATION COMMITTEE

During the Financial Year, the Remuneration Committee reviewed and approved policy for determining executives' remuneration and any amendments to that policy. The Committee makes recommendations to the Board on the remuneration of Executive Directors (including base salary, incentive payments, equity awards and service contracts) and remuneration issues for Non-Executive Directors.

The members of the Remuneration Committee during the period were:

P Espie AO	Non-Executive Chairman
J Warburton	Independent Non-Executive Director

The Committee meets as often as required but not less than once per year. The Committee met four times during the period and Committee member's attendance record is disclosed in the table of Directors Meetings shown above.

### Executive Directors' and Executive Remuneration

Executive remuneration and other terms of employment are reviewed annually and are based on predetermined performance criteria tied to operational outcomes and total shareholder return ("Key Performance Indicators" or "KPIs").

## Directors' Report for the year ended 31 December 2019

In addition to base salary, remuneration packages include superannuation and other bonuses and incentives linked to KPIs. Executive Directors and executives can participate in a Share Rights Scheme which was approved by shareholders in 2019. Remuneration packages are set at levels that are intended to attract and retain executives capable of managing the Consolidated Entity's operations. Consideration is also given to reasonableness, acceptability to shareholders and appropriateness for the current level of operations.

The Remuneration Committee seeks the advice of independent remuneration consultants to benchmark remuneration levels.

### Performance Based Remuneration

As part of the executives' remuneration packages there is a performance-based component, consisting of KPIs. The intention of this program is to align the interests of executives with shareholders.

Performance in relation to the KPIs are assessed annually, with incentive payments awarded depending on performance of the Empire Group over the past year. Incentives payments can be awarded in cash and / or Share Rights.

Following the assessment, the KPIs will be reviewed by the Remuneration Committee in light of the desired and actual outcomes, and their efficiency assessed in relation to the Empire Group's goals and total shareholder returns.

The Company implemented a new Share Rights Plan to provide for performance-based remuneration to executives of the Company which was approved by Shareholders on 30 May 2019.

### Non-Executive Directors' Remuneration

Remuneration of Non-Executive Directors is determined by the Board based on recommendations from the Remuneration Committee and the maximum amount approved by shareholders from time to time. Non-executive Directors can participate in the Share Rights Plan.

The Board undertakes an annual review of its performance and the performance of the Board Committees against performance goals set. Details of the nature and amount of each element of the remuneration of each Director and each key management personnel of the Empire Group receiving the highest remuneration are set out in the following tables.

The annual limit on cash remuneration that can be paid to the Non-Executive Directors is A\$300,000. This was approved by shareholders on 30 May 2019.

#### *Use of remuneration consultants*

During the financial year ended 31 December 2019, the consolidated entity, through the Remuneration Committee, engaged Godfrey Remuneration Group to review its existing remuneration policies and provide recommendations on how to improve both the STI and LTI programs. This has resulted in share-based payments remuneration in the form of performance rights (LTI) being awarded to executives including the Managing Director. Godfrey Remuneration Group was paid A\$21,550 for these services.

An agreed set of protocols has been put in place to ensure that the remuneration recommendations would be free from undue influence from key management personnel. These protocols include requiring that the consultant not communicate with affected key management personnel without a member of the Remuneration Committee being present or without the authorisation of the Chairman of the Remuneration Committee, and that the consultant not provide any information relating to the outcome of the engagement with the affected key management personnel. The Board is also required to make inquiries of the consultant's processes at the conclusion of the engagement to ensure that they are satisfied that any recommendations

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## Directors' Report for the year ended 31 December 2019

made have been free from undue influence. The Board is satisfied that these protocols were followed and as such there was no undue influence.

### 2019 Financial Year

	Short term benefits			Post-employment benefits	Long-term benefits			Total \$
	Cash salary and fees	Bonus payments	Non-monetary	Super contributions	Termination Payment	Long service leave	Share / option-based payments*	
<b>Directors</b>								
A Underwood	279,286	-	13,185	7,137	-	-	99,540	399,148
D H Sutton	-	-	-	20,856	-	-	18,050	38,906
L Tang	1,430	-	-	-	-	-	18,050	19,480
P Espie	36,155	-	-	3,435	-	-	-	39,590
J Gerahty	26,037	-	-	2,473	-	-	-	28,510
J Warburton	50,024	-	-	2,335	-	-	-	52,359
<b>Executives</b>								
A Boyer**	80,400	-	34,194	-	54,000	-	14,004	182,598
D Evans	43,172	-	-	2,834	-	-	37,150	83,156
B Johnston	28,967	-	-	2,434	-	-	15,750	47,151

\* Share/Option based payments reflect a proportion of the independently valued cost of options granted under the Employee Share Option Plan ("ESOP"). The cost shown is a non-cash cost and includes, on a pro-rata basis, the independently valued cost of options issued using the Black Scholes methodology.

\*\* Al Boyer's employment was terminated on 16 April 2019. He was paid termination benefits in accordance with the terms of his termination.

### 2018 Financial Year

	Short term benefits			Post-employment benefits	Long-term benefits			Total \$
	Cash salary and fees	Bonus payments	Non-monetary	Super contributions	Termination Payment	Long service leave	Share / option-based payments**	
<b>Directors</b>								
B W McLeod	253,269	-	15,599	-	362,100*	-	49,328	680,296
A Underwood	210,010	-	-	-	-	-	57,218	267,228
D H Sutton	-	-	-	14,958	-	-	10,428	25,386
L Tang	14,958	-	-	-	-	-	10,428	25,386
P Espie	2,172	-	-	-	-	-	-	2,172
J Gerahty	2,172	-	-	-	-	-	-	2,172
J Warburton	23,391	-	-	-	-	-	-	23,391
<b>Executives</b>								
A Boyer	219,520	-	72,362	-	-	-	11,957	303,839

\* Mr McLeod's services company had a services agreement in place with the Company which provided for termination payments to be made in the event of the termination of Mr McLeod's consulting services agreement. The termination payment made to Mr McLeod's services company was made in accordance with the consulting services agreement, subject to statutory limitations on the quantum of termination payments allowable under the Corporations Act 2001 (Cth).

\*\* Share/Option based payments reflect a proportion of the independently valued cost of options granted under the Employee Share Option Plan ("ESOP"). The cost shown is a non-cash cost and includes, on a pro-rata basis, the independently valued cost of options issued using the Black Scholes methodology. Once the options reach vesting date, the cost shown amortises to \$0. The non-cash cost of the above options issued under the ESOP over the year was \$108,884 and the non-cash loss on options relating to the above directors that expired over the year was \$53,276. The net non-cash cost of options issued to the above directors and executives for the year was \$55,608.



## Directors' Report for the year ended 31 December 2019

### Service Agreements

Remuneration and other terms of employment for key management personnel are formalised in service agreements. Details of these agreements are as follows:

Name:	John Warburton
Title:	Non-Executive Director
Details:	There is a Consulting Services Agreement in place between Imperial Oil & Gas Pty Limited, a wholly owned subsidiary of Empire, and Insight Exploration Pty Ltd (Prof John Warburton's consulting services company) for the purpose of Prof Warburton providing technical consulting services to Imperial Oil & Gas Pty Limited and the Company as and when required.
Name:	Alex Underwood
Title:	Chief Executive Officer
Details:	Base Salary for the year ended 31 December 2019 of A\$369,996 plus superannuation of A\$21,004 to be reviewed annually by the Remuneration Committee. Entitled to receive short-term incentives (STIs) and long-term incentives (LTIs) under the Company's Rights Plan.
Name:	David Evans
Title:	Chief Operating Officer
Details:	Base Salary for the year ended 31 December 2019 of A\$320,000 plus superannuation of A\$21,004 to be reviewed annually by the Remuneration Committee. Entitled to receive short-term incentives (STIs) and long-term incentives (LTIs) under the Company's Rights Plan.
Name:	Ben Johnston
Title:	Vice President – Business Development
Details:	Base Salary for the year ended 31 December 2019 of A\$250,000 plus superannuation of A\$21,004 to be reviewed annually by the Remuneration Committee. Entitled to receive short-term incentives (STIs) and long-term incentives (LTIs) under the Company's Rights Plan.

There are no other service agreements in place formalising the terms of remuneration of directors or other members of key management personnel of the Company and the consolidated entity.

### Loans to Directors and Executives

There were no loans made to Directors or other members of key management personnel of the Company and the consolidated entity during the period commencing at the beginning of the financial period and up to the date of this report.

There are no loans outstanding at the date of this report.

### Share-based compensation to Directors and Key Management Personnel

#### Options

No options were granted to Directors and other members of key management personnel during the year.

## Directors' Report for the year ended 31 December 2019

### Service and Performance Rights

The terms and conditions of each grants of service and performance rights affecting remuneration of directors and other key management personnel in this financial year or future reporting year are as follows:

#### Service Rights

Director	Number of granted service rights	Grant Date	Vesting date and exercisable date	Expiry date	Exercise price	Fair value of Rights at grant date
A Underwood	1,000,000	14 June 2019	31 Aug 2021	30 June 2034	Nil	\$180,000

#### Performance Rights

Director	Number of granted service rights	Grant Date	Vesting date and exercisable date	Expiry date	Exercise price	Fair value of Rights at grant date
A Underwood	3,150,000	14 June 2019	31 Aug 2021	30 June 2034	Nil	\$89,100
D Evans	362,317	30 Dec 2019	31 Dec 2021	30 Dec 2034	Nil	\$53,452
B Johnston	153,569	30 Dec 2019	31 Dec 2021	30 Dec 2034	Nil	\$22,656

The vesting of Performance Rights is subject to challenging performance hurdles tested as at the Vesting date including internal performance hurdles tied to the executive's performance and total shareholder returns of between 10% per annum compounded and 40% per annum compounded from the date of award to the Vesting date.

No Performance Rights or Service Rights expired or were exercised in the year.

#### Directors' Interests and Benefits

The relevant interest of each director in the share capital of the Company as at the date of this report is:

#### Number of shares held by Directors or other members of key management personnel:

Director	Balance at 1 January 2019	Share Consolidation 1:10	Acquired during period through Capital Raisings	Acquired on Market	Other changes during period	Balance at 31 December 2019
A Underwood	17,500,000	(15,750,000)	-	200,000	-	1,950,000
D H Sutton	734,295	(660,866)	-	-	(73,430) <sup>6</sup>	-
L Tang	-	-	-	-	-	-
P Espie	8,500,000	(7,650,000)	-	4,000,000	-	4,850,000
J Gerahty	122,450,000	(110,205,000)	-	-	-	12,245,000
J Warburton	-	-	-	194,000	-	194,000

<sup>6</sup> Shares held at resignation date

## Directors' Report for the year ended 31 December 2019

### Option holdings

Number of options over ordinary shares in the Company held during the financial period by each Director or other members of key management personnel of the Company, including their related entities are set out below:

Director	Balance at 1 January 2019	Share Consolidation 1:10	Granted during the period	Exercised during the period	Expired/forfeited/other	Balance at 31 December 2019
A Underwood	8,500,000	(7,650,000)	-	-	-	850,000
D H Sutton	2,000,000	(1,800,000)	-	-	-	200,000
L Tang	2,000,000	(1,800,000)	-	-	-	200,000
P Espie	3,750,000	(3,375,000)	-	-	-	375,000
J Gerahty	55,625,000	(50,062,500)	-	-	-	5,562,500
J Warburton	-	-	-	-	-	-

The following options held by Directors were issued under an Employee Share Option Plan (which has since been replaced by the Share Rights Plan for all future equity-linked remuneration to Directors) and were exercisable on the following basis and subject to a minimum term of employment conditions:

Director	No. of options	Exercise Price A\$	Expiry Date
D H Sutton	200,000	\$0.30	31 December 2022
L Tang	200,000	\$0.30	31 December 2022
A Underwood	600,000	\$0.30	30 December 2021

### Performance Rights holdings

Number of performance rights in the Company held during the financial period by each Director or other members of key management personnel of the Company, including their related entities are set out below:

Director	Balance at 1 January 2019	Granted during the period	Exercised during the period	Expired/forfeited/other	Balance at 31 December 2019
A Underwood	-	3,150,000	-	-	3,150,000
D Evans	-	362,317	-	-	362,317
B Johnston	-	153,569	-	-	153,569

### Service Rights holdings

Number of service rights in the Company held during the financial period by each Director or other members of key management personnel of the Company, including their related entities are set out below:

Director	Balance at 1 January 2019	Granted during the period	Exercised during the period	Expired/forfeited/other	Balance at 31 December 2019
A Underwood	-	1,000,000	-	-	1,000,000

### End of Audited Remuneration Report

## Directors' Report for the year ended 31 December 2019

### SHARE OPTIONS

#### Movements

##### Cancelled

At the Company's Annual General Meeting conducted on 30 May 2019, Shareholders approved the consolidation of the Company's equity on a 1 for 10 basis. The effect of Share Consolidation during the period reduced the number of options on issue by 497,699,996.

##### Grant of Options

The following options were granted during the financial year:

Number		Exercise Price A\$	Expiry Date
4	Unlisted options	\$0.30	26 September 2020
2,800,000	Unlisted options	\$0.60	30 December 2022
2,800,004			

4 unlisted options exercisable at A\$0.30 were issued to existing option holders to account for rounding effects after the share and option consolidation.

2,800,000 unlisted options exercisable at A\$0.60 were issued to the Joint Lead Managers of a capital raising in November 2019 in partial consideration for their services.

##### Exercise of Options

A total of 1,275,004 unlisted options were exercised during the financial year or in the period since the end of the financial year and up to the date of this report.

##### Expiry of Options

The following options have expired during the financial year or in the period since the end of the financial year and up to the date of this report.

Number		Exercise Price A\$	Expiry Date
100,000	Unlisted options	\$0.28*	25 August 2019

\* Following a Pro-Rata Rights Issue announced in December 2016 the original exercise price of these options (A\$0.03) was adjusted pursuant to the terms and conditions of the options and ASX Listing Rule 6.22.

At the date of this report the total number of unissued shares held under option was 57,275,004. These options are exercisable on the following terms.

Number		Exercise Price A\$	Expiry Date
906,250	Unlisted options	\$0.32	31 July 2020
36,768,754	Unlisted options	\$0.30	26 September 2020
600,000	Unlisted options	\$0.30	26 October 2020
1,300,000	Unlisted options	\$0.30	30 December 2021
300,000	Unlisted options	\$0.30	30 December 2021
300,000	Unlisted options	\$0.30	30 December 2021
1,700,000	Unlisted options	\$0.30	30 December 2021
600,000	Unlisted options	\$0.30	30 December 2021
12,000,000	Unlisted options	\$0.32	31 December 2021
2,800,000	Unlisted options	\$0.60	30 December 2022
57,275,004			

## Directors' Report for the year ended 31 December 2019

### PERFORMANCE RIGHTS

1) During the 2013 financial year the Company issued 2,500,000 Performance Rights (pre-consolidation) over fully paid ordinary shares in the Company as part consideration for the buyback of the minority interest equity holder in Empire Energy USA LLC. The minority interest holder also received 4,000,000 fully paid ordinary shares in the issued capital of Empire Energy Group Limited. The Performance Rights are exercisable at no cost under the following events:

- Lifting of the current moratorium on oil and/or natural gas fracking in New York State;
- If the Company sells, transfers or assigns all or substantially all of its property interests in Chautauqua and Cattaraugus Counties in the State of New York to an unaffiliated third party then the performance rights will vest in accordance with the following schedule:

Fair Market Value of Consideration Received by the Company	Performance rights exercisable
Less than \$25.0m	0.0%
At least \$25.0m but less than \$45.0m.	Percentage calculated by dividing Fair Market Value of Consideration received by the Company by \$45.0m.
\$45.0m or more	100.0%

- If the holder of the Performance Rights in any way disposes of more than 75% of the 4 million ordinary shares assigned as part of the minority interest buy back transaction prior to either the moratorium being terminated or a third party sale being consummated then the performance rights will be cancelled.
- The holder of the Performance Rights is an associated entity of a former senior executive of the Company's US subsidiaries, Mr Allen Boyer.
- At the Company's Annual General Meeting conducted on 30 May 2019, Shareholders approved the consolidation of the Company's equity on a 1 for 10 basis. The effect of the Share Consolidation during the period reduced the 2,500,000 Performance Rights to 250,000 Performance Rights.

2) During the 2019 financial year the Company issued 3,150,000 Performance Rights to the Managing Director under the terms of the Company's Rights Plan approved by Shareholders on 30 May 2019. The award of Performance Rights to the Managing Director was approved by Shareholders on 30 May 2019.

3) During the 2019 financial year, the Company issued 962,811 Performance Rights to senior executives (excluding the Managing Director) under the terms of the Company's Rights Plan which was approved by Shareholders on 30 May 2019.

### SERVICE RIGHTS

During the 2019 financial year the Company issued 1,000,000 Service Rights to the Managing Director under the terms of the Company's Rights Plan approved by Shareholders on 30 May 2019. The award of Service Rights to the Managing Director was approved by shareholders on 30 May 2019.

### DIRECTORS' AND OFFICERS' INDEMNITIES AND INSURANCE

During the financial year Empire Energy Group Limited paid an insurance premium, insuring the Company's Directors (as named in this report), Company Secretary, executive officers and employees against liabilities not prohibited from insurance by the *Corporations Act 2001*. A confidentiality clause in the insurance contract prohibits disclosure of the amount of the premium and the nature of insured liabilities.

## Directors' Report for the year ended 31 December 2019

### Proceedings on Behalf of the Company

No person has applied for leave of court to bring proceedings on behalf of the Company or intervene in any proceedings to which the Company is a party for the purpose of taking responsibility on behalf of the Company for all or any part of those proceedings. The Company was not a party to any such proceedings during the year.

### Environmental Regulations

There are significant environmental regulations surrounding mining activities which have been conducted by the Empire Group. However, there has been no material breach of these regulations during the financial period or since the end of the financial period and up to the date of this report.

### Declaration by the Group Executive Officer and Chief Financial Controller

The Directors have received and considered declarations from the Chief Executive Officer and Chief Financial Controller in accordance with Section 295A of the Corporations Act. The declaration states that in their opinion the Company's and Consolidated Entity's financial reports for the financial year ended 31 December 2019 present a true and fair view in all material aspects of the financial position and performance and are in accordance with relevant accounting standards.

### Non-Audit Services

The Directors are satisfied that the provision of non-audit services during the period by the auditor (or by another person or firm on the auditors' behalf) is compatible with the general standard of independence for auditors imposed by the *Corporations Act 2001*.

Details of amounts paid or payable to the auditor for non-audit services are outlined in Note 34 to the financial statements.

The audit firm is engaged to provide tax compliance services. The Directors believe that given the size of the Empire Group's operations and the knowledge of those operations by the audit firm that it is appropriate for the auditor to provide these services. The Directors are of the opinion that these services will not compromise the auditor's independence requirements of the *Corporations Act 2001*.

### Auditors' Independence Declaration Under Section 307 of the *Corporations Act 2001*

A copy of the Auditors' Independence declaration as required under Section 307C of the *Corporations Act 2001* is set out on page 31 and forms part of the Director's Report for the financial year ended 31 December 2019.

### Auditor

Nexia Sydney continues in office in accordance with Section 327 of the *Corporations Act 2001*. No officers of the Empire Group were previously partners of the audit firm.

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



**Alex Underwood**  
**Chief Executive Officer and Managing Director**  
Sydney 31 March 2020

The Board of Directors  
Empire Energy Group Limited  
Level 19, 20 Bond Street  
SYDNEY NSW 2000

31 March 2020

To the Board of Directors of Empire Energy Group Limited

**Auditor's independence declaration under section 307C of the Corporations Act 2001**

As lead audit partner for the audit of the financial statements of Empire Energy Group Limited for the financial year ended 31 December 2019, I declare that to the best of my knowledge and belief, there have been no contraventions of:

- (a) the auditor independence requirements of the Corporations Act 2001 in relation to the audit; and
- (b) any applicable code of professional conduct in relation to the audit.

Yours sincerely



**Nexia Sydney Partnership**



**Lester Wills**  
Partner

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## CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

for the year ended 31 December 2019

	Note	Year ended December 2019 US\$	Year ended December 2018 US\$
Sales Revenue	6a	5,396,603	6,592,523
Cost of Sales	7	(4,188,781)	(4,722,618)
<b>Gross Profit</b>		<b>1,207,822</b>	<b>1,869,905</b>
Other income	6b	155,428	2,191,941
General and administration expenses		(3,221,403)	(3,194,651)
Exploration expenses		(141,674)	(441,297)
Other non-cash expenses	9a	(9,201,243)	(4,763,159)
<b>Operating Loss before interest costs</b>		<b>(11,201,070)</b>	<b>(4,337,261)</b>
Net interest expense	8	(636,843)	(800,893)
<b>Loss before income tax from continuing operations</b>		<b>(11,837,913)</b>	<b>(5,138,154)</b>
Income tax expense	10a	(134,865)	(115,470)
<b>Loss after income tax from continuing operations</b>		<b>(11,972,778)</b>	<b>(5,253,624)</b>
Loss after income tax from discontinued operations	20	(4,150,891)	(10,613,430)
<b>Loss after income tax expense for the year</b>		<b>(16,123,669)</b>	<b>(15,867,054)</b>
<b>Other comprehensive (loss)/income</b>			
Items that will subsequently be reclassified to profit and loss:			
Exchange differences on translation of foreign operations		48,712	(101,039)
Other comprehensive (loss)/income for the year, net of tax		48,712	(101,039)
<b>Total comprehensive loss for the year</b>		<b>(16,074,957)</b>	<b>(15,968,093)</b>
		<b>Cents per share</b>	<b>Cents per share</b>
<b>Earnings per share for loss from continuing operations attributable to the owners of Empire Energy Group Limited</b>			
Basic earnings per share	31	(5.11)	(2.24)
Diluted earnings per share	31	(5.11)	(2.24)
<b>Earnings per share for loss from discontinuing operations attributable to the owners of Empire Energy Group Limited</b>			
Basic earnings per share	31	(1.77)	(4.53)
Diluted earnings per share	31	(1.77)	(4.53)
<b>Earnings per share for loss attributable to the owners of Empire Energy Group Limited</b>			
Basic earnings per share	31	(6.88)	(6.77)
Diluted earnings per share	31	(6.88)	(6.77)

The above statements of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes.

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## CONSOLIDATED STATEMENT OF FINANCIAL POSITION as at 31 December 2019

	Note	As at December 2019 US\$	As at December 2018 US\$
<b>CURRENT ASSETS</b>			
Cash and cash equivalents		9,882,386	4,157,175
Trade and other receivables	11	1,814,422	2,286,234
Prepayments	12	135,622	402,915
Inventories	13	33,603	29,974
Financial assets, including derivatives	14	426,751	262,142
Assets of discontinued operations	20	252,272	25,623,628
<b>TOTAL CURRENT ASSETS</b>		<b>12,545,056</b>	<b>32,762,068</b>
<b>NON-CURRENT ASSETS</b>			
Financial assets, including derivatives	14	262,286	-
Oil and gas properties	15	26,276,337	31,008,872
Property, plant and equipment	15	356,947	231,958
Right-of-use assets	19	141,197	-
Intangible assets	16	68,217	68,217
<b>TOTAL NON-CURRENT ASSETS</b>		<b>27,104,984</b>	<b>31,309,047</b>
<b>TOTAL ASSETS</b>		<b>39,650,040</b>	<b>64,071,115</b>
<b>CURRENT LIABILITIES</b>			
Trade and other payables	17	3,355,857	3,601,232
Interest-bearing liabilities	18	6,480,970	24,368,652
Lease liabilities	19	99,922	10,002
Provisions	21	49,947	17,805
Liabilities of discontinued operations	20	100,079	1,981,652
<b>TOTAL CURRENT LIABILITIES</b>		<b>10,086,775</b>	<b>29,979,343</b>
<b>NON-CURRENT LIABILITIES</b>			
Lease liabilities	19	126,475	60,847
Provisions	21	15,771,500	12,660,953
<b>TOTAL NON-CURRENT LIABILITIES</b>		<b>15,897,975</b>	<b>12,721,800</b>
<b>TOTAL LIABILITIES</b>		<b>25,984,750</b>	<b>42,701,143</b>
<b>NET ASSETS</b>		<b>13,665,290</b>	<b>21,369,972</b>
<b>EQUITY</b>			
Contributed equity	22	101,523,681	94,071,529
Reserves		4,846,269	6,470,493
Accumulated losses		(92,704,660)	(79,172,050)
<b>TOTAL SHAREHOLDERS' EQUITY</b>		<b>13,665,290</b>	<b>21,369,972</b>

The above consolidated statements of financial position should be read in conjunction with the accompanying notes.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

### for the year ended 31 December 2019

Consolidated	Issued Capital	Fair Value Reserve	Foreign Currency Translation Reserve	Options Reserve	Accumulated Losses	Total Equity
Balance at 31 December 2018	94,071,529	127,396	(199,373)	6,542,470	(79,172,050)	21,369,972
<b>Total Comprehensive income for year</b>						
Loss after income tax	-	-	-	-	(16,123,669)	(16,123,669)
Exchange differences on translation of foreign operations	-	-	48,712	-	-	48,712
<b>Total comprehensive income/(loss) for the year</b>	-	-	48,712	-	(16,123,669)	(16,074,957)
<b>Transactions with owners, recorded directly in equity</b>						
Issue of ordinary shares	8,487,142	-	-	-	-	8,487,142
Plus: share issue transaction costs	(1,034,990)	-	-	-	-	(1,034,990)
Options issued during the year – share-based payments	-	-	-	918,123	-	918,123
Warrants lapsed in period, transferred to issue capital	-	-	-	(2,591,059)	2,591,059	-
<b>Total transactions with owners</b>	7,452,152	-	-	(1,672,936)	2,591,059	8,370,275
<b>Balance at 31 December 2019</b>	101,523,681	127,396	(150,661)	4,869,534	(92,704,660)	13,665,290

The above consolidated statements of changes in equity should be read in conjunction with the accompanying notes.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY for the year ended 31 December 2018

Consolidated	Issued Capital	Fair Value Reserve	Foreign Currency Translation Reserve	Options Reserve	Accumulated Losses	Total Equity
Balance at 31 December 2017	<b>78,415,335</b>	<b>127,396</b>	<b>(98,333)</b>	<b>5,123,575</b>	<b>(63,304,996)</b>	<b>20,262,977</b>
<b>Total Comprehensive income for year</b>						
Loss after income tax	-	-	-	-	(15,867,054)	(15,867,054)
Exchange differences on translation of foreign operations	-	-	(101,040)	-	-	(101,040)
<b>Total comprehensive loss for the year</b>	<b>-</b>	<b>-</b>	<b>(101,040)</b>	<b>-</b>	<b>(15,867,054)</b>	<b>(15,968,094)</b>
<b>Transactions with owners, recorded directly in equity</b>						
Issue of ordinary shares	16,628,221	-	-	-	-	16,628,221
Plus: share issue transaction costs	(972,027)	-	-	-	-	(972,027)
Options issued during the year – share-based payments	-	-	-	1,418,895	-	1,418,895
<b>Total transactions with owners</b>	<b>15,656,194</b>	<b>-</b>	<b>-</b>	<b>1,418,895</b>	<b>-</b>	<b>17,075,089</b>
<b>Balance at 31 December 2018</b>	<b>94,071,529</b>	<b>127,396</b>	<b>(199,373)</b>	<b>6,542,470</b>	<b>(79,172,050)</b>	<b>21,369,972</b>

The above consolidated statements of changes in equity should be read in conjunction with the accompanying notes.

## CONSOLIDATED STATEMENT OF CASH FLOWS

### for the year ended 31 December 2019

	Note	Year ended 31 December 2019 US\$	Year ended 31 December 2018 US\$
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Receipts from customers		11,307,393	16,414,087
Payments to suppliers and employees		(10,040,877)	(13,585,895)
Interest received		326	1,785
Interest paid		(1,885,624)	(2,975,717)
Income taxes paid		(134,865)	(115,468)
Net cash flows from operating activities	30b	(753,647)	(261,208)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Proceeds from sale of oil and gas assets		19,254,669	97,560
Payments for oil and gas assets		(1,847,550)	(168,071)
Payments for property, plant and equipment		-	(49,011)
Net cash flows from investing activities		17,407,119	(119,522)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Net proceeds from issuing of shares		8,487,142	11,677,098
Repayment of interest-bearing liabilities		(18,497,421)	(7,878,290)
Lease payments		(232,279)	(14,113)
Share issue transaction costs		(449,983)	-
Net cash flows from financing activities		(10,692,541)	3,784,695
Net increase in cash and cash equivalents		5,960,931	3,403,965
Cash and cash equivalents at beginning of financial year		4,157,175	908,318
Effect of exchange rate changes on cash and cash equivalents		(235,720)	(155,108)
<b>CASH AND CASH EQUIVALENTS AT THE END OF FINANCIAL YEAR</b>	30a	<b>9,882,386</b>	<b>4,157,175</b>

The above consolidated statements of cash flows should be read in conjunction with the accompanying notes.

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 1. SIGNIFICANT ACCOUNTING POLICIES *Corporate information*

The financial report covers Empire Energy Group Limited and its controlled entities ("Empire Group"). Empire Group is a company limited by shares whose shares are publicly traded on the Australian Securities Exchange. The parent entity of the Empire Group is incorporated and domiciled in Australia with its core operations in the United States of America ("USA").

The principal activities of the Empire Group during the financial year are described in the Directors' Report.

The financial report of the Empire Group for the year ended 31 December 2019 was authorised for issue in accordance with a resolution of Directors on 31 March 2020.

#### ***Basis of preparation***

The general purpose financial statements have been prepared in accordance with Australian Accounting Standards, other authoritative pronouncements of the Australian Accounting Standards Board, Interpretations, and the requirements of the *Corporations Act 2001*, as appropriate for for-profit orientated entities. The consolidated financial statements have been prepared on a cost basis, modified, where applicable, by the measurement at fair value of derivative financial instruments, and share-based payment transactions.

#### ***Statement of compliance***

The financial report complies with Australian Accounting Standards ('AASB's'). Compliance with AASBs ensures that the financial report, comprising the financial statements and accompanying notes, complies with International Financial Reporting Standards ('IFRS').

#### ***Presentation currency***

Empire Group's financial statements are presented in US dollars ("US\$") which is also the functional currency of the majority of the Group's business operations.

#### ***Early adoption of standards***

The Empire Group has not elected to apply any pronouncements before their operative date in the annual reporting period beginning 1 January 2019.

#### ***Principles of Consolidation***

The consolidated financial statements comprise the financial statements of Empire Group Limited and its controlled entities.

Subsidiaries are all those entities over which the Empire Group has control. The Empire 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. Controlled entities are consolidated from the date on which control is transferred to the Empire Group and cease to be consolidated from the date on which control is transferred out of the Empire Group.

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Jointly controlled entities are accounted for using the equity method (equity accounted investees) and are initially recognised at cost.

All intercompany transactions, balance, including unrealised profits arising from intercompany transactions, have been eliminated in full. Unrealised losses are eliminated unless costs cannot be recovered.

The acquisition of subsidiaries is accounted for using the acquisition method of accounting. A change in ownership, without the loss of control, is accounted for as an equity transaction, where the difference between the consideration transferred and the book value of the share of the non-controlling interest acquired is recognised directly in the equity attributable to the parent.

Non-controlling interest in the results and equity of subsidiaries are shown separately in the consolidated statement of comprehensive income and consolidated statement of financial position. Losses incurred by the Empire Group are attributed to non-controlling interest in full, even if that results in a deficit balance.

#### ***Discontinued operations***

A discontinued operation is a component of the consolidated entity that has been disposed of or is classified as held for sale and that represents a separate major line of business or geographical area of operations, is part of a single co-ordinated plan to dispose of such a line of business or area of operations, or is a subsidiary acquired exclusively with a view to resale. The results of discontinued operations are presented separately on the face of the statement of profit or loss and other comprehensive income.

#### ***Foreign Currency Translations***

The financial report is presented in United States Dollars (US\$) which is the functional currency for the majority of the entities within the Empire Group. The functional currency of Empire Energy Group Limited is Australian Dollars but the reporting currency of Empire Energy Group Limited is United States Dollars.

#### ***Foreign currency transactions***

Transactions in foreign currencies are translated at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the end of the reporting period are translated to United States Dollars at the foreign exchange rate ruling at that date.

#### ***Foreign operations***

The assets and liabilities of entities that have a functional currency in Australian Dollars are translated to United States Dollars at exchange rates at the reporting date. The revenue and expense of entities that have a functional currency in Australian Dollars are translated to United States Dollars at exchange rates at the dates of the transaction. Foreign currency differences on translation are recognised directly in equity.

#### ***Revenue recognition***

##### ***Natural gas revenue***

Revenue from the sale of natural gas is recognised when natural gas has been delivered to a custody transfer point, contracts exist with customers, control of the assets passes to the purchaser upon delivery, collection of revenue from the sale is reasonably assured, and the sales price is fixed or determinable. Natural gas is sold by the Empire Group under contracts with terms ranging from one month up to the life of the well.

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## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Virtually all of the Empire Group contracts' pricing provisions are tied to a market index with certain adjustments based on, among other factors, whether a well delivers to a gathering or transmission line, quality of natural gas and prevailing supply and demand conditions, so that the price of the natural gas fluctuates to remain competitive with other available natural gas suppliers.

Because there are timing differences between the delivery of natural gas and the Empire Group's receipt of a delivery statement, the Empire Group has unbilled revenues. These revenues are accrued based upon volumetric data from the Empire Group's records and the Empire Group's estimates of the related transportation and compression fees, which are, in turn, based upon applicable product prices.

##### *Oil and Gas revenue*

Revenue from the sale of oil and gas is recognised when control of the asset has been transferred to the buyer and can be measured reliably, which is usually at the time of lifting, transferred into a vessel, pipe or other delivery mechanism.

There are no elements at variable consideration in contracts with customers and prices are determined based on prevailing market sales price data.

##### *Well operations*

Well operations and pipeline income are recognised when persuasive evidence of an arrangement exists, services have been rendered, collection of revenues is reasonably assured and the sales price is fixed or determinable. The Empire Group is paid a monthly operating fee for each well it operates for outside owners. The fee covers monthly operating and accounting costs, insurance and other recurring costs. The Empire Group might also receive additional compensation for special nonrecurring activities, such as reworks and recompletions.

##### *Finance income*

Finance income comprises interest income on funds invested as well as fair value gains on oil and gas derivatives the group is party to. Interest income is recognised as it accrues, using the effective interest method.

##### ***Current and non-current classification***

Assets and liabilities are presented in the statement of financial position based on current and non-current classification.

An asset is classified as current when: it is either expected to be realised or intended to be sold or consumed in the consolidated entity's normal operating cycle; it is held primarily for the purpose of trading; it is expected to be realised within 12 months after the reporting period; or the asset is cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period. All other assets are classified as non-current.

A liability is classified as current when: it is either expected to be settled in the consolidated entity's normal operating cycle; it is held primarily for the purpose of trading; it is due to be settled within 12 months after the reporting period; or there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period. All other liabilities are classified as non-current.

Deferred tax assets and liabilities are always classified as non-current.

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### ***Cash and cash equivalents***

Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. For the statement of cash flows presentation purposes, cash and cash equivalents also includes bank overdrafts, which are shown within borrowings in current liabilities on the statement of financial position.

#### ***Trade and other receivables***

Trade receivables, which generally have 30 to 90 day terms, are recognised and carried at original invoice amount less an allowance for any expected credit loss.

An estimate of expected credit loss is made based on historic data on collectability and consideration of the credit worthiness of customers. Bad debts are written-off when identified.

#### ***Inventories***

Inventories consists of crude oil, stated at the lower of cost to produce or market and other production supplies intended to be used in natural gas and crude oil operations.

#### ***Financial Assets, including derivatives***

The Empire Group utilises oil and gas option and forward contracts to manage the exposure to price volatility. The Empire Group recognises its derivatives on the consolidated statement of financial performance at fair value at the end of each period. Changes in the fair value of the oil and gas forward contracts are recognised in the statement of profit and loss.

Derivatives are classified as current or non-current depending on the expected period of realisation.

#### ***Oil and gas properties***

Oil and gas properties are stated at cost, less accumulated depreciation and accumulated impairment losses.

Oil and natural gas exploration and development expenditure is accounted for using the successful efforts method of accounting for gas producing activities. Costs to acquire mineral interests in gas properties, drill and equip exploratory wells that find proved reserves, and drill and equip development wells and related asset retirement costs are capitalised. Depletion is based on cost less estimated salvage value using the unit-of-production method. The process of estimating and evaluating gas reserves is complex, requiring significant decisions in the evaluation of geological, geophysical, engineering and economic data. Costs to drill exploratory wells that do not find proved reserves, geological and geophysical costs, and costs of carrying and retaining unproved properties are expensed.

#### ***Major maintenance and repairs***

Expenditure on major maintenance refits or repairs comprises the cost of replacement assets or parts of assets, inspection costs and overhaul costs. Where an asset or part of an asset that was separately depreciated and is now written off is replaced and it is probable that future economic benefits associated with the item will flow to the Empire Group, the expenditure is capitalised. Where part of the asset was not separately considered as a component, the replacement value is used to estimate the carrying amount of the replaced assets which is immediately written off.



## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### *Property, plant and equipment*

Property, plant and equipment is stated at cost less accumulated depreciation and any impairment in value. The capitalised value of a finance lease is also included within property, plant and equipment. Plant and equipment are depreciated over their estimated useful lives using the straight line method as follows:

Plant and equipment: 10-20%

Assets are depreciated from the date of acquisition. Profits and losses on sales of property, plant and equipment are taken into account in determining the results for the year.

For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

#### *Recoverable amount of assets*

At each reporting date, the Empire Group assesses whether there is any indication that an asset may be impaired. Where an indicator of impairment exists, the Empire Group makes a formal estimate of recoverable amount. Where the carrying amount of an asset exceeds its recoverable amount the asset is considered impaired and is written down to its recoverable amount.

Recoverable amount is the greater of value less costs to sell and value in use. It is determined for an individual asset, unless the asset's value in use cannot be estimated to be close to its fair value less costs to sell and it does not generate cash inflows that are largely independent of those from other assets or Empire Groups of assets, in which case, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or cash generating unit.

#### *Intangible Assets*

Intangible assets consist of goodwill. Goodwill is tested for impairment annually under AASB 136.

#### *Interest-bearing liabilities*

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost with any difference between cost and redemption value being recognised in the income statement over the period of the borrowings on an effective interest basis.

#### *Lease liabilities*

A lease liability is recognised at the commencement date of a lease. The lease liability is initially recognised at the present value of the lease payments to be made over the term of the lease, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the consolidated entity's incremental borrowing rate. Lease payments comprise of fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, amounts expected to be paid under residual value guarantees, exercise price of a purchase option when the exercise of the option is reasonably certain to occur, and any anticipated termination penalties. The variable lease payments that do not depend on an index or a rate are expensed in the period in which they are incurred

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### *Provisions – Employee Benefits*

Obligations for contributions to accumulation plans are recognised as an expense in the consolidated statements of comprehensive income as incurred.

Liabilities for employee benefits for wages, salaries, annual leave and represent present obligations resulting from employees' services provided to reporting date, calculated at undiscounted amounts based on remuneration wage and salary rates that the Empire Group expects to pay as at the reporting date including related on-costs, such as, workers compensation insurance, superannuation and payroll tax.

#### *Asset Retirement Obligations*

Asset retirement obligations are recognised when the Empire Group has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount of obligation can be made. The present value of the estimated asset retirement costs is capitalised as part of the carrying amount oil and gas properties. For the Empire Group, asset retirement obligations primarily relate to the plugging and abandonment of oil and gas-producing facilities.

The estimated liability is based on historical experience in plugging and abandoning wells, estimated remaining lives of those based on reserve estimates, external estimates as to the cost to plug and abandon the wells in the future, and regulatory requirements. The liability is discounted using a discount rate that reflects market conditions as at reporting date. Revisions to the liability could occur due to changes in estimates of plugging and abandonment costs, remaining lives of the wells, if regulations enact new plugging and abandonment requirements, or there is a change in the market-based discount rate.

Changes in the estimated timing of decommissioning or decommissions cost estimates are dealt with prospectively by recording an adjustment to the provision, and a corresponding adjustment to oil and gas properties. The unwinding of the discount of the asset retirement obligation is recognised as a finance cost.

#### *Income tax*

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantially enacted at the balance sheet date, and any adjustment to tax payable in respect of previous years.

Deferred tax is provided using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation of settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

#### *Tax consolidation*

Empire Energy Group and its wholly-owned Australian resident entities form a tax-consolidated Empire Group. As a consequence, all members of the tax-consolidated Empire Group have been taxed as a single entity since 1 July 2003. The head entity within the tax-consolidated Empire Group is Empire Energy Group Limited.

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Current tax expense/income, deferred tax liabilities and deferred tax assets arising from temporary differences of the members of the tax-consolidated Empire Group are recognised in the separate financial statements of the members of the tax-consolidated Empire Group using the 'separate taxpayer within Empire Group' approach by reference to the carrying amounts of assets and liabilities in the separate financial statements of each entity and the tax values applying under tax consolidation.

Any current tax liabilities (or assets) and deferred tax assets arising from unused tax losses of the subsidiaries are assumed by the head entity in the tax-consolidated Empire Group and are recognised by the Empire Group as amounts payable/(receivable) to/from other entities in the tax-consolidated Empire Group in conjunction with any tax funding arrangement amounts (refer below). Any difference between these amounts is recognised by the Empire Group as an equity contribution or distribution.

The Empire Group recognises deferred tax assets arising from unused tax losses of the tax consolidated Empire Group to the extent that it is probable that future taxable profits of the tax consolidated Empire Group will be available against which the asset can be utilised.

Any subsequent period adjustments to deferred tax assets arising from unused tax losses as a result of revised assessments of the probability of recoverability is recognised by the head entity only.

#### ***Nature of tax funding arrangements and tax sharing arrangements***

The head entity, in conjunction with other members of the tax-consolidated Empire Group, has entered into a tax funding arrangement which sets out the funding obligations of members of the tax-consolidated Empire Group in respect of tax amounts. The tax funding arrangements require payments to/from the head entity equal to the current tax liability/(asset) assumed by the head entity and any tax-loss deferred tax asset assumed by the head entity, resulting in the head entity recognising an inter-entity receivable/(payable) equal in amount to the tax liability/(asset) assumed. The inter-entity receivables/(payables) are at call.

Contributions to fund the current tax liabilities are payable as per the tax funding arrangement and reflect the timing of the head entity's obligation to make payments for tax liabilities to the relevant tax authorities.

The head entity in conjunction with other members of the tax-consolidated Empire Group, has also entered into a tax sharing agreement. The tax sharing agreement provides for the determination of the allocation of income tax liabilities between the entities should the head entity default on its tax payment obligations. No amounts have been recognised in the financial statements in respect of this agreement as payment of any amounts under the tax sharing agreement is considered remote.

#### ***Goods and Services Tax***

Revenues, expenses and assets are recognised net of the amount of goods and services tax (GST), except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO). 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 are stated with the amount of GST included.

The net amount of GST recoverable from, or payable to, the ATO is included as a current asset or liability in the Consolidated Statement of Financial Position.

Cash flows are included in the statement of cash flows on a gross basis. The GST components of cash flows arising from investing and financing activities which are recoverable from, or payable to, the ATO are classified as operating cash flows.

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### *Earnings per share*

Earnings per share is calculated by dividing the profit attributable to the owners of Empire Group Limited, excluding any costs of servicing equity other than ordinary shares, by the weighted average number of ordinary shares outstanding during the financial year.

There are no preference shares issued in Empire Group Limited, thereby resulting in no dilutive effect being noted in any calculation of diluted earnings per share.

#### *Share based payment transactions*

The Empire Group provides benefits to directors and senior executives of the Empire Group through the executive share option plan whereby eligible participants render services in exchange for options over shares.

#### *New, Revised or Amending Accounting Standards and Interpretations Adopted*

The consolidated entity has adopted all of the new, revised or amending Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ('AASB') that are mandatory for the current reporting period.

Any new revised or amending Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

#### AASB 16 Leases

This standard is applicable to annual reporting periods beginning on or after 1 January 2019. The standard replaces AASB 117 'Leases' and for lessees will eliminate the classifications of operating leases and finance leases. Subject to exceptions, a 'right-of-use' asset will be capitalised in the statement of financial position, measured at the present value of the unavoidable future lease payments to be made over the lease term. The exceptions relate to short-term leases of 12 months or less and leases of low-value assets (such as personal computers and small office furniture) where an accounting policy choice exists whereby either a 'right-of-use' asset is recognised or lease payments are expensed to profit or loss as incurred.

A liability corresponding to the capitalised lease will also be recognised, adjusted for lease prepayments, lease incentives received, initial direct costs incurred and an estimate of any future restoration, removal or dismantling costs. Straight-line operating lease expense recognition will be replaced with a depreciation charge for the leased asset (included in operating costs) and an interest expense on the recognised lease liability (included in finance costs).

In the earlier periods of the lease, the expenses associated with the lease under AASB 16 will be higher when compared to lease expenses under AASB 117. However, EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) results will be improved as the operating expense is replaced by interest expense and depreciation in profit or loss under AASB 16.

For classification within the statement of cash flows, the lease payments will be separated into both a principal (financing activities) and interest (either operating or financing activities) component.

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### Impact of adoption:

On initial application of AASB 16, using the transitional rules available, the Group elected to record right-of-use assets based on the corresponding lease liability in the statement of financial position as at 1 January 2019. Using the simplified approach, right-of-use assets of \$636,139 and lease obligations of \$636,139 were recorded. As a result of this transitional option, there was no net impact on accumulated losses. When measuring lease liabilities, the Group discounted lease payments using its incremental borrowing rate at 1 January 2019, being 3.99%.

#### Estimates and assumptions

In particular, information about significant areas of estimation uncertainty considered by management in preparing the consolidated financial statements are described in the following notes:

### 2. CRITICAL ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS

- Note 9 – Impairment expense
- Note 10 – Income tax
- Note 15 – Oil and gas properties
- Note 21 – Provisions for liabilities and charges
- Note 27 – Share based payments

#### Judgments

In the process of applying the Empire Group's accounting policies, the Directors have made the following judgments apart from those involving estimates, which may have the most significant effect on the amounts recognised in the consolidated financial statements:

#### Reserves base

Estimates of recoverable quantities of proven, probable and possible reserves reported include judgmental assumptions regarding commodity prices, exchange rates, discount rates and production and transportation costs for future cash flows. It also requires interpretation of complex and difficult geological and geophysical models in order to make assessment of the size, shape, depth and quality of reservoirs, and their anticipated recoveries. The economic, geological and technical factors used to estimate may change from period to period. Changes in reported reserves can impact asset carrying values and the recognition of deferred tax assets due to changes in expected future cash flows. Reserves are integral to the amount of amortisation charged to the income statement. Future development costs are estimated using assumptions as to the number of wells required to produce the commercial reserves, the cost of such wells and associated production and other capital costs. The current gas price curves are used for price assumptions. The Empire Group uses suitably qualified persons to prepare annual evaluation of proven hydrocarbon reserves, compliant with US professional standards for petroleum engineers.

#### Carrying value of oil and gas assets

Oil and gas properties are depreciated using the units-of-production (UOP) method over proved developed and undeveloped reserves.

The calculation of the UOP rate of depreciation, depletion and amortisation could be impacted to the extent that actual production in the future is different from current forecast production based on proved reserves.

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 2. CRITICAL ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS (Continued)

This would generally result from significant changes in any of the factors or assumptions used in estimating reserves. Estimates of gas reserve quantities provide the basis for calculation of depletion, depreciation and amortisation and impairment, each of which represents a significant component of the consolidated financial statements.

These factors could include changes in proved reserves, the effect on proved reserves of differences between actual commodity prices and commodity price assumptions, and unforeseen operational issues.

#### *Impairment indicators*

The fair value of oil and gas properties is determined with reference to estimates of recoverable quantities of reserves (as outlined above) to determine the estimated future cash flows. An impairment loss is recognised for the amount by which the asset or Empire Group of assets carrying value exceeds the present value of its future cash flows. 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).

#### *Recoverable amount*

The recoverable amount of an asset is the greater of its fair value less costs of disposal and its value-in-use, using an asset's estimated future cash flows (as described below) discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and risks specific to the asset.

#### *Significant judgement – Impairment of oil and gas assets*

For oil and gas assets, the expected future cash flow estimation is based on a number of factors, variables and assumptions, the most important of which are estimates of reserves, future production profiles, commodity prices, costs and foreign exchange rates. In most cases, the present value of future cash flows is most sensitive to estimates of future oil price and discount rates.

The estimated future cash flows for the value-in-use calculation are based on estimates, the most significant of which are hydrocarbon reserves, future production profiles, commodity prices, operating costs and any future development costs necessary to produce the reserves.

Estimates of future commodity prices are based on the Group's best estimate of future market prices with reference to external market analysts' forecasts, current spot prices and forward curves. Future commodity prices are reviewed at least annually.

The discount rates applied to the future forecast cash flows are based on the Group's weighted average cost of capital, adjusted for risks where appropriate, including functional currency of the asset, and risk profile of the country in which the asset operates.

In the event that future circumstances vary from these assumptions, the recoverable amount of the Group's oil and gas assets could change materially and result in impairment losses or the reversal of previous impairment losses.

Due to the interrelated nature of the assumptions, movements in any one variable can have an indirect impact on others and individual variables rarely change in isolation. Additionally, management can be expected to respond to some movements, to mitigate downsides and take advantage of upsides, as circumstances allow.

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## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 2. CRITICAL ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS (Continued)

Consequently, it is impracticable to estimate the indirect impact that a change in one assumption has on other variables and hence, on the likelihood, or extent, of impairments or reversals of impairments under the different sets of assumptions in subsequent reporting periods.

#### *Asset retirement obligations*

Asset retirement costs will be incurred by the Empire Group at the end of the operating life of some of Empire Group's facilities and properties. The ultimate asset retirement costs are uncertain and cost estimates can vary in response to many factors including changes to relevant legal requirements, the emergence of new restoration techniques or experience at other production sites. The expected timing and amount of expenditure can also change, for example, in response to changes in reserves or changes in laws and regulations or their interpretation. As a result, there could be significant adjustments to the provisions established which would affect future financial results.

#### *Share-based payments*

The consolidated entity measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date which they are granted. The fair value is determined by using either the Binomial or Black-Scholes model taking into account the terms and conditions upon which the instruments were granted. The accounting estimates and assumptions relating to equity-settled share-based payments would have no impact on the carrying amounts of assets and liabilities within the next annual reporting period but may impact profit or loss and equity.

### 3. GOING CONCERN

The consolidated financial statements have been prepared on a going concern basis, which contemplates the realisation of assets and settlement of liabilities in the normal course of business.

The Group incurred net losses of \$16.1m for the year ended 31 December 2019, experienced net cash outflows from operating activities of \$0.8m and had net assets of \$13.7m.

Given the above and cash reserves at 31 December 2019 of \$9.9m, the directors believe there are sufficient resources available to settle outstanding debts as and when they become due.

### 4. DISCONTINUED OPERATIONS

On 19 June 2019, the Group entered into a purchase and sale agreement to sell certain oil and gas leases, wells, and related properties and interests located in various counties in Kansas for cash consideration of \$19.25m.

The sale proceeds were principally used to retire debt to a maximum remaining gross debt balance of \$7.5m, while retaining a proportion from the sale proceeds for working capital and continued investment in Empire's core Northern Territory shale assets. Further details of the discontinued operations are disclosed in Note 20.

The Group determined, in accordance with Australian Accounting Standards, the operations of the Kansas properties should be reported as discontinued operations for all periods presented.

As a result, the operations and financial position of these net assets are presented as discontinued operations for all periods presented in the Group's consolidated financial statements.

All information provided in the Group's notes to the consolidated financial statements primarily include only items that are part of the continuing operations.

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## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 5. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Empire Group's principal financial instruments, other than derivatives comprise bank loans, financial assets, and cash and cash equivalents. The main purpose of these financial instruments is to raise finance for the Empire Group's operations. The Empire Group has various other financial assets and liabilities such as trade receivables and payables, which arise from its operations. The Empire Group also enters derivative transactions, principally commodity hedges.

The board has overall responsibility for the determination of the Empire Group's risk management objectives and policies and has the responsibility for designing and operating processes that ensure the effective implementation of the objectives and policies to the Empire Group's finance function. The board receives monthly reports through which it reviews the effectiveness of the processes put in place and appropriateness of the objectives and policies it sets.

The overall objective of the board is to set policies that seek to reduce risk as far as possible without unduly affecting the Empire Group's competitiveness and flexibility.

The Empire Group is exposed to risks that arise from its use of financial instruments. The main risks arising from the Empire Group's financial instruments are interest rate risk, commodity price risk, liquidity risk, equity risk and credit risk. This note describes the Empire Group's objectives, policies and processes for managing those risks and methods used to measure them. Further quantitative information in respect of these risks is presented throughout these financial statements.

There have been no substantive changes in the Empire Group's exposure to financial instrument risks, its objectives, policies and processes for managing those risks or the methods used to measure them from previous periods unless otherwise stated in this note.

Further details regarding these policies are set out below:

##### **(A) MARKET RISK**

##### **(i) Foreign Exchange Risk**

The Empire Group's core operations are located in the United States where both revenues and expenditures are recorded. The Statement of Financial Position can be affected by movement in the US\$/A\$ exchange rates upon translation of the A\$ operations into the US\$ presentation currency.

Foreign exchange risk arises from commercial transactions and recognised assets and liabilities denominated in a currency that is not the entity's functional currency. The Empire Group seeks to mitigate the effect of its foreign currency exposure by borrowing in US\$ for US operations and maintaining a minimum cash balance in Australia.

Excluding presentation translation adjustments, the Empire Group's exposure to foreign exchange risk at the reporting date is limited to loans and investments between the Parent entity and the US subsidiaries.

##### **(ii) Commodity Price Risk**

The Empire Group's revenues and cash flows are exposed to commodity price fluctuations, in particular oil and gas prices. The Empire Group enters option and forward commodity hedges to manage its exposure to falling spot oil and gas prices.

To mitigate a portion of the exposure to adverse market changes, the Empire Group's commodity hedging programs utilise financial instruments based on regional benchmarks including NYMEX Henry Hub Natural Gas.

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## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 5. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

The Empire Group enters into derivative instruments for the Empire Group's production to protect against price declines in future periods while retaining some of the benefits of price increases. While these derivatives are structured to reduce exposure to changes in price associated with the derivative commodity, they also limit benefits the Empire Group might otherwise have received from price changes in the physical market. The Empire Group believes the derivative instruments in place continue to be effective in achieving the risk management objectives for which they were intended.

##### (iii) Interest Rate Risk

The Empire Group is constantly monitoring its exposure to trends and fluctuations in interest rates in order to manage interest rate risk. The Empire Group's exposure to interest rate risk at 31 December 2019 is set out in the following tables.

The Empire Group's exposure to the risk of changes in market interest rates relates primarily to the Empire Group's long-term debt obligations with a floating interest rate in the US. The Empire Group manages its interest cost using a mix of fixed and variable rate debt.

The Empire Group's policy is to continually review the portion of its borrowings that are either at floating or fixed rates of interest. To manage this mix in a cost-efficient manner, the Empire Group previously entered into interest rate swaps, in which Empire agrees to exchange, at specified intervals, the difference between fixed and variable interest rate amounts calculated by reference to an agreed upon notional principal amount. These swaps were designated to hedge underlying debt obligations. There are no interest rate swaps at 31 December 2019.

The Empire Group monitors forecasts and actual cash flows and the maturity profiles of financial assets and liabilities to manage its liquidity risk.

	%	Fixed Interest Maturing in			Non-Interest Bearing	Total
		Floating Interest Rate	1 Year or Less	Over 1 to 5 Years		
<b>31 December 2019</b>						
<b>Financial Assets</b>						
Cash and cash equivalents	0.01	9,882,386	-	-	-	9,882,386
Trade and other receivables		-	-	-	1,814,422	1,814,422
Financial assets		-	-	-	689,037	689,037
		9,882,386	-	-	2,503,459	12,385,845
<b>Financial Liabilities</b>						
Trade & other payables		-	-	-	3,355,857	3,355,857
Interest-bearing liabilities	8.25	-	6,480,970	-	-	6,480,970
		-	6,480,970	-	3,355,857	9,836,827

**NOTES TO THE FINANCIAL STATEMENTS**  
for the year ended 31 December 2019

**5. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)**

	%	Floating Interest Rate	Fixed Interest Maturing in		Non-Interest Bearing	Total
			1 Year or Less	Over 1 to 5 Years		
<b>31 December 2018</b>						
<b>Financial Assets</b>						
Cash and cash equivalents	1.25	4,157,175	-	-	-	4,157,175
Trade and other receivables		-	-	-	2,286,234	2,286,234
Financial assets		-	-	-	262,142	262,142
		4,157,175	-	-	2,548,376	6,705,551
<b>Financial Liabilities</b>						
Trade & other payables		-	-	-	3,601,232	3,601,232
Interest-bearing liabilities	9.02	-	24,368,652	-	-	24,368,652
		-	24,368,652	-	3,601,232	27,969,884

**(iv) Empire Group Sensitivity**

Based on the financial instruments held at 31 December 2019, had the Henry Hub prices increased/decreased by 10% and 10% respectively, with all other variables held constant, the Empire Group's post-tax profit for the year would not materially change due to the extent of effective hedging of oil and gas production. Equity would not have materially changed under either scenario.

If interest rates were to increase by 1%, the impact on post-tax profit would be a decrease of approximately \$65,000.

**(B) CREDIT RISK**

Credit risk is the risk that the other party to the financial instrument will fail to discharge their financial obligation in respect of that instrument resulting in the Empire Group incurring a financial loss. The Empire Group's exposure to credit risk arises from potential default of the counter party with the maximum exposure equal to the carrying amount of these instruments. There are no significant concentrations of credit risk within the Empire Group.

The Empire Group trades only with recognised, credit worthy third parties. In the US, trade receivables, (balances with oil and gas purchases) have not exposed the Empire Group to any bad debt to date. All derivatives are with the same counterparty.

In the US, all of the purchasers that the Empire Group's operators choose to deal with are oil or gas companies and local utilities.

Trade and other receivable balances are monitored on an ongoing basis with the Empire Group's exposure to bad debts minimal.

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 5. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

The maximum exposure to credit risk at balance date is as follows:

	2019	2018
	\$	\$
Trade, other receivables, and derivatives	2,503,459	2,548,376

The maximum exposure to credit risk at balance by country is as follows:

	2019	2018
	\$	\$
Australia	-	-
United States of America	2,503,459	2,548,376

#### (C) LIQUIDITY RISK

Liquidity risk is the inability to access funds, both anticipated and unforeseen, which may lead to the Empire Group being unable to meet its obligations in an orderly manner as they arise.

The Empire Group's liquidity position is managed to ensure sufficient funds are available to meet financial commitments in a timely and cost-effective manner. The Empire Group is primarily funded through on-going cash flow, debt funding and equity capital raisings, as and when required.

Funding is in place with reputable financial institutions in the US and Australia. Bank compliance reporting is undertaken quarterly and adherence to covenants checked regularly. Management also regularly monitors actual and forecast cash flows to manage liquidity risk.

Maturity Analysis	Fair Value	Carrying Amount	Contractual Cash flows	1 year	1-5 years
	\$	\$	\$	\$	\$
<b>31 December 2019</b>					
<b>Non Derivatives</b>					
<b>Current</b>					
Trade and other payables	3,355,857	3,355,857	3,355,857	3,355,857	-
Interest bearing liabilities	6,480,970	6,480,940	7,500,000	825,000	6,675,000
<b>Non-current</b>					
Interest bearing liabilities	-	-	-	-	-
<b>Derivatives</b>					
Financial asset	(689,037)	(689,037)	(689,037)	(426,751)	(262,286)
Financial liability	-	-	-	-	-

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 5. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

Maturity Analysis	Fair Value \$	Carrying Amount \$	Contractual Cash flows \$	1 year \$	1-5 years \$
<b>31 December 2018</b>					
<b>Non Derivatives</b>					
<b>Current</b>					
Trade and other payables	3,601,232	3,601,232	3,601,232	3,601,232	-
Interest bearing liabilities	24,368,652	24,368,652	25,977,421	2,500,000	23,477,421
<b>Derivatives</b>					
Financial asset	(262,142)	(262,142)	(262,142)	(262,142)	-
Financial liability	-	-	-	-	-

#### (D) EQUITY RISK

The Empire Group relies on equity markets to raise capital for its exploration and development activities, and is thus exposed to equity market volatility.

Equity price risk arises from investments in equity securities and Empire Group Limited's issued capital.

The Company's equity risk is considered minimal and as such no sensitivity analysis has been completed.

#### Fair Value of Financial Assets and Liabilities

The fair value of all monetary financial assets and liabilities of Empire Group Limited approximate their carrying value there were no off-balance financial assets and liabilities at year end.

The Empire Group is required to classify financial instruments, measured at fair value, using a three level hierarchy, being:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities;
- 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
- Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

An instrument is required to be classified in its entirety on the basis of the lowest level of valuation inputs that is significant to fair value. Considerable judgement is required to determine what is significant to fair value and therefore which category the financial instrument is placed in can be subjective.

The fair value of financial instruments classified as level 3 is determined by the use of valuation models. These include discounted cash flow analysis or the use of observable inputs that require significant adjustments based on unobservable inputs.

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 5. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

<b>Consolidated</b> <b>31 December 2019</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets</b>				
Fair value of derivatives	-	689,037	-	689,037
Total assets	-	689,037	-	689,037
<b>Liabilities</b>				
Fair value of derivatives	-	-	-	-
Total liabilities	-	-	-	-
<b>Consolidated</b> <b>31 December 2018</b>				
<b>Assets</b>				
Fair value of derivatives	-	262,142	-	262,142
Total assets	-	262,142	-	262,142

There were no transfers between levels during the financial year.

#### Capital Risk Management

The Company considers its capital to comprise its ordinary share capital and reserves.

In managing its capital, the Company's primary objective is to maintain a sufficient funding base to enable the Company to meet its working capital and strategic operation needs.

In making decisions to adjust its capital structure to achieve these aims, either through altering its dividend policy, new share issues, or consideration of debt the Company considers not only its short-term position but also its long-term operational and strategic objectives.

#### 6. REVENUE

##### a. Sales revenue

	<b>2019</b> <b>\$</b>	<b>2018</b> <b>\$</b>
Revenue from oil and gas sales	4,443,000	6,128,795
Revenue from well operations	469,913	463,728
Oil and gas price risk management income	483,690	-
	<b>5,396,603</b>	<b>6,592,523</b>

##### b. Other income

Interest income	326	1,785
Rental income	6,005	6,110
Insurance proceeds	-	2,004,700
Other income	149,097	179,346
	<b>155,428</b>	<b>2,191,941</b>

#### 7. COST OF SALES

Oil and gas production	4,188,781	4,722,618
	<b>4,188,781</b>	<b>4,722,618</b>

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

	2019	2018
	\$	\$
<b>8. INTEREST EXPENSE</b>		
Interest paid/payable on financial liabilities	636,843	800,893
	<u>636,843</u>	<u>800,893</u>
<b>9. EXPENSES</b>		
<b>a. Other non-cash expenses</b>		
Leasing expiration expenses (note 9c)	2,500	124,900
Impairment of assets (note 9c)	6,511,896	1,046,556
Depreciation, depletion and amortisation	1,392,050	542,020
Finance costs (note 9b)	1,167,055	1,490,520
Unrealised derivative movement	99,349	1,320,575
Other expenses	28,393	238,588
Total other expenses	<u>9,201,243</u>	<u>4,763,159</u>
<b>b. Finance expenses (non-cash)</b>		
Accretion of asset retirement obligation (note 21)	557,316	526,706
Unwind of discount of debt	609,739	963,814
Total finance costs (non-cash)	<u>1,167,055</u>	<u>1,490,520</u>
<b>c. Loss before income tax from continuing operation includes the following specific expenses:</b>		
<i>Depreciation, depletion and amortisation</i>		
Oil & Gas properties and plant & equipment (note 15)	1,392,050	542,020
	<u>1,392,050</u>	<u>542,020</u>
<i>Employee benefits expense</i>		
Defined contribution superannuation expense	25,708	15,024
Other employee expenses	3,741,719	4,226,017
Total employee benefits expense	<u>3,767,427</u>	<u>4,241,041</u>
<i>Impairment expense<sup>(a)</sup></i>		
Impairment/(Write-back) of additional asset retirement obligation	2,630,800	(1,642,361)
Impairment of property plant & equipment	3,881,096	2,688,917
Total impairment expense	<u>6,511,896</u>	<u>1,046,556</u>
Lease expiration expense <sup>(b)</sup>	2,500	124,900

#### (a) Impairment expense

For the period 31 December 2019, the Company wrote down the oil and gas properties by \$3,881,096 due to evidence of impairment. Furthermore, an increase in the asset retirement obligation of \$2,630,800 resulted from a change in the discount rate.

#### (b) Lease expiration expense

A charge of before the discontinued operation of \$2,500 has been taken against the book value of undeveloped leases which have expired or are to expire. The Company has an ongoing program to renew expiring leases, to take up options on expiring leases or acquire new leases if and when possible. The charge is a non-cash entry which has no effect on cash-flows.

**NOTES TO THE FINANCIAL STATEMENTS**  
for the year ended 31 December 2019

**10. INCOME TAX**

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
<b>a. Income tax expense</b>		
Current tax	134,865	115,470
Deferred tax	-	-
Income tax benefit attributable to continuing operations	<u>134,865</u>	<u>115,470</u>
<b>b. Numerical reconciliation of income tax expense to prima facie tax payable</b>		
Loss before income tax from continuing operations	(11,837,913)	(5,138,154)
Loss before income tax from discontinued operations	(4,150,891)	(10,613,430)
	<u>(15,988,804)</u>	<u>(15,751,584)</u>
Tax at the Australian tax rate of 27.5% (2018: 27.5%)	(4,396,921)	(4,331,686)
Tax effect of amounts which are not deductible/(taxable) in calculating taxable income:		
Withholding tax paid	134,865	101,427
Deferred tax asset in relation to tax losses and temporary differences (utilised)/not recognised	4,252,450	4,021,679
Effect of difference in overseas tax rates	144,471	324,050
<b>Income tax benefit</b>	<u>134,865</u>	<u>115,470</u>
<b>c. Deferred tax assets not recognised relate to the following:</b>		
Tax losses	6,059,277	918,262
Capital losses	141,410	141,410
Other	4,525,153	5,010,435
	<u>10,725,840</u>	<u>6,070,107</u>

The potential benefit of the deferred tax asset attributable to tax losses will only be obtained if:

- (i) the consolidated entity derives future assessable income of a nature and of an amount sufficient to enable the benefit from the deduction for the loss to be realised; or
- (ii) the consolidated entity continues to comply with the conditions for deductibility imposed by the law; and
- (iii) no changes in tax legislation adversely affect the consolidated entity in realising the asset.

**d. Dividend Franking Account**

There are no franking account credits available as at 31 December 2019.

**NOTES TO THE FINANCIAL STATEMENTS**  
**for the year ended 31 December 2019**
**10. INCOME TAX (Continued)**

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
<b>e. Deferred tax liabilities</b>		
<b>The balance comprises temporary differences attributable to:</b>		
Forward commodity contracts	170,803	997,731
Oil & Gas and Property, Plant & Equipment	2,052,240	4,567,585
Other	738,109	630,369
	<u>2,961,152</u>	<u>6,195,685</u>
Set-off of deferred tax liabilities pursuant to set-off provisions (note f)	(2,961,152)	(6,195,685)
Net deferred tax liabilities	-	-
<b>f. Deferred tax assets</b>		
<b>The balance comprises temporary differences attributable to:</b>		
Accrued asset retirement obligation	1,240,977	666,886
Oil & Gas and Property, Plant & Equipment	2,539,623	4,004,892
Other	1,076,542	1,523,907
	<u>4,857,142</u>	<u>6,195,685</u>
Set-off of deferred tax assets pursuant to set-off provisions (note e)	(4,857,142)	(6,195,685)
Net deferred tax assets	-	-
<b>11. TRADE AND OTHER RECEIVABLES</b>		
<b>Current</b>		
Trade receivables	1,771,497	2,203,284
Other	42,925	82,950
	<u>1,814,422</u>	<u>2,286,234</u>
<b>12. PREPAYMENTS</b>		
Prepayments	135,622	402,915
<b>13. INVENTORIES</b>		
Crude oil and production supplies	33,603	29,974
<b>14. FINANCIAL ASSETS, INCLUDING DERIVATIVES</b>		
<b>Current</b>		
Oil and gas price forward contracts	426,751	262,142
<b>Non-current</b>		
Oil and gas price forward contracts	262,286	-



**NOTES TO THE FINANCIAL STATEMENTS**  
for the year ended 31 December 2019

Commodity hedge contracts outstanding as at 31 December 2019 are outlined below.

2019 NATURAL GAS - HENRY HUB - NYMEX – Swaps					2018 NATURAL GAS - HENRY HUB - NYMEX - Swaps				
Period	Swap Price	Premium	Product		Period	Swap Price	Premium	Product	
Jan 20 – Mar 20	\$2.91	-	227,500	mmbtu	Jan 19 - Dec 19	3.45	-	420,000	mmbtu
-	-	-	-	-	Jan 19 - Dec 19	3.45	-	78,000	mmbtu
2019 OIL - WTI – NYMEX - Swaps					2018 OIL - WTI – NYMEX – Swaps				
-	-	-	-	-	Jan 20 – Dec 20	\$66.50	-	108,000	bbl
-	-	-	-	-	Jan 21 – Dec 21	\$64.00	-	96,000	bbl
-	-	-	-	-	Jan 22 – Dec 22	\$60.00	-	24,000	bbl
2019 NATURAL GAS - HENRY HUB - NYMEX – Options					2018 NATURAL GAS - HENRY HUB - NYMEX - Floors				
Period	Floor Price	Premium	Volume		Period	Floor Price	Premium	Volume	
Jan 20 – Dec 20	\$2.50	\$0.23	1,440,000	mmbtu	Jan 20 – Dec 20	\$2.50	\$0.23	1,440,000	mmbtu
Jan 21 – Dec 21	\$2.50	\$0.23 - \$0.37	600,000	mmbtu	Jan 21 – Dec 21	\$2.50	\$0.23	300,000	mmbtu
Jan 22 – Dec 22	\$2.50	\$0.23 - \$0.35	300,000	mmbtu	-	-	-	-	-

**NOTES TO THE FINANCIAL STATEMENTS**  
for the year ended 31 December 2019

**15. OIL AND GAS PROPERTIES AND PROPERTY PLANT & EQUIPMENT**

	Oil & Gas – Proved	Oil & Gas – Unproved	Land	Buildings	Equipment	Motor Vehicles	Total
<b>Cost in \$</b>							
At 1 January 2019	117,776,505	6,338,732	30,591	331,798	919,220	692,584	126,089,430
Additions	-	1,778,456	-	-	12,224	56,870	1,847,550
New asset retirement obligation	2,630,800	-	-	-	-	-	2,630,800
Write-back of asset retirement obligation	(9,321)	-	-	-	-	-	(9,321)
Sale of wells	(60,006,729)	(2,370,398)	(25,591)	(95,277)	(132,765)	(4,753)	(62,635,513)
Disposals	-	-	-	-	(15,036)	-	(15,036)
Reclassifications	-	2,383	-	-	(12,770)	-	(10,387)
Expiration costs	-	(2,500)	-	-	-	-	(2,500)
At 31 December 2019	60,391,255	5,746,673	5,000	236,521	770,873	744,701	67,895,023
<b>Accumulated Depreciation in \$</b>							
At 1 January 2019	(72,120,156)	-	-	(94,290)	(787,882)	(573,582)	(73,575,910)
Depreciation and depletion	(1,307,387)	-	-	-	(51,145)	(33,518)	(1,392,050)
Write-off sale of wells	40,444,424	-	-	13,858	135,195	4,755	40,598,232
Disposals	-	-	-	-	15,277	-	15,277
Change in ARO	(5,516)	-	-	-	-	-	(5,516)
Impairment	(6,511,896)	-	-	-	-	-	(6,511,896)
At 31 December 2019	(39,500,531)	-	-	(80,432)	(688,555)	(602,345)	(40,871,863)
<b>Opening written down value</b>	<b>45,656,347</b>	<b>6,338,733</b>	<b>30,591</b>	<b>237,508</b>	<b>131,340</b>	<b>119,002</b>	<b>52,513,521</b>
<b>Impact of foreign currency adjustments</b>	<b>-</b>	<b>(361,060)</b>	<b>-</b>	<b>-</b>	<b>(4,370)</b>	<b>(24,446)</b>	<b>(389,876)</b>
<b>Closing written down value</b>	<b>20,890,724</b>	<b>5,385,613</b>	<b>5,000</b>	<b>156,089</b>	<b>77,948</b>	<b>117,910</b>	<b>26,633,284</b>

**NOTES TO THE FINANCIAL STATEMENTS**  
for the year ended 31 December 2019

**15. OIL AND GAS PROPERTIES AND PROPERTY PLANT & EQUIPMENT (continued)**

	Oil & Gas – Proved	Oil & Gas – Unproved	Land	Buildings	Equipment	Motor Vehicles	Total
<b>Cost in \$</b>							
At 1 January 2018	119,028,365	6,443,729	30,591	328,948	896,420	608,376	127,336,429
Additions	94,096	37,503	-	2,850	22,800	84,208	214,457
New asset retirement obligation	321,539						321,539
Write-back of asset retirement obligation	(1,642,361)	-	-	-	-	-	(1,642,361)
Sale of wells	(25,134)						(25,134)
Expiration costs	-	(142,500)	-	-	-	-	(142,500)
At 31 December 2018	117,776,505	6,338,732	30,591	331,798	919,220	692,584	126,089,430
<b>Accumulated Depreciation in \$</b>							
At 1 January 2018	(55,616,054)	-	-	(86,044)	(717,849)	(542,696)	(56,962,643)
Depreciation and depletion	(1,608,357)	-	-	(8,246)	(70,033)	(30,886)	(1,717,522)
Write-off sale of wells	41,748	-	-	-	-	-	41,748
Write-off plugged wells	6,655	-	-	-	-	-	6,655
Impairment	(14,944,148)	-	-	-	-	-	(14,944,148)
At 31 December 2018	(72,120,156)	-	-	(94,290)	(787,882)	(573,582)	(73,575,910)
<b>Opening written down value</b>	<b>63,412,311</b>	<b>6,202,085</b>	<b>30,591</b>	<b>242,904</b>	<b>174,704</b>	<b>45,464</b>	<b>70,108,059</b>
<b>Impact of foreign currency adjustments</b>	<b>-</b>	<b>(257,007)</b>	<b>-</b>	<b>-</b>	<b>(4,046)</b>	<b>(24,049)</b>	<b>(285,102)</b>
Reclassifications to assets of discontinued operations	(19,867,510)	(861,692)	(25,591)	(95,277)	(121,819)	(15,699)	(20,987,588)
<b>Closing written down value</b>	<b>25,788,839</b>	<b>5,220,033</b>	<b>5,000</b>	<b>142,231</b>	<b>5,473</b>	<b>79,254</b>	<b>31,240,830</b>

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 15. OIL AND GAS PROPERTIES AND PROPERTY PLANT & EQUIPMENT (continued)

At 31 December 2019, the group reassessed the carrying amounts of its non-current assets for indicators of impairment in accordance with the Group's accounting policy.

Estimates of recoverable amounts are based on an asset's value in use using a discounted cash flow method, and are most sensitive to the key assumptions described in note 2.

Recoverable amounts for the year ended 31 December 2019 are:

Oil and gas assets	Carrying Value	Recoverable amount	Impairment
	\$	\$	\$
Appalachia	27,402,620	20,890,724	6,511,896
Total	27,402,620	20,890,724	6,511,896

The pre-tax discount rate that has been applied to the above oil and gas assets is 12% (2018: 12%).

	2019 \$	2018 \$
<b>16. INTANGIBLE ASSETS</b>		
Goodwill	68,217	68,217
	68,217	68,217
<b>17. TRADE AND OTHER PAYABLES</b>		
<b>Current</b>		
Trade creditors	3,325,380	3,572,560
Other creditors	30,477	28,672
	3,355,857	3,601,232
<b>18. INTEREST-BEARING LIABILITIES</b>		
<b>Current</b>		
Bank loan - secured	6,480,970	24,368,652
	6,480,970	24,368,652

#### Classification of Borrowings

These accounts are presented on the basis that all borrowings have been classified as current liabilities. This treatment is as a result of a strict application of the relevant provisions of AASB 101 Presentation of Financial Statements ("AASB 101"). This accounting standard requires the Group to classify liabilities as current if the Group does not have an unconditional right to defer payment for twelve months at period end. However, the expected repayment of the borrowings is not for complete repayment within the twelve month period.

The Company maintains a credit facility, as amended and restated in October 2018, which matures in September 2024 with a bank that is a minority owner in the Company. Interest accrues on the outstanding borrowing at rate options selected by the Company and based on prime lending rate, 5.50% at December 31, 2019 or the London InterBank Offered Rate (30-Day LIBOR) (1.7543% at December 31, 2019) plus 6.5%. At December 31, 2019, the Company's rate option was the 30-day LIBOR. Interest rates were 8.254% and 9.003% as of December 31, 2019 and 2018 respectively.

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## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 18. INTEREST-BEARING LIABILITIES (Continued)

Outstanding borrowings under the agreement are secured by the assets of the Company. Under terms of the facilities, the Company is required to maintain financial ratios customary for the oil and gas industry. The Company is required to repay the facilities monthly to the extent certain benchmarks of an applicable percentage of net operating cash flow and capital transactions are met and occur. Principal payments made in 2019 and 2018 were approximately \$18,497,000 and \$11,949,000, respectively (including a debt to equity conversion of \$4m in 2018). Principal repayments are to be made in the amount of \$137,500 each quarter, beginning with the quarter ending March 31, 2020. The most restrictive operational and financial covenants for which the Company is required to maintain are the adjusted proved developed producing (PDP ratio) adjusted present value PV ratio and interest coverage ratio.

As at 31 December 2019 the Company breached the adjusted PV ratio under the Macquarie Credit agreement. On 27 March 2020 Macquarie waived all existing/prior defaults under the credit agreement. On that date Macquarie also agreed to waive any potential breaches up to and including 31 December 2020. In consideration for Macquarie granting those waivers. Empire made principal, repayments totalling US\$825,000 on 27 March 2020 which were funded from existing USD cash balances.

The Company fully amortised the remaining portion of the \$1,037,000 deferred financing costs from the April 2016 debt restructuring during the year ended December 31, 2018. Due to the debt restructuring in October 2018, the Company accumulated deferred financing costs and options of approximately \$1,622,048. Amortisation expense of the deferred financing costs included with other non-cash expenses statement of profit or loss and other comprehensive income amounts to \$609,739 and \$963,814 for 2019 and 2018, respectively.

#### Credit Facility Summary

Empire Energy USA, LLC maintains a long-term credit facility with Macquarie Bank Limited (Macquarie), which matures in September 2024, consisting of a single tranche term loan facility with an opening availability of \$7,500,000.

The credit facility balance on 31 December 2019 was \$7,500,000. The loan balance on 31 March 2020 was \$6,675,000.

#### Uses of credit facility:

Term Loan: To refinance the existing secured loan facilities with Macquarie Bank Limited.

#### Credit facility structure

Term Loan:	Availability	\$7,500,000
	Interest rate	LIBOR+6.5%
	Drawn balance as at 31 December 2019	\$7,500,000
	Term	Matures in September 2024
	Repayment	No principal repayments for 2019, then 100% of Appalachia Net Operating Cashflow subject to minimum amortisation of \$550,000 per annum.

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 18. INTEREST-BEARING LIABILITIES (Continued)

##### Other features of the credit facility:

- Outstanding borrowings under the facility are secured by the US assets of the Company and a pledge of the Company's shareholding in Imperial Oil & Gas Pty Limited. The facility is guaranteed by the Company.
- Reserve Assessment of reserves are based on third party reserve engineering consultants.
- Under terms of the facilities, the Company is required to maintain financial ratios customary for the oil and gas industry. These include certain operational and financial covenants for which the Company is required to maintain, the most restrictive of which is the adjusted proved developed producing (PDP) present value (PV).

##### Key financial covenants:

- 1.5x 1P PV10 coverage to net loan (after adjustment for cash, trade payables and trade receivables)
- 1.3x PDP PV10 coverage to net loan (after adjustment for cash, trade payables and trade receivables)
- 1.0x Current Ratio
- 1.3x EBITDA / Interest Ratio

- Upfront Fees:
- 1.0% of Principal Amount
  - 12m options exercisable at A\$0.32 (refer to Note 22C) on or before 31 December 2021

A summary of period end debt is as follows:

	<b>2019</b>	<b>2018</b>
	<b>\$</b>	<b>\$</b>
Facility	7,500,000	22,997,421
Revolver	-	3,000,000
Sub-Total	7,500,000	25,997,421
Less deferred financing costs, net	(1,019,030)	(1,628,769)
<b>Total Debt</b>	<b>6,480,970</b>	<b>24,368,652</b>

#### 19. LEASE ASSETS AND LIABILITIES

##### ASSETS

Right-of-use assets	141,197	-
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##### LIABILITIES

###### Current

Leases – minimum lease payments	99,922	10,002
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###### Non-Current

Leases – minimum lease payments	126,475	60,847
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The Company leases its US corporate headquarters under a non-cancellable operating lease of monthly payments ranging from \$3,665 to \$3,966 through February 2022. The US corporate headquarters moved in 2019 to Mayville, New York into a building owned by the Company.

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## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 19. LEASE ASSETS AND LIABILITIES (Continued)

The Company was obligated to make lease payments for the former US corporate headquarters of approximately \$52,000 and \$51,000 for the years ended 31 December 31, 2019 and 2018 respectively. The lease for the former US corporate headquarters is still in place and the Company is seeking a sub-tenant through a corporate leasing agent. The Kansas headquarters four-year lease agreement required monthly payments ranging from \$2,853 to \$2,945 through April 2021. The net rental expense for the Kansas location approximated \$23,000 and \$34,000 for the years ended December 31, 2019 and 2018. The Kansas office lease was terminated in 2019 following the closure of the Kansas office without penalty.

The Company leases trucks under an operating agreement. The term of the agreement begins upon the delivery of each truck and last for a period of up to 48 months, Lease payments in 2019 and 2018 were approximately \$188,000 and \$194,000 respectively. The Empire Energy Group has the option to acquire the leased assets at the agreed value on the expiry of the leases.

#### 20. DISCONTINUED OPERATIONS

Refer to Note 4 for background information on the discontinued operations

##### *Financial performance information*

	2019 \$	2018 \$
<b>Revenue</b>		
Oil and gas sales	5,211,132	7,418,795
Well operations and services fees	157,328	240,898
	<u>5,368,460</u>	<u>7,659,693</u>
<b>Cost of sales</b>		
Cost of oil and gas sales	2,615,868	3,834,993
Cost of well operation services	502,303	695,630
Depreciation, depletion and amortisation	-	1,175,502
Impairment expense	-	13,897,592
Unrealised loss/(gain) on hedges	1,593,049	(3,712,340)
Administration costs	148,754	301,210
Lease expiration costs	1,396,969	17,600
	<u>6,256,943</u>	<u>16,210,187</u>
Interest expense, including amortisation of deferred financing costs	1,248,781	2,174,824
Other income, net	(46,094)	(87,454)
Gain on sale of assets (includes write-back of inter group loan)	-	(24,434)
	<u>1,202,687</u>	<u>2,062,936</u>
<b>Loss from discontinued operations</b>	2,091,170	10,613,430
<b>Disposal Proceeds</b>		
Proceeds on completion of sale	(19,100,000)	-
Proceeds from post-closing adjustment	(154,670)	-
Net assets disposed	21,314,391	-
<b>Total Loss from disposal of discontinued operations</b>	<u>2,059,721</u>	<u>-</u>
<b>Total loss from discontinued operations</b>	<u>4,150,891</u>	<u>10,613,430</u>

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 20. DISCONTINUED OPERATIONS (Continued)

##### Cash flow information

	2019 \$	2018 \$
Net cash from operating activities	498,121	(747,324)
Net cash from investing activities	(13,085)	-
Net decrease in cash and cash equivalents from discontinued operations	(485,036)	(747,324)

##### Carrying amount of assets and liabilities disposed

##### At date of disposal:

Accounts receivable	205,301	-
Inventory	510,772	-
Fair value of hedges	1,593,049	-
PPE Net	21,000,673	-
<b>Total assets</b>	<b>23,309,795</b>	<b>-</b>
Accounts payable	258,197	-
Asset retirement obligations	1,737,207	-
<b>Total liabilities</b>	<b>1,995,404</b>	<b>-</b>
<b>Net assets</b>	<b>21,314,391</b>	<b>-</b>

##### Assets and liabilities of disposal groups classified as discontinued:

Accounts receivable	252,272	326,895
Inventory	-	596,805
Fair value of hedges	-	3,712,340
PPE Net	-	20,987,588
<b>Assets classified as held for sale</b>	<b>252,272</b>	<b>25,623,628</b>
Accounts payable	-	196,503
Revenue payable	100,079	100,079
Asset retirement obligations	-	1,685,070
<b>Liabilities directly associated with assets classified as held for sale</b>	<b>100,079</b>	<b>1,981,652</b>
<b>Net assets</b>	<b>152,193</b>	<b>23,641,976</b>



## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 21. PROVISIONS

	2019 \$	2018 \$
<b>Current</b>		
Employee entitlements	49,947	17,805
<b>Non-current</b>		
Asset retirement obligations	15,771,500	12,660,953
<b>Movement in Asset Retirement Obligation</b>		
Balance at beginning of the period <sup>(a)</sup>	14,346,023	15,186,576
Additions for the period	-	321,539
Disposed – discontinued operations	(1,737,207)	(1,685,070)
Write-off accrued plugging costs	(25,432)	(46,437)
Accretion expense for the period, included in finance costs	557,316	526,706
Change in estimate <sup>(b)</sup>	2,630,800	(1,642,361)
Balance end of the period	15,771,500	12,660,953

<sup>(a)</sup> Opening balance before the impact of discontinued operations

<sup>(b)</sup> \$2,630,800 is due to a decrease in the discount rate (2018: \$1,642,361 is due to an increase in the discount rate).

#### Asset Retirement Obligation

The Empire Group makes full provision for the future costs of decommissioning oil and gas production facilities and pipelines on a discounted basis on the installation or acquisition of those facilities.

The provision represents the present value of decommissioning costs which are expected to be incurred up to 2050. The estimated liability is based on historical experience in plugging and abandoning wells, estimated remaining lives of those based on reserve estimates, external estimates as to the cost to plug and abandon the wells in the future, and regulatory requirements. Assumptions, based on the current economic environment, have been made which management believe are a reasonable basis upon which to estimate the future liability. These estimates are reviewed regularly to take into account any material changes to the assumptions. However, actual decommissioning costs will ultimately depend upon future market prices for the necessary decommissioning works. Furthermore, the timing of decommissioning is likely to depend on when the assets cease to produce at economically viable rates. This in turn will depend upon the future oil and gas prices, which are inherently uncertain.

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

22. CONTRIBUTED EQUITY	2019	2018
	\$	\$
<b>a) Shares</b>		
<b>Issued Capital</b>		
Balance at beginning of period	94,071,529	78,415,335
<b>Movement in ordinary share capital</b>		
- Issue of 73,000,000 fully paid ordinary shares in February 2018 as a private placement to raise funds	-	726,806
- Issue of 2,000,000 fully paid ordinary shares in February 2018 as a private placement to raise funds	-	19,515
- Issue of 75,000,000 fully paid ordinary shares in April 2018 as a private placement to raise funds	-	726,656
- Issue of 4,500,000 fully paid ordinary shares in April 2018 in lieu of services rendered	-	43,701
- Issue of 189,785,575 fully paid ordinary shares in August 2018 as a private placement to raise funds	-	2,782,636
- Issue of 560,214,425 fully paid ordinary shares in September 2018 as a private placement to raise funds	-	8,328,907
- Issue of 297,847,000 fully paid ordinary shares in October 2018 as partial replacement of debt	-	4,000,000
- Issue of 375,000 fully paid ordinary shares in November 2019 due to conversion of options	77,029	-
- Issue of 250,000 fully paid ordinary shares in November 2019 due to conversion of options	51,083	-
- Issue of 600,000 fully paid ordinary shares in November 2019 due to conversion of options	122,292	-
- Issue of 30,000,000 fully paid ordinary shares in November 2019 as a private placement to raise funds	8,138,400	-
- Issue of 25,000 fully paid ordinary shares in December 2019 due to conversion of options	5,114	-
- Issue of 175,000 fully paid ordinary shares in December 2019 due to conversion of options	36,698	-
- Issue of 104,348 fully paid ordinary shares in December 2019 in lieu of cash payment for fees and services rendered	14,588	-
- Issue of 200,000 fully paid ordinary shares in January 2020 (funds received in December 2019) due to conversion of options	41,940	-
Less costs associated with the share issues detailed above	(1,034,990)	(972,027)
Balance as at 31 December 2019	<u>101,523,681</u>	<u>94,071,529</u>

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 22. CONTRIBUTED EQUITY (continued)

b) Shares	2019 No. of shares	2018 No. of shares
<b>Issued shares</b>		
Balance at beginning of period	2,313,084,176	1,110,737,176
<b>Movement in ordinary share capital</b>		
- Issue of 73,000,000 fully paid ordinary shares in February 2018 as a private placement to raise funds	-	73,000,000
- Issue of 2,000,000 fully paid ordinary shares in February 2018 as a private placement to raise funds	-	2,000,000
- Issue of 75,000,000 fully paid ordinary shares in April 2018 as a private placement to raise funds	-	75,000,000
- Issue of 4,500,000 fully paid ordinary shares in April 2018 in lieu of services rendered	-	4,500,000
- Issue of 189,785,575 fully paid ordinary shares in August 2018 as a private placement to raise funds	-	189,785,575
- Issue of 560,214,425 fully paid ordinary shares in September 2018 as a private placement to raise funds	-	560,214,425
- Issue of 297,847,000 fully paid ordinary shares in October 2018 as partial replacement of debt	-	297,847,000
- Effect of Share Consolidation in May 2019 on a 1:10 basis	(2,081,775,758)	-
- Issue of 883 fully paid ordinary shares due to the round up on consolidation	883	-
- Issue of 375,000 fully paid ordinary shares in November 2019 due to conversion of options	375,000	-
- Issue of 250,000 fully paid ordinary shares in November 2019 due to conversion of options	250,000	-
- Issue of 600,000 fully paid ordinary shares in November 2019 due to conversion of options	600,000	-
- Issue of 30,000,000 fully paid ordinary shares in November as a private placement to raise funds	30,000,000	-
- Issue of 25,000 fully paid ordinary shares in December 2019 due to conversion of options	25,000	-
- Issue of 175,000 fully paid ordinary shares in December 2019 due to conversion of options	175,000	-
- Issue of 104,348 fully paid ordinary shares in December 2019 in lieu of cash payment for fees and services rendered	104,348	-
Balance as at 31 December 2019	<u>262,838,649</u>	<u>2,313,084,176</u>

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## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 22. CONTRIBUTED EQUITY (continued)

#### c) Share Options

##### Movements

##### Granted

4 unlisted options were granted to satisfy the rounding up (to the nearest whole number) obligations to complete the 1 for 10 security consolidation in each class of securities. The exercise price of the options is A\$0.30 and they are exercisable on or before 26 September 2020.

2,800,000 options were granted to the Joint Lead Managers of the November 2019 capital raising in partial consideration of the provision of services to the Company. The exercise price of the options is A\$0.60 and they are exercisable on or before 30 December 2022.

##### Exercise of Options

1,275,004 unlisted options were exercised during the financial year or in the period since the end of the financial year and up to the date of this report.

##### Expiry/Lapse of Options

100,000 unlisted options with an exercise price of A\$0.28 expired on 25 August 2019.

At balance date the Empire Group had the following securities on issue:

##### Shares

- 262,838,649 (2018: 2,313,084,176 – pre-consolidation) listed fully paid ordinary shares – ASX Code: EEG

The Company does not have authorised capital or par value in respect of its issued shares. All issued shares are fully paid. The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company. No dividends were paid or declared during the year, or since the year-end.

##### Options

At balance date the Company had 57,725,004 (2018: 559,000,000 – pre-consolidation) unissued shares under option. These options are exercisable on the following terms:

Number		Exercise Price A\$	Expiry Date
1,000,000	Unlisted options	\$0.32	31 July 2020
350,000	Unlisted options	\$0.30	31 January 2020
36,775,004	Unlisted options	\$0.30	26 September 2020
600,000	Unlisted options	\$0.30	26 October 2020
1,300,000	Unlisted options	\$0.30	30 December 2021
300,000	Unlisted options	\$0.30	30 December 2021
300,000	Unlisted options	\$0.30	30 December 2021
1,700,000	Unlisted options	\$0.30	30 December 2022
600,000	Unlisted options	\$0.30	30 December 2021
12,000,000	Unlisted options	\$0.32	31 December 2021
2,800,000	Unlisted options	\$0.60	30 December 2022
57,725,004			

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 22. CONTRIBUTED EQUITY (continued)

#### d) Performance Rights

During the 2013 financial year the Company issued 2,500,000 Performance Rights over fully paid ordinary shares in the Company as part consideration for the buyback of the minority interest equity holder in Empire Energy USA LLC. The minority interest holder also received 4,000,000 fully paid ordinary shares in the issued capital of Empire Group Limited. The Performance Rights are exercisable at no cost under the following events:

- Lifting of the current moratorium on oil and/or natural gas fracking in New York State;
- If the Company sells, transfers or assigns all or substantially all of its property interest Chautauqua and Cattaraugus Counties in the State of New York to an unaffiliated third party then the performance rights will vest in accordance with the following schedule:

Fair Market Value of Consideration Received by the Company	Performance rights exercisable
Less than \$25.0m	0.0%
At least \$25.0m but less than \$45.0m.	Percentage calculated by dividing Fair Market Value of Consideration received by the Company by \$45.0m.
\$45.0m or more	100.0%

- If the holder of the Performance Rights in any way disposes of more than 75% of the 4m ordinary shares assigned as part of the minority interest buy back transaction prior to either the moratorium being terminated or a third party sale being consummated then the performance rights will be cancelled.
- The holder of the Performance Rights is an entity associated with a senior US executive of the Company, Mr Allen Boyer.
- At the Company's Annual General Meeting conducted on 30 May 2019, Shareholders approved the consolidation of the Company's equity on a 1 for 10 basis. The effect of the Share Consolidation during the period reduced the 2,500,000 Performance Rights to 250,000 Performance Rights.

During the 2019 financial year the Company issued 4,112,811 Performance Rights to the Company's Managing Director and employees under the terms of the Company's Rights Plan approved by Shareholders on 30 May 2019.

At balance date the Company had 4,362,811 unissued shares subject to Performance Rights. The Performance Rights are subject to certain preconditions being met.

The terms and conditions of each grants of performance rights affecting remuneration of directors and other key management personnel in this financial year or future reporting year are as follows:

#### Performance Rights

Director	Number of granted service rights	Grant Date	Vesting date and exercisable date	Expiry date	Exercise price	Fair value of options at grant date
A Underwood	3,150,000	14 June 2019	31 Aug 2021	31 June 2034	Nil	\$89,100
D Evans	362,317	30 Dec 2019	31 Dec 2021	30 Dec 2034	Nil	\$53,452
B Johnston	153,569	30 Dec 2019	31 Dec 2021	30 Dec 2034	Nil	\$22,656

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 22. CONTRIBUTED EQUITY (continued)

#### e) Service Rights

At balance date, the Company had 1,000,000 unissued shares subject to Service Rights. The Service Rights are subject to certain preconditions being met.

The terms and conditions of each grants of service rights affecting remuneration of directors and other key management personnel in this financial year or future reporting year are as follows:

#### *Service Rights*

Director	Number of granted service rights	Grant Date	Vesting date and exercisable date	Expiry date	Exercise price	Fair value of options at grant date
A Underwood	1,000,000	14 June 2019	31 Aug 2021	31 June 2034	Nil	\$180,000

### 23. RESERVES

#### **Fair value reserve**

The fair value reserve comprises the cumulative net change in the fair value of equity investments until the investment is derecognised.

#### **Foreign currency translation reserve**

The foreign currency translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

#### **Option Reserve**

The option reserve comprises the value of options, performance rights and service rights issued but not exercised at balance date.

### 24. CONTINGENT LIABILITIES

Empire Group Limited has executed a Deed of Guarantee and indemnity in favour of Macquarie Bank Limited guaranteeing the obligations of each of Empire Energy USA LLC and its subsidiary Empire Energy E&P LLC pursuant to the Macquarie Bank Limited credit facility.

The Empire Group is involved in legal proceedings arising out of the normal conduct of its US business. In the opinion of management, the ultimate resolution of such matters will not have a material effect on the consolidated financial position or results of operations of the Empire Group.

The Empire Group is subject to various federal, state and local laws and regulations relating to the protection of the environment. The Empire Group has established procedures for the ongoing evaluation of its operations, to identify potential environmental exposures and to comply with regulatory policies and procedures.

Environmental expenditures that relate to current operations are expensed or capitalised as appropriate. Expenditures that relate to an existing condition caused by past operations, and do not contribute to current or future revenue generation, are expensed. Liabilities are recorded when environmental assessment and or clean-up is probable, and the costs can be reasonably estimated. The Empire Group maintains insurance that may cover in whole or in part certain environmental expenditures. At 31 December 2019, the Empire Group had no environmental contingencies requiring specific disclosure or accrual.

There have been no other changes in contingent liabilities since the last annual reporting date.

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 25. CONTINGENT ASSETS

There are no contingent assets as at the date of this annual report.

### 26. COMMITMENTS FOR EXPENDITURE

#### Exploration and Mining Tenement Leases

In order to maintain current rights of tenure to exploration and mining tenements, the Company and the companies in the consolidated entity are required to outlay lease rentals and to meet the minimum expenditure requirements of the various Government Authorities. These obligations are subject to re-negotiation upon expiry of the relevant leases or when application for a mining licence is made. No expenditure commitment exists at 31 December 2019.

### 27. SHARE BASED PAYMENTS

#### Year Ending – 31 December 2019

During the 2019 financial period the following share-based payments occurred:

The Company granted 104,348 ordinary fully paid shares to Aamica Pty Ltd as partial consideration for capital raising and other financial advisory services in December 2018 in lieu of cash payment of A\$20,870 for services rendered, at a deemed issued price of A\$0.20 per share.

During the financial year the following options were granted:

No. of Options	Grant Date	Vesting Date	Exercise Price A\$	Expiry Date
2,800,000	30 December 2019	30 December 2019	\$0.60	30 December 2022

The Company granted the following service and performance rights to the Company's Managing Director and employees under the terms of the Company's Rights Plan approved by Shareholders on 30 May 2019.

#### Service Rights

Number of granted service rights	Grant Date	Vesting date and exercisable date	Expiry date	Exercise price	Fair value of service rights at grant date
1,000,000	14 June 2019	31 August 2021	30 June 2034	Nil	\$180,000

#### Performance Rights

Number of granted service rights	Grant Date	Vesting date and exercisable date	Expiry date	Exercise price	Fair value of performance rights at grant date
3,150,000	14 June 2019	31 August 2021	30 June 2034	Nil	\$89,100
792,903*	30 December 2019	31 December 2021	30 December 2034	Nil	\$104,663
169,908**	30 December 2019	31 December 2021	30 December 2034	Nil	\$37,380

\* Tranche 1

\*\* Tranche 2

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 27. SHARE BASED PAYMENTS (Continued)

##### Options

For the options granted during the 2019 financial year, the valuation model inputs used to determine the fair value at the grants date, are as follows:

Granted during year	Grant Date	Expiry date	Share price at grant date A\$	Expected volatility	Dividend yield	Risk-free interest rate
2,800,000	30 December 2019	30 December 2022	\$0.44	115.59%	Nil	0.88%

##### Service Rights

For the Service Rights granted during the 2019 financial year, the valuation model inputs used to determine the fair value at the grants date, are as follows:

Granted during year	Grant Date	Expiry date	Share price at grant date A\$	Expected volatility	Dividend yield	Risk-free interest rate
1,000,000	14 June 2019	31 August 2021	\$0.18	104.36%	Nil	1.38%

##### Performance Rights

For the Performance Rights granted during the 2019 financial year, the valuation model inputs used to determine the fair value at the grants date, are as follows:

Granted during year	Grant Date	Expiry date	Share price at grant date A\$	Expected volatility	Dividend yield	Risk-free interest rate
3,150,000	14 June 2019	30 June 2034	\$0.18	104.36%	Nil	1.38%
962,811	30 December 2019	30 December 2034	\$0.44	103.22%	Nil	1.31%

The weighted average share price during the financial year was A\$0.294 (2018: A\$0.28 on a post consolidation basis).

The weighted average remaining contractual life of options granted during the financial year and outstanding at the end of the financial year was 3 years (2018: 2.1 years).

The weighted average remaining time to Vesting Date of Service Rights (unless extended in accordance with the rights Plan Rules) granted during the financial year and outstanding at the end of the financial year was 1.7 years (2018: n/a).

The weighted average remaining time to Vesting Date of Performance Rights (unless extended in accordance with the rights Plan Rules) granted during the financial year and outstanding at the end of the financial year was 1.8 years (2018: n/a).



## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 27. SHARE BASED PAYMENTS (Continued)

##### Year Ending – 31 December 2018

During the 2018 financial period the following share-based payments occurred:

During the financial year the following options were granted pursuant to the Employee Share Option Plan:

No. of Options	Grant Date	Vesting Date	Exercise Price A\$	Expiry Date
3,000,000	16 April 2018	16 April 2018	\$0.03	30 December 2021
3,000,000	16 April 2018	16 April 2019	\$0.03	30 December 2021
17,000,000	18 June 2018	18 June 2020	\$0.03	30 December 2022

During the financial year the following options were granted to Macquarie Bank Limited in connection with the refinanced credit facility:

No. of Options	Grant Date	Vesting Date	Exercise Price A\$	Expiry Date
120,000,000	26 September 2018	26 October 2018	\$0.032	31 December 2021

During the financial year the following options were granted to the lead managers of the February 2018 capital raising:

No. of Options	Grant Date	Vesting Date	Exercise Price A\$	Expiry Date
5,000,000	16 February 2018	16 February 2018	\$0.03	31 January 2020

For the options granted during the 2018 financial year, the valuation model inputs used to determine the fair value at the grant date, are as follows:

Granted during year	Grant date	Expiry date	Share price at grant date A\$	Exercise price A\$	Expected volatility	Dividend yield	Risk-free
							interest rate
5,000,000	16 February 2018	31 January 2020	\$0.023	\$0.03	123.95%	-	1.99%
3,000,000	16 April 2018	30 December 2021	\$0.023	\$0.03	118.99%	-	2.20%
3,000,000	16 April 2018	30 December 2021	\$0.018	\$0.03	118.99%	-	2.20%
17,000,000	18 June 2018	30 December 2022	\$0.036	\$0.03	114.90%	-	2.34%
375,000,000	26 September 2018	26 September 2020	\$0.022	\$0.03	132.50%	-	2.07%
10,000,000	26 September 2018	31 July 2020	\$0.022	\$0.032	133.25%	-	2.07%
120,000,000	26 September 2018	31 December 2021	\$0.019	\$0.032	124.04%	-	2.03%
6,000,000	26 September 2018	26 October 2020	\$0.019	\$0.03	131.28%	-	1.99%

The weighted average share price during the financial year was A\$0.028 (2017: A\$0.010).

The weighted average remaining contractual life of options outstanding at the end of the financial year was 2.1 years (2017: 3.8 years)

**NOTES TO THE FINANCIAL STATEMENTS**  
**for the year ended 31 December 2019****27. SHARE BASED PAYMENTS (Continued)****a) Expenses arising from share-based payment transactions****Year ending - 31 December 2019**

The share-based payments during the year have been recognised as follows:

- Expense relating to issued options based on a pro-rata portion of the vesting period  
A\$518,724
- Recognised directly against issued capital as a cost associated with the share issue  
A\$784,000

**Year ending - 31 December 2018**

The share-based payments during the year have been recognised as follows:

- Expense relating to issued options based on a pro-rata portion of the vesting period A\$203,574
- Recognised directly against issued capital as a cost associated with the capital raising  
A\$195,000
- Recognised directly against debt as a cost of arranging finance  
A\$1,560,000

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## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 28. SEGMENT INFORMATION

The Empire Group has three reportable segments as described below. Information reported to the Empire Group's chief executive officer for the purpose of resource allocation and assessment of performance is more significantly focused on the category of operations.

<i>in USD</i>	US Operations		Northern Territory		Corporate		Eliminations		Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Revenue (external)	5,396,603	6,592,523	-	-	-	-	-	-	5,396,603	6,592,523
Revenue (internal)	-	-	-	-	231,350	619,471	(231,350)	(619,471)	-	-
Other income (excluding interest income)	148,311	89,999	1,112	-	6,005	2,101,942	-	-	155,428	2,191,941
<b>Reportable segment result before tax</b>	<b>367,166</b>	<b>1,062,282</b>	<b>(508,767)</b>	<b>(890,881)</b>	<b>(1,266,279)</b>	<b>1,026,221</b>	<b>(231,350)</b>	<b>(619,471)</b>	<b>(1,639,229)</b>	<b>578,151</b>
<b>Adjustments:</b>										
Effect of interest income and expense:										
- Interest income (internal)	-	-	-	-	1,881,268	1,372,213	(1,881,268)	(1,372,213)	-	-
- Interest income (external)	-	-	176	347	3,150	62,432	-	-	3,326	62,779
- Interest expense (internal)	(1,348,963)	(889,710)	(532,306)	(482,502)	-	-	1,881,268	1,372,213	-	-
- Interest expense (external)	(635,281)	(855,286)	-	-	(4,888)	(8,386)	-	-	(640,169)	(863,672)
	(1,984,244)	(1,744,996)	(532,130)	(482,155)	1,879,530	1,426,259	-	-	(636,843)	(800,893)
Material non-cash expenses not included in segment result										
- Depreciation and amortisation	(1,372,074)	(527,681)	(5,337)	(298)	(14,639)	(14,041)	-	-	(1,392,049)	(542,020)
- Share-based payment expense	-	-	-	-	(360,598)	(152,253)	-	-	(360,598)	(152,253)
- Impairment of assets	(3,881,096)	(2,688,917)	-	-	-	-	-	-	(3,881,096)	(2,688,917)
- (Impairment) / write-back of ARO	(2,630,800)	1,642,361	-	-	-	-	-	-	(2,630,800)	1,642,361
- Lease expiration costs	(2,500)	(124,900)	-	-	-	-	-	-	(2,500)	(124,900)
- Unrealised gain/loss on derivatives	(99,349)	(1,320,575)	-	-	-	-	-	-	(99,349)	(1,320,575)
- Finance cost - ARO accretion	(557,316)	(526,706)	-	-	-	-	-	-	(557,316)	(526,706)
- Finance cost - Discount on debt	(609,739)	(963,814)	-	-	-	-	-	-	(609,739)	(963,814)
- Other non-cash expenses	(28,394)	(238,588)	-	-	-	-	-	-	(28,394)	(238,588)
<b>Loss before income tax - continuing operations</b>	<b>(10,798,346)</b>	<b>(5,431,534)</b>	<b>(1,046,233)</b>	<b>(1,373,335)</b>	<b>238,015</b>	<b>2,286,185</b>	<b>(231,350)</b>	<b>(619,471)</b>	<b>(11,837,913)</b>	<b>(5,138,154)</b>
Reportable segment assets	27,583,085	58,830,073	4,214,199	1,586,198	65,382,395	58,155,325	(57,529,639)	(54,500,481)	39,650,040	64,071,115
Reportable segment liabilities	(40,245,411)	(56,449,527)	(12,930,604)	(9,278,579)	(338,374)	(1,473,516)	27,529,639	24,500,481	(25,984,750)	(42,701,142)
Capital expenditure	(39,787)	(291,264)	(1,807,763)	(37,395)	-	-	-	-	(1,847,550)	(328,659)

## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 28. SEGMENT INFORMATION (Continued)

The revenue (external) reported above represents revenue generated from external customers. Revenue (internal) represents service charges between segments in the period. Information reported to the Chief Operating Decision Makers (CODM) allows resources to be allocated and subsequent performance to be analysed. This is reviewed on a monthly basis.

The Empire Group's reportable segments under AASB 8 and reviewed by the CODM are as follows:

- US oil and gas operations - includes all oil and gas operations located in the USA. Revenue is derived from the sale of oil and gas and operation of wells.
- Northern Territory gas operations - includes all exploration oil and gas tenements in the Northern Territory, Australia.
- Corporate – includes all head-office investments and expenses related the Empire Group.

Segment profit/(loss) represents the profit/(loss) earned by each segment before finance income and finance expenses, other non-cash expenses and discontinued operations. This is the measure reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance.

#### Geographical information

All revenue generated from the sale of oil and gas to external customers is derived from operations in the USA.

All of the Company's producing oil and gas assets are located in the USA.

The Company has exploration oil and gas tenements in the Northern Territory, Australia.

#### Major customers

Revenues from two major customers of the Empire Group's Oil & Gas segment represents approximately \$7,505,508 (2018: two major customers \$9,012,547) of the Empire Group's total revenues.

### 29. RELATED PARTY DISCLOSURES

#### a. Disclosures Relating to Directors

- i. The names of persons who were directors of the Company at any time during the financial year were:
  - A Underwood
  - D H Sutton (to 30 June 2019)
  - L Tang (to 6 February 2019)
  - P Espie
  - J Gerahty
  - J Warburton

Details of remuneration and equity holdings of directors and other key management personnel are included in the remuneration report.

#### b. Disclosures Relating to Controlled Entities

Empire Energy Group Limited is the ultimate controlling Company of the Consolidated Entity comprising the Company and its wholly owned controlled companies. During the year, the Company advanced and received loans, and provided accounting and administrative services to other companies in the Consolidated Entity. These balances, along with associated charges, are eliminated on consolidation.

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 29. RELATED PARTY DISCLOSURES (Continued)

##### c. Investments in Controlled Companies

	Country of Incorporation	Class of Share	Interest Held	
			December 2019 %	December 2018 %
<b>Controlling Empire Group</b>				
Empire Energy Group Limited	Australia			
<b>Controlled Companies</b>				
Imperial Oil & Gas Pty Limited	Australia	Ordinary	100	100
Empire Energy Holdings, LLC	USA	Units	100	100
Empire Energy USA, LLC	USA	Units	100	100
Empire Energy (MidCon), LLC	USA	Units	100	100
Empire Energy E&P, LLC	USA	Units	100	100

All entities are audited by Nexia Sydney Partnership with the exception of Empire Energy Holdings, LLC, Empire Energy USA LLC, Empire Energy (MidCon), LLC and Empire Energy E&P, LLC which are companies incorporated in the USA and are audited by Schneider Downs & Co. Inc.

#### 30. NOTES TO THE STATEMENT OF CASH FLOWS

	December 2019 \$	December 2018 \$
<b>(a) Reconciliation of Cash</b>		
Cash at the end of the financial year is shown in Statement of Financial Position as follows:		
Cash at bank and in hand	9,882,386	4,157,175
<b>(b) Reconciliation of profit after income tax expense to net cash flows from operating activities</b>		
(Loss) for the period after income tax expense	(16,123,669)	(15,867,054)
<b>Adjustments for non-cash items:</b>		
Amortisation on right-of-use assets	246,630	-
Depreciation & amortisation expense	1,392,050	1,717,523
Impairment of property, plant & equipment	3,881,096	16,586,509
Write-back of Asset Retirement Obligation	2,630,800	(1,642,361)
(Gain)/loss on disposal of property, plant & equipment	-	(33,234)
Expiration of leases	1,399,469	142,500
Discount on debt	609,739	442,614
Asset retirement obligation accretion	(557,316)	526,706
Share-based payment expense	333,116	226,092
Unrealised loss/(gain) on forward commodity contracts	1,692,396	(2,391,765)
Other non-cash expenses	28,395	-
Loss on disposal of discontinued operations	2,059,722	-
<b>Operating loss before changes in working capital and provisions</b>	<b>(1,292,940)</b>	<b>(292,470)</b>

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 30. NOTES TO THE STATEMENT OF CASH FLOWS (Continued)

	2019 \$	2018 \$
Change in Trade and other receivables	341,134	(215,286)
Change in Prepayments and other current assets	267,293	(165,678)
Change in Inventories	82,404	(86,072)
Change in Trade and other payables	(183,680)	492,782
Change in Provisions	32,142	5,516
	<u>539,292</u>	<u>31,262</u>
<b>Net cash flows used in operating activities</b>	<u>(753,647)</u>	<u>(261,208)</u>

#### (c) Non-Cash Financing and Investing Activities

(i) Reconciliation of Liabilities arising from Financing Activities – refer also to Note 18.

	Balance at 1 January 2019	Financing Cashflows	Options and refinance costs	Amortisation of deferred finance costs	Debt to Equity	Balance at 31 December 2019
Interest bearing borrowings	24,368,652	(18,497,421)	-	609,739	-	6,480,970

	Balance at 1 January 2018	Financing Cashflows	Options and refinance costs	Amortisation of deferred finance costs	Debt to Equity	Balance at 31 December 2018
Interest bearing borrowings	36,905,176	(7,878,290)	(1,622,048)	963,814	(4,000,000)	24,368,652

(ii) During the year share-based payments were made as partial consideration for capital raising and other financial advisory services. Refer to Note 27.

## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 31. EARNINGS PER SHARE

	<b>2019</b>	<b>2018</b>
Basic earnings per share from continuing operations (cents per share)	(5.11)	(2.24)
Diluted earnings per share from continuing operations (cents per share)	(5.11)	(2.24)
Profit/(loss) used in the calculation of basic and diluted earnings per share from continuing operations	(11,972,778)	(5,235,624)
Weighted average number of ordinary shares on issue used in the calculation of basic earnings per share from continuing operations	234,326,722	150,883,670
Weighted average number of potential ordinary shares used in the calculation of diluted earnings per share from continuing operations	234,326,722	150,883,670
Basic earnings per share from discontinued operations (cents per share)	(1.77)	(4.53)
Diluted earnings per share from discontinued operations (cents per share)	(1.77)	(4.53)
Profit/(loss) used in the calculation of basic and diluted earnings per share from discontinued operations	(4,150,891)	(10,613,430)
Weighted average number of ordinary shares on issue used in the calculation of basic earnings per share from discontinued operations	234,326,722	150,883,670
Weighted average number of potential ordinary shares used in the calculation of diluted earnings per share from discontinued operations	234,326,722	150,883,670
Basic earnings per share (cents per share)	(6.88)	(6.77)
Diluted earnings per share (cents per share)	(6.88)	(6.77)
Profit/(loss) used in the calculation of basic and diluted earnings per share	(16,123,669)	(15,867,054)
Weighted average number of ordinary shares on issue used in the calculation of basic earnings per share	234,326,722	150,883,670
Weighted average number of potential ordinary shares used in the calculation of diluted earnings per share	234,326,722	150,883,670

#### 32. SUPERANNUATION COMMITMENTS

The Empire Group contributed to externally managed accumulation superannuation plans on behalf of employees.

Empire Group contributions are made in accordance with the Empire Group's legal requirements.

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## NOTES TO THE FINANCIAL STATEMENTS

### for the year ended 31 December 2019

#### 33. PARENT ENTITY INFORMATION

	2019 \$	2018 \$
<b>Information relating to Empire Energy Group Limited:</b>		
Current Assets	8,717,791	3,588,600
Total Assets	65,382,395	58,155,325
Current Liabilities	338,374	1,473,516
Total Liabilities	338,374	1,473,516
Shareholder's Equity:		
Issued Capital	(101,523,681)	(94,163,284)
Reserves		
- Fair value reserve	(575,677)	(575,677)
- Foreign currency translation reserve	8,035,212	7,946,386
- Options reserve	(2,552,601)	(1,547,184)
- Share based payment reserve	(196,300)	(191,846)
- General Reserve	(233,858)	(233,644)
Accumulated Losses	30,985,628	33,138,185
Total Shareholder's Equity	(66,061,278)	(55,627,064)
Profit for the period	103,149	2,152,473
Total Comprehensive Income	(119,902)	581,293

#### 34. AUDITORS' REMUNERATION

##### Audit Services

Auditors of the Company – Nexia Sydney Partnership:

Audit and review of financial reports	80,639	77,681
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Other auditors:

Audit and review of financial reports	103,351	174,000
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	183,990	251,681
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##### Other services

Auditors of the Company – Nexia Sydney Partnership:

Taxation services	5,276	7,484
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Other auditors:

Taxation services	24,710	374
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	29,986	7,858
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## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### 35. MATTERS SUBSEQUENT TO BALANCE DATE

- 1) On 23 January 2020, the Company announced the completion of processing and interpretation of the recently acquired (231-line kilometres) 2D seismic data set in its 100% owned Northern Territory EP187 permit, across the eastern sector of the Beetaloo Sub-Basin. The seismic data confirmed that the target shale sequences were present in the Company's EP187 tenement.
- 2) On 1 February 2020, the Company's Australian corporate headquarters moved office location. The Company will enter into a 5-year lease which had not been finalised as at the date of the report.
- 3) On 6 March 2020, the Company advised its shareholders that it had received Northern Territory Government Ministerial consent for the drilling of Carpentaria-1 in EP187.
- 4) As at 31 December 2019, the Company breached the Adjusted PV Ratio under the Macquarie Credit agreement. On 27 March 2020, Macquarie waived all existing / prior defaults under the credit agreement and waived any potential breaches up to and including 31 December 2020. In consideration for Macquarie granting those waivers, Empire made principal repayments totalling \$825,000 on 27 March 2020 which were funded from existing USD cash balances.
- 5) At the date of completion of the Financial Report, the Group is continuing to monitor and respond to the effects of COVID-19. Empire has implemented robust COVID-19 policies designed to minimise the risk of transmission of COVID-19 among its workforce and local communities while minimising the risk of disruption to its ongoing business activities. Any potential financial effect of the virus on Empire's operations is currently unquantifiable.

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## NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 December 2019

### DIRECTORS' DECLARATION

In the opinion of the directors of Empire Energy Group Limited (the "Company"):

- a** The financial statements and notes of the Company and the remuneration disclosures that are contained in the Remuneration report in the Directors' report set out on pages 22 to 27, are in accordance with the *Corporations Act 2001*, including:
  - i** Giving a true and fair view of the Company's and Group's financial position as at 31 December 2019 and of their performance, for the year ended on that date; and
  - ii** Complying with Australian Accounting Standards (including the Australian Accounting Interpretations) and the *Corporations Regulations 2001*;
- b** the financial report also complies with the International Financial Reporting Standards as disclosed in Note 1; and
- c** there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

The directors have been given the declarations required by section 295A of the *Corporations Act 2001* from the Chief Executive Officer and the Chief Financial Controller for the year ended 31 December 2019.

Signed in accordance with a resolution of the directors.



**Alexander Underwood**  
Managing Director

**Date:** 31 March 2020

## Independent Auditor's Report to the Members of Empire Energy Group Limited

### Report on the Audit of the Financial Report

#### Opinion

We have audited the financial report of Empire Energy Group Limited (the Company and its subsidiaries (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, consolidated statement of changes in equity and 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:

- i) 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
- ii) 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 Corporations Act 2001 and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (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 Company, 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.

#### 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 key audit matter
<p><b>Impairment of oil and gas properties</b></p> <p><i>Refer to note 15 (Oil and Gas properties and property, plant and equipment)</i></p> <p>At 31 December 2019, the Group has capitalised proved and unproved oil and gas assets of \$26.2m. AASB 136 <i>Impairment of Assets</i> requires that the recoverable amount of an asset, or cash generating unit to which it belongs, be determined whenever an indicator of impairment exists. Management identified that such indicators did exist during the reporting period, included declined oil and gas prices.</p> <p>The Group's assessment of the recoverable amount of its producing gas properties was a key audit matter because the carrying value of the assets are material to the financial statements and management's assessment of recoverable amounts incorporate significant internal and external judgements and assumptions including commodity</p>	<p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> <li>▪ reviewing management's identification of impairment indicators existing during the period;</li> <li>▪ assessing whether the external expert engaged by management to provide independent valuations was appropriately experienced and qualified;</li> <li>▪ evaluating management's key assumptions and estimates used to determine the recoverable amount of its assets, including those related to forecast commodity prices and revenue, costs, discount rates and estimated residual values;</li> <li>▪ checking the mathematical accuracy of the cash flow models, testing inputs from valuation reports produced, as well as external inputs, including spot and forward prices for gas at the reporting date;</li> <li>▪ assessing the accuracy of management's forecasting by evaluating the reliability of historical forecasts and reviewing</li> </ul>



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Key audit matter	How our audit addressed the key audit matter
<p>prices, available reserves, residual values and discount rates.</p> <p><b>Asset retirement obligations</b> <i>Refer to note 21 (Provisions)</i></p> <p>At 31 December 2019, the Group has a carrying value of Asset Retirement Obligations of \$15.8m.</p> <p>The measurement of the provision for Asset Retirement Obligations incorporates significant judgement and uncertainty, with restoration cost estimates varying in response to many factors including changes in technology, legal requirements, discount rates, past experience at other production sites, and estimates of future restoration well plugging costs.</p> <p>The expected timing and amount of expenditure can also change, for example, in response to changes in laws and regulations or their interpretation.</p> <p>This was a key area of audit focus due to the size and nature of these estimates and their consequential effects on assessing the recoverable amount of producing assets.</p>	<p>whether current market conditions would impact those forecasts; and</p> <ul style="list-style-type: none"> <li>▪ assessing whether appropriate disclosure regarding significant areas of uncertainty has been made in the financial report.</li> </ul> <p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> <li>▪ evaluating management’s process of estimating and measuring the provision for asset retirement obligations;</li> <li>▪ evaluating whether the discount rate applied by management to the forecast cash outflows is appropriate and consistent with the requirements of AASB 137 - Provisions, Contingent Liabilities and Contingent Assets;</li> <li>▪ considering the Group’s estimates of plugging costs per well, including assessment of whether there have been changes in technology or costs that would materially impact those estimates. We compared the estimates for plugging costs against actual costs incurred in 2019;</li> <li>▪ considering whether the key assumptions and judgements used in management’s estimates were consistently applied in measuring the asset retirement obligations and in assessing the recoverable amount of the related assets; and</li> <li>▪ performing sensitivity analysis on management’s estimates used in calculating the obligations.</li> </ul>
<p><b>Discontinued operations/Sale of Kansas</b> <i>Refer to notes 4 and 20 (Discontinued Operations)</i></p> <p>During the year the Group recognised a loss after income tax from discontinued operations of \$4.2m (2018: \$10.6m) and classified and presented separately in the statement of financial position, current assets of discontinued operations of \$0.25m (2018: \$25.6m) and current liabilities of discontinued operations of \$0.1m (2018: \$2.0m).</p> <p>In June 2019, the directors entered into an agreement to sell the Group’s assets and interests in the Kansas operations. The sale was effective as at 30 September 2019.</p> <p>This was a key area of audit focus due to the significance of the transaction, its materiality to the financial report and the extent of audit effort needed to test the calculation of the loss on disposal of the discontinued operation and the related disclosures of discontinued operations in accordance with Australian Accounting Standards, especially AASB 5 - Non-current Assets Held for Sale and Discontinued Operations and AASB 107 - Statement of Cash Flows.</p>	<p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> <li>▪ testing the accuracy of management’s calculation of the loss on disposal of the discontinued operation;</li> <li>▪ checking the completeness and accuracy of management’s computation of the separately classified and presented assets and liabilities of discontinued operations; and</li> <li>▪ testing that the disclosure of the discontinued operations is compliant with the Australian Accounting Standards.</li> </ul>

## Other information

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

Our opinion on the financial report does not cover the other information and 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 the other information we are required to report that fact. We have nothing to report in this regard.

## Directors' responsibility for the financial report

The directors of the Company 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 Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

## Auditor's responsibility 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.

A further description of our responsibilities for the audit of the financial report is located at The Australian Auditing and Assurance Standards Board website at: [www.auasb.gov.au/auditors\\_files/ar1.pdf](http://www.auasb.gov.au/auditors_files/ar1.pdf). This description forms part of our auditor's report.

## Report on the Remuneration Report

### Opinion on the Remuneration Report

We have audited the Remuneration Report included in pages 22 to 27 of the directors' Report for the year ended 31 December 2019. In our opinion, the Remuneration Report of Empire Energy Group Limited for the year ended 31 December 2019, complies with section 300A of the Corporations Act 2001.

### Responsibilities

The directors of the Company 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.



**Nexia Sydney Partnership**



**Lester Wills**

Partner

Dated: 31 March 2020, Sydney

## SHAREHOLDER INFORMATION

## ORDINARY SHARES

## a Substantial Shareholders as at 29 March 2020 (grouped)

Name	Number of Shares	% Holding
Macquarie Bank Limited	26,459,867	10.07
Global Energy and Resources Development Limited	25,711,000	9.77
Elphinstone Group	13,250,000	5.05

## b Distribution of Fully Paid Ordinary Shares

	Holders	Number of Shares	% Holding
1 – 1,000	160	49,757	0.02
1,001 – 5,000	403	1,297,776	0.49
5,001 – 10,000	254	2,066,553	0.78
10,001 – 100,000	636	25,887,531	9.83
100,001 and over	315	233,987,032	88.87
<b>Total number of holders</b>	<b>1,768</b>	<b>263,288,649</b>	<b>100.00</b>

i Number of holders of less than a marketable parcel 347

ii Percentage held by 20 largest holders 49.18%

## c Twenty Largest Shareholders grouped as at 29 March 2020 (ungrouped)

Name	Number of Shares	% Holding
1 MACQUARIE BANK LIMITED <METALS MINING AND AG A/C>	26,451,367	10.05
2 GLOBAL ENERGY AND RESOURCES DEVELOPMENT LIMITED	25,711,000	9.77
3 LIANGROVE MEDIA PTY LIMITED	12,245,000	4.65
4 ELPHINSTONE HOLDINGS PTY LTD	12,000,000	4.56
5 HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	8,031,470	3.05
6 CITICORP NOMINEES PTY LIMITED	6,919,496	2.63
7 CHA QIAN	5,145,000	1.95
8 MR KOOI ONN CHYE	4,643,363	1.76
9 CHEOY LEE YACHTS AUSTRALIA PTY LTD	4,130,000	1.57
10 GROSVENOR EQUITIES PTY LTD <NO 2 A/C>	3,597,921	1.37
11 MR ANDREW FORSTER	2,500,000	0.95
12 KUARKA PTY LIMITED <KUARKA A/C>	2,500,000	0.95
13 MR TEIK TATT OH	2,500,000	0.95
14 INVIA CUSTODIAN PTY LIMITED <PACIFIC ROAD PROVIDENT A/C>	2,350,000	0.89
15 ORACLE FINANCIAL PLANNING PTY LTD	2,101,000	0.80
16 MR CHARLES PHILLIP LOWSLEY PEAKE	2,003,000	0.76
17 JOHN WARDMAN & ASSOCIATES PTY LTD <THE WARDMAN SUPER FUND A/C>	1,896,487	0.72
18 JETAN PTY LTD	1,715,095	0.65
19 RHB SECURITIES SINGAPORE PTE LTD <CLIENTS A/C>	1,535,029	0.58
20 GARFIELD SUPER CO PTY LTD <CCS PTY LTD SUPERFUND A/C>	1,500,000	0.57
	<b>129,475,228</b>	<b>49.18</b>

### Voting Rights

On a show of hands every member present in person or by proxy shall have one vote and upon a poll every member, present in person or by proxy, shall have one vote for every share except if the issue price has not been paid in full, then the holder is only entitled to a fraction of a vote on that share, being, the quotient of the amount paid up divided by the issue price of that share.

### UNQUOTED SECURITIES AS AT 29 MARCH 2020

Class of unquoted securities	No. of securities	No. of holders
- Unlisted options exercisable at A\$0.30 expiring 26 November 2020	36,768,754	129
- Unlisted options exercisable at A\$0.30 expiring 30 December 2021	1,300,000	9
- Unlisted options exercisable at A\$0.30 expiring 30 December 2021	300,000	1
- Unlisted options exercisable at A\$0.30 expiring 30 December 2021	300,000	1
- Unlisted options exercisable at A\$0.30 expiring 30 December 2022	1,700,000	11
- Unlisted options exercisable at A\$0.30 expiring 31 July 2020	906,250	4
- Unlisted options exercisable at A\$0.30 expiring 26 October 2020	600,000	2
- Unlisted options exercisable at A\$0.30 expiring 30 December 2021	600,000	1
- Unlisted options exercisable at A\$0.60 expiring 30 December 2022	2,800,000	2
- Unlisted options exercisable at A\$0.32 expiring 31 December 2021	12,000,000	1
- Unlisted Performance Rights	250,000	1
- Unlisted Service Rights	1,000,000	1
- Unlisted Performance Rights	3,150,000	1
- Unlisted Performance Rights	962,811	3

### Voting Rights

There are no voting rights attached to any of the unquoted securities listed above

### LIST OF MINERAL LEASES – USA AND AUSTRALIA

A full list of the mineral (oil & gas) leases and rights of way held by the Company was announced on the Australian Securities Exchange on 31 March 2020. Given the extensive list it was not practical to include this listing in the Annual Report of the Company.

### CORPORATE GOVERNANCE STATEMENT

The Company's corporate governance statement can be found on the Company's website at the following location: <http://empireenergygroup.net/company-overview/corporate-governance>

## Interview with Prof. John Warburton 30<sup>th</sup> July 2019

(Originally published in the Australian Resource Investment Magazine, Vol 13, Number 4, December 2019).

### Empire Energy Director tells how the company ignited the Northern Territory's shale gas potential

My career had been entirely focused on conventional international big-field oil and gas until I met Bruce McLeod, an industry veteran with a mathematics and economics background. In 1993, I was part of the exploration team that led BP into the Northern Caspian Sea, both in Azerbaijan and Kazakhstan. Eventually the massive Kashagan oil field was discovered with recoverable reserves of about 13 billion barrels of oil - the world's biggest oil discovery since the 1970s.

Bruce's knowledge of shale geology was cursory, but he knew Empire Energy's producing oil and gas fields in the US overlay prospective Utica Shale sequences in Pennsylvania and New York State.

From about 2008 onwards, horizontal drilling with multi-stage fracking provided the breakthrough in the USA to enable commercial oil and gas production from tight shale rock, and Bruce had seen the dramatic impact of shale gas on the US economy and simply queried why that couldn't happen elsewhere.

The first thing Bruce asked me during our first lunch meeting in 2010 was 'What do you know about shale?' That threw me a bit and I said 'Well, to be honest Bruce, I've spent my life in conventional oil and gas, so I know pretty much nothing about shale other than as a conventional petroleum source rock'. Rather than being the end of the conversation, and to my surprise, Bruce said 'So, when can you start?'

We agreed I would spend six months finding a shale play somewhere else in the world that Empire Energy could acquire and monetize.

In the previous four years I'd completed a major business development review of South East Asia for a multinational petroleum company. My mission had been to identify big conventional gas exploration opportunities that were geologically simple, easily developed, with a low entry cost, substantial acreage



footprint, low fiscal risk and where there was a high chance of finding a super-giant gas field. It was a relatively quick task to screen the entire region once again, and essentially applying the same screening metrics, but this time with a view to shale plays.

By 2010, Shale gas had been spoken about in Australia for at least a year and I'd assumed all the prospective acreage would already have been snapped-up, but this was not so.

We wanted large contiguous areas at 100% equity, to allow ourselves to be unfettered by others. On the 24<sup>th</sup> March 2010 I planted myself in the Information Centre of the Northern Territory Geological Survey (NTGS). One particular report described the results from a mineral well named GRNT-09. It had been drilled by Amoco Minerals in the Glyde Sub-Basin back in 1979 during their exploration for lead and zinc mineralization in the vicinity of what is now Glencore's zinc-lead McArthur River Mine in the McArthur Basin.

These metals were hosted in ancient black shale formations laid down in a relatively deep-water sedimentary basin an astonishing 1.64 billion years ago during the Palaeo-Proterozoic Era. If I may, I'll tell you a bit about how these extraordinary rocks formed.

They were of enormous interest to me as a petroleum man. The atmosphere of the early Earth from about 3.5 to 2.5 billion years ago had only a small fraction of the present-day oxygen level. That was because all the oxygen created by photosynthetic blue-green algae - some of the earliest life-forms on Earth - was captured by iron in the oceans to form the thick banded iron-ore formations. After the free iron available in the early oceans was exhausted, oxygen levels increased modestly until about two billion years ago, and yet the oceans remained relatively 'anoxic'.

Those conditions allowed for the preservation of organic carbon and the deposition of black carbonaceous, sulphide-rich black shales. The best analogue today is around the deep-sea 'black smoker' hydrothermal vents where life thrives in the form of bacterial colonies, shrimps and crabs.

In the Proterozoic Era, the dominant life form on Earth was prolific microscopic cyanophyte, or blue-green algal blooms. These rained in vast numbers onto the seabed forming layers of concentrated carbon in what became shale rock. The sulphide layers were interbedded with layers of black shale that was also raining down

from the oceanic water column. And it still amazes me that world-class, zinc-lead deposits can be interspersed with fine layers of world-class organic, petroleum-prone black shale.

But the real lightbulb moment came as I ploughed through the completion report for the 1979 Amoco 534 metre-deep GRNT-09 mineral well. The rig had struck a layer containing natural gas and caught fire! It was a mineral well so didn't have sophisticated blow-out preventers that are requisite on petroleum wells. A grainy photo of the flaming gas showed it blew six meters or so into the air and had a yellow smoky appearance indicating the gas contained condensate liquid or light oil.

The well burned into the wet season until the hole had filled with water and the gas escape was reduced to bubbles. Somebody in Amoco had the presence of mind to sample that gas, which comprised about 75% methane plus heavier components of C2 to C8 and with very little carbon dioxide contaminant. It had intersected a viable petroleum source in the Barney Creek Formation which had been historically mined for lead and zinc. I simply then used the published NTGS geological maps to track the geographic distribution of that rock formation.

I phoned Bruce and said 'Look, we are potentially onto a winner here; this is a shale play that fits all our screening metrics'. As far as I was aware at the time nobody else had spotted it. This was what we'd been looking for. An aerially extensive, proven gas and liquids-rich petroleum system in our own 'back-yard', not overseas.

The Barney Creek Formation was estimated by the NTGS Geologists to be up to 900 meters thick in places, almost an order of magnitude greater than many of the US shale fields. The area that contained the Barney Creek Formation was mostly flat, sparsely vegetated stony land with little agricultural potential so - subject to the approval of its traditional owners - the play could be accessed, exploited and remediated quite easily. On 26<sup>th</sup> March 2010, I applied for seven license areas occupying 59,000 square kilometers, or about five per cent of the entire onshore Northern Territory - an area about the size of Croatia.

Unknown to us, at the time that I was submitting Empire's License Applications a competitor, Armour Energy, was also active. Armour's presence became evident when two of the areas I had submitted applications for were refused by the Northern Territory Petroleum Licensing Department. Evidently, and just days before, Armour had also submitted applications for the same two licenses to the south of Empire's acreage.

Armour Energy has since drilled a number of successful exploration wells, including one with a horizontal leg. Despite being 1.64 billion years old, those wells have confirmed that the Barney Creek Formation shales are a prolific and potentially commercially viable petroleum system. Being exceedingly old (almost one third of the age of the Earth itself), such ancient rocks like these have typically been deeply buried, or may have suffered recrystallization or even melting, thus depriving them of any petroleum.

The rocks of McArthur and Beetaloo Basins have never been buried so deep as to ruin their petroleum prospectivity. It is very clear that during their history they experienced just the right pressures and temperatures for petroleum generation and preservation - almost like a petroleum 'Goldilocks zone'.

## **What are the chances that the McArthur and Beetaloo Basins can make Australia self-sufficient in liquid fuels?**

I genuinely believe there is a very high chance that shale petroleum will play an enormous part in Australia's energy self-sufficiency - and ultimately exports. The numbers quoted by most operators for the volumes of hydrocarbons, albeit currently at 'prospective resource' status, are enormous. They dwarf Australia's proven present-day conventional oil and gas volumes.

The NTGS estimates that in excess of 500 trillion cubic feet of gas-in-place is present just within the Middle Velkerri Shale in the Beetaloo Basin. Empire's independent expert certification is that the P50 - or 'most likely' - resource in Empire's acreage to be about two billion barrels of oil equivalent - or 13 trillion cubic feet of gas - but is up five billion barrels of oil equivalent at P10. This is a substantial prospective petroleum volume, yet is conservative when compared with the NTGS's estimate. NTGS has also assumed up to 75% of the shale formation is not petroleum-bearing. And we have the McArthur Basin potential on top of that.

The part of the McArthur Basin within Empire Energy's acreage occupies a similar area to the United States' Fayetteville Basin. After many years of drilling, the United States Department of Energy has estimated that the Fayetteville Basin contains about 42 trillion cubic feet of gas.

## How do you know where to start exploratory drilling in such an enormous area?

### Isn't it like trying to find a needle in a haystack?

The United States has been developing shale petroleum for a number of years now, and geologists have a good knowledge of where the richest shales, or 'sweet-spots', are located. The rule-of-thumb from the United States, from hindsight, is that about 10 per cent of the area of a shale play is a real sweet-spot. Furthermore, it's suggested that the sweet-spot contains about 45 per cent of the total economic value of the basin. So clearly that's where you want to start drilling.

Early sweet-spot development enhances the project economics; achieving good early production rates means the initial investment will be paid back quicker. Lower quality shales can be exploited later.

## How do the Geologists go about predicting shale petroleum sweet-spots in a basin?

You look for the relationships between the color, hardness and composition of the various layers of rock and identify which layers have the high organic carbon content. You also look at the fine sedimentary structures that describe the conditions in which the sediment was originally laid down. Those details will tell you a lot about how the rock was deposited, whether sand was being introduced into the basin (diluting the shales), and whether the depositional environment was anoxic, so the carbon content is preserved. And then you correlate the rock layers between many wells and mineral cores, and see if they are continuous over great distances or fragmented.

This approach will allow you to draw contour maps and determine the geographic variation in things such as total thickness of black shale layers with high organic carbon, the depths at which the rocks are buried, and if they are deep enough to generate oil and gas. The areas with thick shale, little sandstone dilution, a large number of layers with organic carbon, at the right palaeo-temperature and at optimum depth to drill, will be the sweet-spots. Seismic data helps to establish the horizontal continuity across the basin and identify local geological complexities to stay away from.

Analyzing the shapes in the rock layers on seismic tells us about the relative sea level under which successive rock layers were originally deposited, and the likely overall chemistry of the rocks at different depths. You can say 'Right, we see a particular shape in the seismic data; that's a particular place of interest'.

I'm really looking forward to seeing first-hand the seismic data we are acquiring across EP187 right now.

As a frontrunner, Empire Energy acquired not just a sizable portion of the Beetaloo Basin, but also a major segment of the older McArthur Basin. Along with Empire, only Armour Energy has substantial claim over the McArthur, which may have an even greater petroleum potential than the Beetaloo.

## How will Empire commercialize its gas?

The supply-demand conversations and possibilities between the Northern Territory and Queensland are real. In 2018, Jemena constructed the North East Gas Interconnector between Tennent Creek and the eastern pipeline network connecting the systems at Mt Isa. Such investment proves there is already growing, and Australia-wide recognition of the energy potential of the Northern Territory shale basins.

Empire Energy plans to start commercial gas production as early as possible initially, for example, with customers from the local mining and fertilizer industries looking to replace diesel with cleaner and cheaper gas. The McArthur River mine has a gas pipeline that passes right through Empire Energy's license EP187. Longer term, if there really is 29 trillion cubic feet of gas - which external assessments currently attribute to Empire Energy's McArthur Basin acreage - this will lead us to the possibility of liquefied natural gas (LNG) exports and examining Australia's strategic security of supplies, as well as in liquid fuels.

Empire's prospective shale acreage extends 600 kilometers, south to north, up to the very top of East Arnhem Land. Near the site of Pacific Aluminium's now-closed Gove Refinery, there is functioning deepwater port at Nhulunbuy in East Arnhem Land, just 80 kilometers to the east of Empire Energy's northernmost exploration area. Furthermore, a right of way for a 600-kilometer spur pipeline from Katherine to Nhulunbuy has been surveyed and passes right through Empire Energy's tenements EPA 180 and EPA 181.

The town of Nhulunbuy is in one of Australia's most northerly locations and faces the South East Asian LNG markets. We are extremely well positioned to be a substantial player in the emerging shale petroleum export story.

My personal view is that the industry must embrace the conversation about this new frontier, about energy security, and of the huge potential for the exportation of liquefied natural shale gas. It created a massive change in the United States, with daily shale gas production increasing dramatically from about two billion cubic feet in 2007 to 50 billion cubic feet in 2015 - with a 10 per cent decrease in national annual carbon emissions. There will be intense market pull, both domestic (from gas usage and prices) and international (for LNG) if the shale resource is realized.

**John Warburton** is a Non-Executive Director of Empire Energy Group. Previously, he spent 14 years with BP Exploration, where he held senior technical and management positions, then moved to senior positions with substantial oil and gas companies, including LASMO plc, Eni Pakistan Ltd and Oil Search Ltd. John is an Independent Non-Executive Director of Senex Energy Ltd and Visiting Professor in the School of Earth & Environment at the University of Leeds, United Kingdom.

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