

## **Hawkley Oil and Gas Limited**

# **Independent Expert's Report** and Financial Services Guide





## MOORE AUSTRALIA CORPORATE FINANCE (WA) PTY LTD

## Australian Financial Services License No. 240773

#### FINANCIAL SERVICES GUIDE

This Financial Services Guide is issued in relation to our Independent Expert's Report on the proposed acquisition of 100% of the ordinary share capital of Persist Oil and Gas Inc ("Persist") from the Persist Vendors in exchange for the issue of 95,457,232 ordinary shares and 9,545,752 Options in Hawkley Oil and Gas Limited ("Hawkley") on a post consolidation basis ("Proposed Transaction"). Our report has been prepared at the request of the Directors of Hawkley for inclusion in the Notice of Meeting to be dated on or about 15 December 2021.

#### Moore Australia Corporate Finance (WA) Pty Ltd

Moore Australia Corporate Finance (WA) Pty Ltd ("MACF") has been engaged by the directors of Hawkley to prepare an independent expert's report expressing our opinion as to whether or not the Proposed Transaction is "fair and reasonable" to the shareholders of Hawkley other than those associated with the Proposed Transaction

MACF holds an Australian Financial Services Licence – Licence No 240773.

#### **Financial Services Guide**

As a result of our report being provided to you we are required to issue to you, as a retail client, a Financial Services Guide ("FSG"). The FSG includes information on the use of general financial product advice and is issued so as to comply with our obligations as holder of an Australian Financial Services Licence.

#### Financial Services we are licensed to provide

We hold an Australian Financial Services Licence which authorises us to provide reports for the purposes of acting for and on behalf of clients in relation to proposed or actual mergers, acquisitions, takeovers, corporate restructures or share issues, and to carry on a financial services business to provide general financial product advice for securities to retail and wholesale clients.

We provide financial product advice by virtue of an engagement to issue a report in connection with the issue of securities of a company or other entities

Our report includes a description of the circumstances of our engagement and identifies the party who has engaged us. You have not engaged us directly but will be provided with a copy of our report as a retail client because of your connection with the matters on which our report has been issued. We do not accept instructions from retail clients and do not receive remuneration from retail clients for financial services

Our report is provided on our own behalf as an Australian Financial Services Licensee authorised to provide the financial product advice contained in this report.

#### **General Financial Product Advice**

Our report provides general financial product advice only, and does not provide personal financial product advice, because it has been prepared without taking into account your particular personal circumstances or objectives either financial or otherwise, your financial position or your needs.

Some individuals may place a different emphasis on various aspects of potential investments.

An individual's decision in relation to the proposed transaction may be influenced by their particular circumstances and, therefore, individuals should seek independent advice.

#### Benefits that we may receive

We will charge fees for providing our report. The basis on which our fees will be determined has been agreed with, and will be paid by, the person who engaged us to provide the report. Our fees have been agreed on either a fixed fee or time cost basis. We estimate that our fees for the preparation of this report will be approximately \$45,000 plus GST.

#### Remuneration or other benefits received by our employees

All our employees receive a salary. Employees may be eligible for bonuses based on overall productivity and contribution to the operation of MSPCS or related entities but any bonuses are not directly in connection with any assignment and in particular are not directly related to the engagement for which our report was provided.

#### Referrals

We do not pay commissions or provide any other benefits to any parties or person for referring customers to us in connection with the reports that we are licensed to provide.

#### Associations and relationships

MACF is the licensed corporate advisory arm of Moore Australia Perth, Chartered Accountants. The directors of MACF may also be partners in Moore Australia Perth Chartered, Accountants.

Moore Australia, Chartered Accountants is comprised of a number of related entities that provide audit, accounting, tax, and financial advisory services to a wide range of clients.

MACF's contact details are set out on our letterhead.

MACF is currently preparing an investigating accountant's report for inclusion in the prospectus of Hawkley and is expected to receive a fee of \$35,000 for the investigating accountant's report.

#### Complaints resolution

As the holder of an Australian Financial Services Licence, we are required to have a system for handling complaints from persons to whom we provide financial product advice. All complaints must be in writing, addressed to The Complaints Officer, Moore Australia Corporate Finance (WA) Pty Ltd, PO Box 5785, St George's Terrace, Perth WA 6831.

On receipt of a written complaint we will record the complaint, acknowledge receipt of the complaint and seek to resolve the complaint as soon as practical.

If we cannot reach a satisfactory resolution, you can raise your concerns with the Australian Financial Complaints Authority Limited ("AFCA"). AFCA is an independent body established to provide advice and assistance in helping resolve complaints relating to the financial services industry. MACF is a member of AFCA. AFCA may be contacted directly via the details set out below.

Australian Financial Complaints Authority Limited

GPO Box 3

Melbourne VIC 3001 Toll free: 1800 931 678 Facsimile: 03 9613 6399 Email: info@afca.org.au

## TABLE OF CONTENTS

1.	INTRODUCTION	4
2.	SUMMARY AND OPINION	5
3.	SUMMARY OF THE PROPOSED TRANSACTION	8
4.	SCOPE OF THE REPORT	.11
5.	INDUSTRY ANALYSIS	.13
6.	PROFILE OF HAWKLEY OIL AND GAS LIMITED	. 17
7.	PROFILE OF PERSIST OIL AND GAS INC	.20
8.	VALUATION APPROACH	.26
9.	VALUATION OF A HAWKLEY SHARE PRIOR TO THE PROPOSED TRANSACTION	.28
10.	VALUATION OF A HAWKLEY SHARE FOLLOWING THE PROPOSED TRANSACTION	.31
11.	IS THE PROPOSED TRANSACTION FAIR TO HAWKLEY SHAREHOLDERS?	.46
12.	IS THE PROPOSED TRANSACTION REASONABLE?	.47
13.	INDEPENDENCE	.49
14.	QUALIFICATIONS	.49
15.	DISCLAIMERS AND CONSENTS	.50
APPI	ENDIX A – SOURCE OF INFORMATION	.51
APPI	ENDIX B – VALUATION METHODOLOGIES	.52
APPI	ENDIX C – GLOSSARY	.54
APPI	ENDIX D – COMPARABLE ASX LISTED OIL AND GAS PRODUCERS	.56
APPI	ENDIX E – CHAPMAN REPORT	.58



16 November 2021

The Directors
Hawkley Oil and Gas Limited
Unit 106/Ground floor
101 Moray Street
SOUTH MELBOURNE VIC 3205

**Dear Directors** 

#### **Moore Australia**

Level 15, Exchange Tower, 2 The Esplanade, Perth, WA 6000 PO Box 5785, St Georges Terrace, WA 6831

T +61 8 9225 5355 F +61 8 9225 6181

www.moore-australia.com.au

## **Independent Expert's Report**

## 1. INTRODUCTION

- 1.1 This Independent Expert's Report ("IER") has been prepared to accompany the Notice of Meeting ("Notice of Meeting") to be provided to shareholders for a General Meeting of Hawkley Oil and Gas Limited ("Hawkley", "the Company" or "the Purchaser").
- 1.2 The Directors of Hawkley have engaged Moore Australia Corporate Finance (WA) Pty Ltd ("MACF") to prepare an Independent Expert's Report, being independent and qualified for purpose, to express an opinion as to whether or not the proposed acquisition of 100% of the ordinary share capital of Persist Oil and Gas Inc ("Persist") by Hawkley via the issue of fully paid ordinary shares in Hawkley (the "Proposed Transaction"), is fair and reasonable to the Non-Associated Shareholders of Hawkley.
- 1.3 Our assessment of the Proposed Transaction relies on financial information provided by the Company and the Directors. We have not completed an audit or due diligence of the information which has been provided or of the entities which have been valued. We have however, performed a critical analysis of the information provided to us by querying any abnormal or unusual movements, as required by RG 111: Content of Experts Reports.
- 1.4 This report does not contain any accounting or taxation advice.
- 1.5 Further details of the Proposed Transaction are set out in Section 3 of our report.



## 2. SUMMARY AND OPINION

## **Purpose of the Report**

- 2.1 The Independent Experts Report is to accompany a Notice of Meeting and Explanatory Statement to be sent to shareholders of Hawkley to comply with the requirements of Section 606 of the Corporations Act.
- 2.2 Section 606 of the Corporations Act prohibits a person from acquiring a relevant interest in the issued voting shares of a public company if the acquisition results in that person's voting power increasing from a starting point below 20% to an interest above 20% or from a starting point of above 20% to an increased percentage, other than under limited exceptions.
- 2.3 Assuming the minimum Capital Raising is achieved, completion of the Proposed Transaction is expected to result in the Vendors of Persist having a combined voting power in Hawkley of 53.43% immediately following completion of the Proposed Transaction, and a combined voting power in Hawkley of 55.96% on a fully diluted basis (assuming the conversion of all Options, Performance Rights and Convertible Notes). Assuming the maximum Capital Raising is achieved, completion of the Proposed Transaction is expected to result in the Vendors of Persist having a combined voting power in Hawkley of 49.41% immediately following completion of the Proposed Transaction, and a combined voting power in Hawkley of 52.30% on a fully diluted basis (assuming the conversion of Options, Performance Rights and Convertible Notes). See Section 3 of this report for further details of shareholdings prior to and post the Proposed Transaction.
- 2.4 Under Item 7 of Section 611 of the Act, the prohibition contained in Section 606 of the Act does not apply if the Proposed Transaction has been approved by the Non-Associated Shareholders of the Company. Accordingly, the Company is seeking approval from the Non-Associated Shareholders for the Proposed Transaction under Item 7 of Section 611 of the Act.
- 2.5 Item 7 Section 611 of the Act states that shareholders must be given all information that is material to the decision on how to vote at the meeting. ASIC Regulatory Guide 111 ("RG 111") advises the requirement to commission an Independent Expert's Report in such circumstances and provides guidance on the content.
- 2.6 The Directors of Hawkley have engaged Moore Australia Corporate Finance (WA) Pty Ltd ("MACF") being independent and qualified for the purpose, to prepare an Independent Expert's Report to express an opinion as to whether or not the Proposed Transaction is fair and reasonable to the shareholders of Hawkley not associated with the Proposed Transaction (the "Non-Associated Shareholders").
- 2.7 Our assessment of the Proposed Transaction relies on financial information and instructions provided by the Company and the Directors. We have critically analysed the information provided to us, but we have not completed any audit or due diligence of the information which has been provided for the entities which have been valued. This report does not contain any accounting or taxation advice.

## **Approach**

- 2.8 Our report has been prepared having regard to Australian Securities & Investments Commission ("ASIC") Regulatory Guide 111 Content of Expert's Reports ("RG 111") and Regulatory Guide 112 Independence of Expert's ("RG 112").
- 2.9 In arriving at our opinion, we have assessed the terms of the Proposed Transaction, as outlined in the body of our report, by considering the following:
  - Whether the value of a Hawkley share following the Proposed Transaction (on a minority basis) is greater than the value of a Hawkley share prior to the Proposed Transaction (on a control basis);
  - Advantages and disadvantages of approving the Proposed Transaction;
  - The likelihood of a superior alternative Proposed Transaction being available to Hawkley;
  - Other factors which we consider to be relevant to the shareholders of Hawkley in their assessment of the Proposed Transaction; and



- The position of the shareholders of Hawkley should the Proposed Transaction not be successful.
- 2.10 Further information on the approach we have employed in assessing whether the Proposed Transaction is "fair and reasonable" is set out at Section 4 of this Report.

## **Opinion**

2.11 We have considered the terms of the Proposed Transaction as outlined in the body of our report and have concluded that the Proposed Transaction is fair and reasonable to the Non-Associated Shareholders of Hawkley, as set out in Sections 11 and 12 of this Report.

#### **Fairness**

2.12 In Section 11 we determined the value of Hawkley's shares before the Proposed Transaction and the value of Hawkley's shares following the Proposed Transaction, as detailed below:

	Section	Low A\$	High A\$
Value of a Hawkley share roposed Transaction on a	9	Nil	Nil
Value of a Hawkley share ed Transaction on a minority	10	0.20	0.24

Source: Moore Australia Corporate Finance (WA) Pty Ltd analysis

2.13 The above assessment indicates that, in the absence of any other relevant information, the Proposed Transaction is fair to the Non-Associated Shareholders of Hawkley.

#### Reasonableness

- 2.14 RG 111 establishes that an offer is reasonable if it is fair. It may also be reasonable if, despite not being fair, there are sufficient reasons for security holders to accept the Proposed Transaction in the absence of a higher bid before the Proposed Transaction closes. We have considered the analysis in Section 11 of this report, in terms of both;
  - Advantages and disadvantages of the Proposed Transaction; and
  - Other considerations, including the position of the Non-Associated Shareholders of Hawkley if the Proposed Transaction is not successful.
- 2.15 In our opinion, if the Proposed Transaction is successful, the position of the Non-Associated Shareholders of Hawkley is more advantageous than their position if the Proposed Transaction was not successful. Accordingly, in the absence of a superior Proposed Transaction, and any other relevant information, we believe that the Proposed Transaction is reasonable for Non-Associated Shareholders of Hawkley.
- 2.16 The advantages and disadvantages considered are summarised below:

#### **Advantages**

- The Proposed Transaction is fair.
- A condition of the Proposed Transaction is the relisting of Hawkley shares on the ASX, which
  would increase the liquidity of Hawkley shares.
- The Persist business is expected to bring profits to the combined group and would be Earnings Per Share ("EPS") accretive to Hawkley shareholders.



- The Proposed Transaction includes a capital raising of between A\$12m and A\$15m, which will provide Hawkley with access to cash to extinguish existing debt in Hawkley and to facilitate the growth and acceleration of production in existing operations of Persist.
- If the Proposed Transaction is not approved, Hawkley may not be able to repay the principal
  and interest due on the Convertible Notes and unsecured loans by their due dates. Nonpayment may cause a material going concern issue for Hawkley, in which case Hawkley may
  not be able to realise its assets or settle its liabilities in the normal course of business, nor at
  amounts stated in the financial statements.
- The Performance Rights to be issued on completion of the Proposed Transaction are based on the achievement of share price hurdles. If Hawkley does not meet these performance milestones in the specified time constraints, then the Performance Rights will not convert, allowing risk to be shared between Hawkley and the Vendors of Persist with respect to the Proposed Transaction. It also allows all parties to benefit from the uplift in value of Hawkley's shares following the Proposed Transaction.

#### **Disadvantages**

- In the event the Proposed Transaction is successful, the issue of new shares to the Vendors of Persist will have a significant dilutive effect on the voting interest of the Shareholders of Hawkley. Immediately following the completion of the Proposed Transaction, the combined voting power of the existing Hawkley Shareholders will decrease from a 100% interest (prior to the conversion of existing Convertible Notes) to 2.4% immediately following the Proposed Transaction, assuming the minimum Capital Raising is achieved. If we assumed that the maximum Capital Raising is achieved, the existing Hawkley Shareholders combined voting interest will be 2.2% immediately following completion of the Proposed Transaction. This calculation is on the assumption that the Options and Performance Rights do not convert on completion of the Proposed Transaction. If the Options and Performance Rights converted to Ordinary Shares on completion of the Proposed Transaction, then the combined voting power of the Shareholders of Hawkley will decrease to 2.1% on the basis of the minimum Capital Raising being achieved, and 1.9% on the basis of the maximum Capital Raising being achieved. The combined voting power of the Persist Vendors will form a significant voting block at completion of the Proposed Transaction. For further information on the details of the Capital Structure of Hawkley pre and post the Proposed Transaction refer to Section 3 of this report.
- The share price hurdles associated with the Performance Rights to be issued to executive management as part of the Proposed Transaction are not guaranteed and accordingly there is no certainty that the Company will meet these targets on or following completion of the Proposed Transaction.
- The net assets of Persist include substantial existing debt. As at 30 June 2021, Persist had net debt of C\$19.4m, with the Senior Secured Note liability outstanding on 30 June 2021 of approximately C\$5m maturing on 1 April 2022. The Company anticipates that on completion of the Proposed Transaction. The debt will be refinanced. Persists ability to repay these amounts depends on the future performance of the business and ability of the company to continue as a going concern.
- 2.17 Other key matters we have considered include:

Section	
12	The likelihood of alternative offers offering similar value to shareholders is low.
12	We are not aware of any alternative offers.
12	If the Proposed Transaction is not approved, Hawkley will continue as a dormant entity with net liabilities and may not be able to continue as a going concern without financial support from its shareholders.
12	Hawkley shares are illiquid



## 3. SUMMARY OF THE PROPOSED TRANSACTION

- 3.1 Under the Proposed Transaction, Hawkley is proposing to acquire 100% of the issued share capital of Persist through its wholly owned subsidiary, 2371527 Alberta Inc ("AcquireCo"). AcquireCo will merge with Persist through an amalgamation by way of a Plan of Arrangement under the *Business Corporations Act (Alberta)*. On completion of the Proposed Transaction Persist will be amalgamated with AcquireCo and continue as one corporation ("AmalCo"). AmalCo will become a wholly owned subsidiary of Hawkley. The transaction will be a reverse acquisition for accounting purposes.
- 3.2 The key terms of the Consideration payable are as follows:
  - Consideration of 100% of Persist's common and preferred shares valued at C\$1.27 per share;
  - Issue of 95,457,232 fully paid ordinary shares (on a post consolidation basis) in Hawkley at a deemed price of A\$0.20 per share ("Consideration shares");
  - Issue of 9,545,752 options in Hawkley (on a post consolidation basis) with an exercise price
    of A\$0.30 on a post consolidation basis and a 3 year term from the date of admission to the
    ASX ("Consideration Options").

Collectively, the "Consideration Securities".

## **Other Elements of the Proposed Transaction**

#### **Performance Rights**

- 3.3 The Executive management team will receive Performance Rights in Hawkley of Performance Rights (on a post consolidation basis) as follows:
  - 33% (5,333,333) Class A Performance Rights will vest upon the VWAP of Hawkley shares trading on the ASX being at least A\$0.30 per share over 20 consecutive trading days on which shares have actually traded;
  - 33% (5,333,333) Class B Performance Rights will vest upon the VWAP of Hawkley shares trading on the ASX being at least A\$0.40 per share over 20 consecutive trading days on which shares have actually traded; and
  - 33% (5,333,333) Class C Performance Rights will vest upon the VWAP of Hawkley shares trading on the ASX being at least A\$0.50 per share over 20 consecutive trading days on which shares have actually traded.

## **Capital Raising**

- 3.4 The Company is proposing to raise capital of at least A\$12m through the issue of 60m shares at an issue price of A\$0.20 per share ("Capital Raising"). The maximum capital raising will be A\$15m through the issue of 75m share at an issue price of A\$0.20 per share. The capital raising is stated on a post consolidation basis.
- 3.5 The capital raising fee is 6%.

#### **Convertible Notes**

- 3.6 Existing Convertible Notes as at 30 June 2021 of A\$140,000 will convert to ordinary shares in Hawkley at the time of relisting on the ASX. The notes have an exercise price at a 75% discount to the Capital Raising price noted in paragraph 3.4 of A\$0.20, being A\$0.05 per share and will convert into Hawkley shares on a post consolidation basis.
- 3.7 The Company proposes to raise additional interim funding of A\$1.06m through the issue of additional Convertible Notes on the same terms as those currently on issue as per paragraph 3.6 above. The total interim Convertible Notes expected to be raised is A\$1.2m (the "Convertible Notes"). The Convertible Notes are not a condition of the Proposed Transaction.



#### **Options**

- 3.8 The Company will issue 3m broker options to the lead manager exercisable at A\$0.30 for a 3 year term from the date of listing on the ASX ("Broker Options").
- 3.9 The Company will issue 1m broker options to the corporate advisor exercisable at A\$0.30 for a 3 year term from the date of listing on the ASX ("Advisor Options").

#### **Consolidation of Capital**

3.10 The Company is proposing to consolidate its share capital on a 1:20 basis. All shareholdings and option holdings noted in this report are stated on a post consolidation basis.

## **Key conditions of the Proposed Transaction**

- 3.11 The Proposed Transaction is subject to various conditions, the most significant being:
  - A capital raising of at least A\$12m and up to A\$15m at an offer price of A\$0.20 per share;
  - Obtaining approval for the relisting of the Company on the ASX by 1 March 2022, or such other date as mutually agreed between the parties;
  - The completion of the Consolidation of Capital;
  - Shareholder approval of the Proposed Transaction for the purposes of Item 7 of Section 611 of the Corporations Act; and
  - Regulatory approvals or waivers agreed are obtained from ASIC or ASX.
- 3.12 For the purposes of this report, we consider the Proposed Transaction to include the issue of Consideration Securities, the Capital Raising, the issue of Broker and Advisor Options.

## **Rationale for the Proposed Transaction**

- 3.13 Completion of the Proposed Transaction will provide Hawkley with access to oil and gas producing assets and total proven and probable reserves of 13.2 MMBOE which is expected to enable Hawkley to relist on the ASX. Completion of the Proposed Transaction will enable the acceleration of production in existing underutilised infrastructure to take advantage of economies of scale and rising commodity prices.
- 3.14 Refer also to our analysis of advantages of the Proposed Transaction set out in Section 12.



## **Impact of Proposed Transaction on Hawkley Capital Structure**

3.15 The tables below sets out a summary of the capital structure and percentage holdings of the existing Shareholders in voting shares in the capital of Hawkley, prior to, immediately post completion of the Proposed Transaction, and on a fully diluted basis. The first table represents the minimum capital raising scenario and the second table represents the maximum capital raising scenario. All shareholdings are noted on a post consolidation basis.

MINIMUM CAPITAL RAISING	Ref	Prior to Proposed Transaction		Prior to the Proposed Transaction and after subsequent events		Immediately post Proposed Transaction		Post Proposed Transaction (Fully Diluted)	
Ordinary Shares on issue:		No (post consolidation)	%	No (post consolidation)	%	No (post consolidation)	%	No (post consolidation)	%
Existing Hawkley shareholders	i	4,436,033	100	4,436,033	15.4	4,436,033	2.4	4,436,033	2.1
Former directors	ii	-	-	375,000	1.3	375,000	0.2	375,000	0.2
Non-Persist Convertible Noteholders	iii	-	-	21,000,000	72.9	21,000,000	11.4	21,000,000	9.8
Vendors of Persist	3.1 V	-	-	3,000,000	10.4	98,457,232	53.4	120,002,984	56.0
Capital Raising	3.4	-	-	-	-	60,000,000	32.6	60,000,000	28.0
Non-Persist Option holders	iv	-	-	-	-	-	-	4,643,750	2.2
Non-Persist Performance Rights holders	3.3 v	-	-	-	-	-	-	4,000,000	1.9
Total Shares on issue		4,436,033	100	28,811,033	100	184,268,265	100	214,457,767	100

MAXIMUM CAPITAL RAISING	Ref			Prior to the Proposed Transaction and after subsequent events		Immediately post Proposed Transaction		Post Proposed Transaction (Fully Diluted)	
Ordinary Shares on issue:		No (post % consolidation)		No (post consolidation)	%	No (post consolidation)	%	No (post consolidation)	%
Existing Hawkley shareholders	i	4,436,033	100	4,436,033	15.4	4,436,033	2.2	4,436,033	1.9
Former directors	ii	-	-	375,000	1.3	375,000	0.2	375,000	0.2
Non-Persist Convertible Noteholders	iii	-	-	21,000,000	72.9	21,000,000	10.5	21,000,000	9.2
Vendors of Persist	3.1 V	-	-	3,000,000	10.4	98,457,232	49.4	120,002,984	52.3
Capital Raising	3.4	-	-	-	-	75,000,000	37.6	75,000,000	32.7
Option holders	iv	-	-	-	-	-	-	4,643,750	2.0



3.

Non-Persist
Performance
Rights holders
Total Shares

on issue

.3 v	-	-	-	-	-	-	4,000,000	1.7
	4,436,033	100	28,811,033	100	199,268,265	100	229,457,767	100

- 3.16 The above analysis is based on the following assumptions:
  - i. The existing Hawkley Shareholders include current shareholders in Hawkley at the date of this report.
  - ii. The former directors are to be issued 375,000 shares for outstanding remuneration from previous financial periods, at A\$0.20 per share. The shares to be issued to former directors are expected to be issued at the same time as the Proposed Transaction but are not conditional on the completion of the Proposed Transaction and as such are considered to be a subsequent event rather than an element of the Proposed Transaction.
  - iii. The Convertible Noteholders include those that have participated in the interim funding of A\$1.2m and whose shares will convert to ordinary shares in Hawkley on the earlier of completion of the Proposed Transaction or 30 June 2022. The interim funding is not conditional on completion of the Proposed Transaction and are not a condition of the Proposed Transaction. The Convertible Notes are expected to be raised prior to the completion of the Proposed Transaction and are therefore considered to be a subsequent event rather than an element of the Proposed Transaction. We note that 3,000,000 of the Convertible Notes were issued to Persist Shareholders.
  - iv. On completion of the consolidation of capital, the existing options on issue in Hawkley will be exercisable at A\$1.00 per share on or before 30 June 2023. Other option holders include brokers and corporate advisors who will be issued options as per paragraphs 3.8 and 3.9 above. For the purposes of this report, we have assumed that the options do not convert immediately on completion of the Proposed Transaction due to their exercise price being in excess of the capital raising price. We have assumed that these options convert on a fully diluted basis, in the table above.
  - v. On a fully diluted basis, we have assumed that the Performance Rights issued to executive management and the Options issued to the vendors of Persist as part of the Consideration payable convert in full.
  - vi. The existing Shareholders of Hawkley and Persist Vendors do not acquire any additional Ordinary Shares and do not participate in the Capital Raising.
- 3.17 In summary, assuming the minimum capital raising is achieved, the total shareholdings that the existing Shareholders would hold following completion of the Proposed Transaction will decrease from 100% prior to the Proposed Transaction (and prior to subsequent events) to 2.4% immediately post completion of the Proposed Transaction (on the assumptions noted above), and to 2.1% post completion of the Proposed Transaction, on a fully diluted basis. Assuming the maximum capital raising is achieved, the total shareholdings that the existing Shareholders would hold immediately following completion of the Proposed Transaction will be 2.2% (on the assumptions noted above), and 1.9% post completion of the Proposed Transaction, on a fully diluted basis.

## 4. SCOPE OF THE REPORT

## **Corporations Act**

- 4.1 The Independent Experts Report is to accompany a Notice of Meeting and Explanatory Statement to be sent to shareholders of Hawkley to comply with the requirements of Section 606 and Chapter 2E of the Corporations Act.
- 4.2 Section 606 of the Act prohibits a person from acquiring a relevant interest in the issued voting shares of a public company if the acquisition results in that person's voting interest in the company increasing from a starting point that is below 20% to an interest that is above 20% or from a starting point of above 20% to an increased percentage, under than under limited exceptions.



- 4.3 Completion of the Proposed Transaction is expected to result in the Vendors of Persist having a combined voting power in Hawkley 53.4% immediately following completion of the Proposed Transaction, assuming the minimum Capital Raising. On a fully diluted basis (assuming the conversion of all Options, Performance Rights and Convertible Notes) the combined voting power of the Vendors of Persist will be 56.0%, assuming the minimum Capital Raising, as noted in Section 3 of this report.
- 4.4 Under Item 7 of Section 611 of the Act, the prohibition contained in Section 606 of the Act does not apply if the acquisition has been approved by the Non-Associated Shareholders of the Company. Accordingly, the Company is seeking approval from the Non-Associated Shareholders for the Proposed Transaction under Item 7 of Section 611 of the Act.
- 4.5 Item 7 Section 611 of the Act states that shareholders must be given all information that is material to the decision on how to vote at the meeting. ASIC Regulatory Guide 111 ("RG 111") advises the requirement to commission an Independent Expert's Report in such circumstances and provides guidance on the content.
- 4.6 The Directors of Hawkley have engaged Moore Australia Corporate Finance Pty Ltd ("MACF" or "Moore Australia"), being independent and qualified for the purpose, to prepare an Independent Expert's Report to express an opinion as to whether or not the Proposed Transaction are fair and reasonable to the shareholders of Hawkley not associated with the Proposed Transaction (the "Non-Associated Shareholders").
- 4.7 As such, the Company is seeking approval from Non-Associated Shareholders under section 7 of Section 611 of the Act.

## Regulatory guidance

- 4.8 The Corporations Act does not define the meaning of 'fair and reasonable'. In determining whether the Proposed Transaction is fair and reasonable, we have had regard to the views expressed by ASIC in RG 111. This regulatory guide provides guidance as to what matters an independent expert should consider to assist security holders to make informed decisions about Transaction.
- 4.9 This regulatory guide suggests that where the transaction is a control transaction, the expert should focus on the substance of the control transaction rather than the legal mechanism to affect it. RG 111 suggests that where a transaction is a control transaction, it should be analysed on a basis consistent with a takeover bid.
- 4.10 In our opinion, the Proposed Transaction are a control transaction as defined by RG 111 and we have therefore assessed the Proposed Transaction as control Transaction to consider whether, in our opinion, they are fair and reasonable to the Non-Associated Shareholders of Hawkley.

## Adopted basis of evaluation

- 4.11 RG 111 states that a transaction is fair if the value of the offer price or consideration is greater than the value of the securities subject of the offer. This comparison should be made assuming a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length.
- 4.12 Further to this, RG 111 states that a transaction is reasonable if it is fair. It might also be reasonable if despite being 'not fair' the expert believes that there are sufficient reasons for Non-Associated Shareholders to accept the Proposed Transaction in the absence of any higher bid.
- 4.13 Having regard to the above, MACF has completed this comparison in two parts:
  - A comparison between the value of a Hawkley share prior to the Proposed Transaction (on a control basis) to the value of a Hawkley share following the Proposed Transaction (on a minority basis) (fairness – see Section 10 – Assessment of Fairness); and
  - An investigation into other significant factors to which Non-Associated Shareholders might give consideration, prior to accepting the Proposed Transaction, after reference to the value derived above (reasonableness see Section 11 Assessment of Reasonableness).

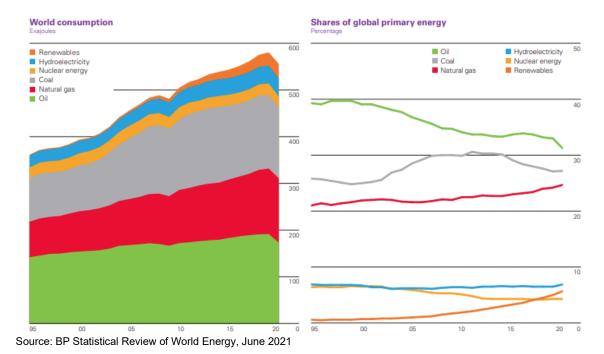


## 5. INDUSTRY ANALYSIS

- 5.1 The oil and gas industry can be separated into three distinct markets: being the upstream industry, midstream industry and downstream industry. The upstream industry finds and produces oil and gas (being in the form of crude oil, natural gas, liquified petroleum gas, coal seam gas, shale oil and gas). The midstream industry processes, stores, markets and transports commodities such as crude oil, natural gas and other equivalent products. The downstream industry includes final refined products such as petroleum, natural gas and other oil-based product distribution on a retail level including synthetic rubber and plastics.<sup>1</sup>
- 5.2 The process in which these hydrocarbons are extracted depends on various factors such as geological setting (generally structural trap, stratigraphic trap, or seal/cap rock such as shales).<sup>2</sup> The geological setting of the of the formation greatly impacts the cost, risk and return of the oil or gas deposit. Due to the capital intensity and scale of the market, the concentration of players is low generally being large multinational conglomerates.
- 5.3 While the risk profile of the deposit varies, the underlying commodities once extracted are traded at standard global pricing.
- 5.4 Oil is primarily traded via two benchmarks being:
  - Brent Crude; and
  - West Texas Intermediate (WTI)

#### **Global Oil and Gas Consumption and Demand Drivers**

5.5 It is estimated that global energy demand fell by 4.5% during 2020. Oil continues to be the largest share of global energy production, contributing an estimated 31.2%<sup>3</sup>. Coal was the 2<sup>nd</sup> most used resource for energy production accounting for 27.2%<sup>3</sup>. While oil is the leading contributor of energy use it has been steadily declining since 2000, In contrast, gas has seen long term increases in use over a historical 30-year period, with renewables also having a large increase in the recent years to now being used more than nuclear power.



5.6 In the recent history the transport sector has been the largest consumer of oil and oil products, at times consuming more than 60% of the total energy used. With the demand of oil strongly linked to the transportation sector, and the impact of global lockdowns and restricted travel there has been

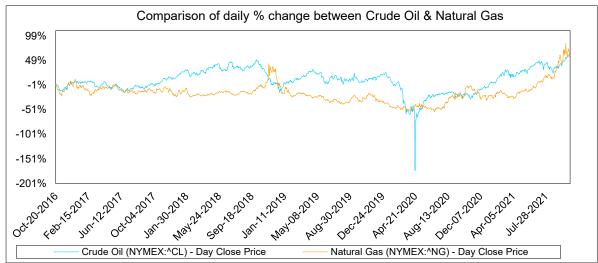
<sup>&</sup>lt;sup>1</sup> https://www.psac.ca/business/oil-and-gas-industry-overview/

<sup>&</sup>lt;sup>2</sup> http://www.geologyin.com/2014/12/hydrocarbon-traps.html

<sup>&</sup>lt;sup>3</sup> BP Statistical Review of World Energy, June 2021

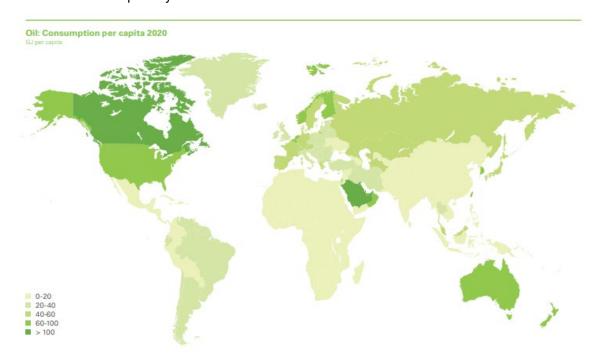


- a significant impact on the overall energy demand. The decline in oil consumption in 2020 has accounted for around 75% of the total decline in energy demand for that period.
- 5.7 The gas industry's primary demand drivers in the past include commercial use, electricity generation and industrial use. While heavily impacted by lockdowns worldwide, there was a large increase in domestic use due to lockdowns and individuals working from home. Natural gas is also heavily linked to crude oil pricing with the market for oil significantly impacting natural gas pricing <sup>4</sup>.



Source: S&P Capital IQ

During 2020, due to the COVID19 pandemic, oil consumption declined by 9.3% which was the largest decline in oil consumption in history. The consumption of 88,477 million barrels per day during 2020 was greater than total production of 88,391 million barrels per day for the same period. China was the greatest influencer of any country on net imports of oil over 2020, with an 8.8% growth in its net imports, as comparison the USA's net oil import falling by 14.0% <sup>5.</sup> The USA still hold the title of the world's largest consumer of oil, despite a large 11.8% decline in the number of barrels consumed per day.



Source: BP Statistical Review of World Energy, June 2021

<sup>&</sup>lt;sup>4</sup> BP Statistical Review of World Energy, June 2021

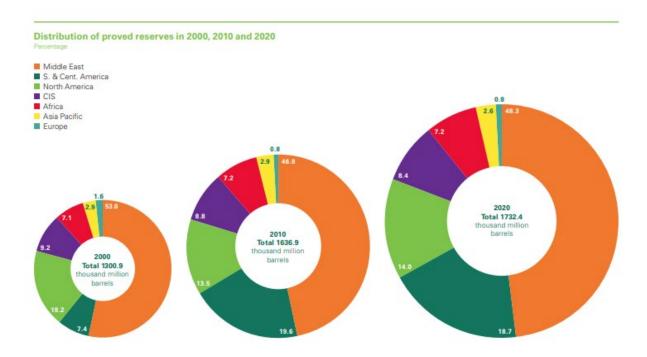
<sup>&</sup>lt;sup>5</sup> BP Statistical Review of World Energy, June 2021



- 5.9 During 2020, natural gas consumption fell by 2.3%, with consumption falling in most regions apart from China where it grew by 7%. Production exceeded consumption during this period with consumption of 3,822.8 billion cubic metres (bcm) and total production for 2020 totalling 3,853.7 bcm.<sup>6</sup> Oil prices have continued to strengthen in 2021 with OPEC production levels lower than expected. A shortage in natural gas has also helped to drive an increase in demand for oil consumption.<sup>7</sup>
- 5.10 Year on year comparison saw natural gas prices on the NYMEX^NG Index drop by 27.59% between 2019 to 2020, from US\$2.308 to US\$1.671. Since then, the price has risen by 116.87% to US\$3.624 to July 2021.8

#### **Global Oil and Gas Reserves**

5.11 Global oil reserves have significantly increased over the last decade. Proved oil reserves as of 2020 were 1,732.4 billion barrels<sup>8</sup>. The Middle East and South & Central America had the highest reported reserves at 48.3% and 18.7% respectively.<sup>9</sup>



Source: BP Statistical Review of World Energy, June 2021

<sup>&</sup>lt;sup>6</sup> BP Statistical Review of World Energy, June 2021

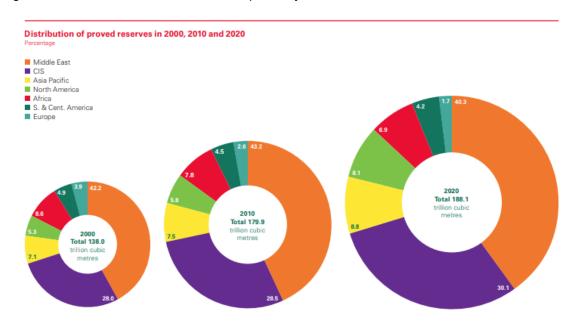
<sup>&</sup>lt;sup>7</sup> Bell Potter Energy Weekly 2021/10/05

<sup>8</sup> https://www.capitaliq.com/ciqdotnet/Estimates/Commodities/Tearsheet.aspx?CompanyId=53838134

<sup>&</sup>lt;sup>9</sup> BP Statistical Review of World Energy, June 2021



5.12 Global gas reserves have also significantly increased over the last decade. Proved gas reserves as of 2020 were 188.1 trillion cubic meters<sup>8</sup>. The Middle East and CIS had the two highest reported global reserves at 40.3% and 30.1% respectively<sup>8</sup>.



Source: BP Statistical Review of World Energy, June 2021

## Canada's Oil and Gas Industry

- 5.13 Canada is ranked as the world's 4<sup>th</sup> largest producer of oil and 6<sup>th</sup> largest producer of natural gas. The oil and natural gas industry is active within 12 of their 13 provinces and territories <sup>10</sup> with about half of their production exported to USA. It is regarded as having the most comprehensive information among its petroleum resources in the world, operating over 690 drilling rigs nationally. Alberta accounts for over 80% of Canada's oil and gas production, with many upstreaming businesses being based within Alberta. Canada's upstreaming process includes more than 1,000 exploration companies and hundreds of associated businesses throughout the supply chain. Transmission pipeline companies are a major part of the midstream industry within Canada, predominantly Calgary.<sup>11</sup>
- 5.14 As of 2016 Canada ranked 5<sup>th</sup> in the cost to produce a barrel of oil or gas equivalent, sitting at \$26.6 USD, with production costs of \$11.6 USD which was the second most expensive behind the UK of \$17.4 USD. <sup>12</sup> The corporate tax environment in Canada is relatively low for oil and gas activities compared to other international jurisdictions.
- 5.15 The Alberta oil and gas industry was significantly impacted by the Covid 19 pandemic which led to significant declines in demand for oil as noted above. Many companies in the oil and gas sector were forced to cut costs and lay off employees as production halted and new project investment was abandoned due to the decline in commodity prices. Whilst oil prices have since recovered to pre-pandemic levels, demand for oil has not yet retuned to pre pandemic levels.

## **Outlook**

5.16 Both oil and gas reserves and associated production have increased over the last decade. With forecasts indicating this growth is set to continue over the medium term, with the expectation for global demand to reach 104.4 million barrels a day (mb/d) by 2026 (13.8 mb/d more than current production)<sup>11</sup>. Change in trends over the long term, particularly in developed countries, expect to see negative growth, with a shift to alternative fuel and generation methods, a major player being electric vehicles. This negative growth is likely to be offset in non-OECD countries and a high population growth rate with an average growth rate of 1.1mb/d predicted through to 2045.<sup>13</sup> The production of oil is forecast to rise, with external pressures worldwide causing the price of oil to

<sup>10</sup> https://www.capp.ca/economy/industry-across-canada/

<sup>11</sup> https://www.psac.ca/business/oil-and-gas-industry-overview/

<sup>12</sup> https://knoema.com/nolsgce/cost-of-crude-oil-production-by-country-and-crude-oil-prices

<sup>&</sup>lt;sup>13</sup>OPEC, Annual Energy Outlook 2021



increase. The global price of crude oil is expected to increase at an annual rate of 4.4% to 2026<sup>13</sup>. As gas is looked to be a replacement fuel for oil and coal, the global production of natural gas is forecasted to increase with growth in consumption. This is likely to influence the global price of gas over the coming years, with the value of exports and imports expected to increase at an annual rate of 5.6% up until 2026.<sup>14</sup>

## 6. PROFILE OF HAWKLEY OIL AND GAS LIMITED

## **Background**

- 6.1 Hawkley is an Australian public company, incorporated in Western Australia in August 2005. Hawkley was admitted to the official list of the ASX in May 2006. Janita Global Limited completed a reverse takeover of Incitive Limited and changed its name to Hawkley Oil and Gas Limited in June 2010.
- 6.2 Historically Hawkley's principal activities included holding gas and exploration and production licences in Ukraine and developing a successful gas plant. Following the unstable political environment in the Ukraine, production halted in December 2014 and the Company sold its Ukrainian assets in November 2016.
- 6.3 The Company's shares were suspended on the ASX in May 2017 and following a period of continuous suspension for 2 years, Hawkley was removed from the official list of the ASX in June 2020. Hawkley's board is currently reviewing suitable projects for the Company.

## **Group Structure**

6.4 At the date of this report Hawkley does not have any subsidiaries or investments.

#### **Board of Directors**

6.5 Hawkley have the following as directors:

Name	Title	Experience
Josep Naemi	Chairman and Non-Executive Director	Mr. Naemi has thirty years of international experience across the entire hydrocarbons value chain as a founder or co-founder of a series of oil and gas exploration and production ("E&P") companies. He has completed several E&P mergers and acquisitions, consummated tradesale transactions, negotiated joint ventures, and facilitated equity and debt capital raisings. He has worked in a wide range of jurisdictions including The Americas, North Africa, Middle East, Central Asia, and South East Asia. He has previously served on the board of publicly listed oil & gas and mining companies in Australia, Canada, and Mongolia.
Cosimo Damiano	Executive Director	Mr. Damiano's experience involves the strategic analysis and financial modelling of oil & gas companies for global investment banks and energy commodity trading companies in a principal investment role. He was Managing Director of Xstate Resources Limited (ASX: XST) from May 2016 until November 2019. Mr Damiano has experience in North America, representing the Mercuria Group as a Director of Upstream Investments and represented Mercuria's Board interests in the company's oil and gas investments throughout North America located in California and North Dakota.
Murray Wylie	Non-Executive Director and Company Secretary	Mr Wylie has more than 30 years' experience in governance and accounting roles in both the public and private sectors. Mr Wylie holds a Bachelor of Commerce degree and is a member of the Governance Institute of Australia. Mr Wylie is Company Secretary for several ASX and AIM listed companies.

Page | 17

<sup>&</sup>lt;sup>14</sup> https://my.ibisworld.com/gl/en/industry/b0531-gl/industry-outlook



#### **Historical Financial Information**

## **Financial Position**

The information below provides a summary of the financial position of Hawkley as at 30 June 2019, 2020 and 2021. The financial information has been derived from the audited financial statements of Hawkley for the years then ended.

		Audited	Audited	Audited
Statement of Financial Position		30-Jun-19	30-Jun-20	30-Jun-21
ACCETO	Ref	A\$	A\$	<b>A</b> \$
ASSETS				
CURRENT ASSETS				
Cash and cash equivalents		12,947	15,943	45,617
Trade and other receivables		346	68,528	2,864
Other assets	_	5,386	-	_
TOTAL CURRENT ASSETS		18,679	84,471	48,481
NON-CURRENT ASSETS	_			
TOTAL NON-CURRENT ASSETS		-	-	-
TOTAL ASSETS	_	18,679	84,471	48,481
LIABILITIES	_			
CURRENT LIABILITIES				
Trade and other payables		193,178	462,675	515,849
Convertible note	i	189,931	-	140,000
Unsecured loan	ii	-	212,049	118,049
TOTAL CURRENT LIABILITIES		383,109	674,724	773,898
NON CURRENT LIABILITIES	_			
TOTAL NON-CURRENT LIABILITIES	_	-	-	-
TOTAL LIABILITIES	_	383,109	674,724	773,898
NET ASSETS	_	(364,430)	(590,253)	(725,417)
EQUITY	-			
Issued capital		38,974,788	39,349,788	40,079,911
Reserves		4,074,362	4,074,362	4,120,562
Accumulated losses	_	(43,413,580)	(44,014,403)	(44,925,890)
TOTAL EQUITY	_	(364,430)	(590,253)	(725,417)

- 6.7 The Company's auditor issued an unmodified opinion on the Group financial report for the years presented above. The audit reports for those periods did include an Emphasis of Matter paragraph regarding a material uncertainty related to going concern due to the net loss and the net cash outflows for the year then ended.
- 6.8 We note the following in relation to the financial position of Hawkley as at 30 June 2021:
  - i. The convertible notes as at 30 June 2021 are part of a A\$1.2m interim funding in progress and have been issued on the following terms:
    - Coupon rate of 10%;
    - Unsecured;
    - Conversion price at 25% of the relisting price, or if a listing transaction does not occur then then conversion price will be A\$0.01 per share;
    - Mandatory conversion on the earlier of relisting or 30 June 2022;
    - Matures on 30 June 2022.



- ii. The unsecured loan as at 30 June 2021 refers to a loan from Emco Capital Pty Ltd (a related party to a former director) on the following terms:
  - Interest rate of 3% per annum (the accrued interest has been waived in a Settlement Agreement dated 30 June 2021);
  - The loan is due to be settled in 2 payments of A\$100,000, with the first instalment on 30
    June 2021 and the final payment at the earlier of 5 days after the Company's shares are
    admitted to trading on the ASX or 31 December 2021.

## **Financial Performance**

6.9 The table below sets out a summary of the financial performance of Hawkley for the years ended 30 June 2019, 2020 and 2021. The financial information has been extracted from the audited financial statements of the Company for the years then ended.

		Audited	Audited	Audited
Statement of Financial Performance	Ref	FY19	FY20	FY21
		A\$	A\$	<b>A</b> \$
Gain on modification of financial liability		14,385	10,790	-
Government assistance	i	-	9,000	47,000
Expenses				
Employee benefits expense	ii	(92,984)	(147,940)	(264,661)
Administrative expense	iii	(128,790)	(404,807)	(71,509)
Share based payments to corporate advisors	iv	-	-	(616,200)
Borrowing expense	V	-	(35,000)	-
Loss on extinguishment of financial liability		(158)	(4,418)	-
Foreign exchange		5	11	(121)
EBITDA		(207,542)	(572,364)	(905,491)
Interest expense		(35,234)	(28,489)	(6,000)
Interest received		335	30	4
Net Loss before tax		(242,441)	(600,823)	(911,487)
Income tax expense				_
Net Loss after tax		(242,441)	(600,823)	(911,487)

- 6.10 We note the following in relation to Hawkley's financial performance:
  - i. The Company received financial assistance from the government in the form of Covid 19 subsidies.
  - ii. Employee benefits expense includes Director's remuneration.
  - iii. Administrative expenses include corporate expenses, lease payments etc.
  - iv. The Company issued 19m ordinary shares in settlement upon termination of corporate advisor agreements in FY21.
  - v. The borrowing expense relates to the costs of raising capital via the issue of A\$375,000 in interim funding in FY20.

#### **Capital Structure**

- 6.11 At the date of this report Hawkley has 88,711,653 ordinary shares on issue (pre consolidation). After the consolidation of capital, Hawkley will have 4,436,033 shares on issue.
- 6.12 At the date of this report Hawkley has 12,875,000 options on issue (pre consolidation) with an exercise price of A\$0.005 expiring on 30 June 2023. After the consolidation of capital, Hawkley will have 643,750 options exercisable at A\$1.00 on 30 June 2023.



## 7. PROFILE OF PERSIST OIL AND GAS INC

## **Background**

- 7.1 Persist is a private Canadian company, incorporated in February 2018 in Alberta, that engages in the business of oil and gas development and production in Canada.
- 7.2 Persist owns the rights to producing oil fields located in Alberta, Canada:
  - 100% interest in Carseland Alberta Area
  - 100% interest in Wayne Alberta Area
  - 79% interest in Garrington Alberta Area
  - 56% interest in Stolberg Alberta Area
- 7.3 Persist's land comprises 156,500 gross acres across four producing fields. The land base is considered to be underdeveloped, with significant additional capacity available in the current production infrastructure that is owned and operated by Persist. The reserves of the sites were last independently assessed by Sproule Associates Limited on 29 July 2021, with an effective date of 30 June 2021. The assessment indicated that Persist had proved and probable reserves ("2P") of and 13.2 MMBOE of reserves at that time.
- 7.4 During the 12 months ended 30 June 2021, Persist achieved average daily oil sales of 724 bbls/d of oil, 356 bbls/d of Natural Gas Liquids and 11,770 mcf/d of natural gas.
- 7.5 Persist is looking to accelerate production in their existing underdeveloped fields in order to take advantage of underutilised infrastructure and economies of scale.

## Oil and gas projects

#### Carseland

- 7.6 The Carseland site is approximately 3,808 hectares of developed land and 2,126 hectares of undeveloped land approximately 70km east of Calgary. It consists of an average mineral working interest of approximately 100%. Carseland has an oil handling capacity of 3,000 bbl/d, an inlet gas flow capacity of 14,000 Mcf/d and a water handling capacity of 500 bbl/d.
- 7.7 The field is largely characterised by medium to light sweet oil production and associated gas production from Lithic Glauconitic formation sandstone deposited in meandering channel settings. The area also includes subordinate oil and gas production associated with channel sandstone deposits of the Ellerslie formation. Development of the area occurred mostly in the 1980's and 1990's with vertical drilling. Renewed exploration and development using horizontal drilling and multi-stage fracture stimulation technology occurred in the last 5 years. The upside inventory of development drilling is focused on the Glauconite formation. The infrastructure footprint includes one oil battery, one gas plant and an extensive pipeline network. All producing wells on the Carseland Property are flowline connected.
- 7.8 The Carseland Property is also characterised by sweet natural gas production from shallow, coalbearing clastic reservoir intervals of the Belly River and Horseshoe Canyon formations. Over the last 20 years, development of these intervals in Carseland has occurred with vertical or deviated wells.

#### Garrington

7.9 The Garrington Property consists of an average mineral working interest of approximately 79% in 9,579 hectares of developed lands and 3,573 hectares of undeveloped lands in the Garrington, Alberta area (approximately 130 km north of Calgary) and Persist operates a 97% net revenue production facilities interest in all facilities associated therewith. Garrington has an oil handling capacity of 1,000 bbl/d, an inlet gas flow capacity of 14,200 Mcf/d and water handling capacity of 1,000 bbl/d.



7.10 The field is dominated by medium to light oil production (and associated gas production) from Devonian Wabamun shelf carbonates; the carbonate deposits are characterized by various amounts of dolomitization. The Garrington field was largely developed more than 50 years ago with vertical drilling. Since then, only a handful of deviated and horizontal wells have been drilled using multi-stage fracture stimulation technology.

#### Wayne

- 7.11 The Wayne Property consists of an average mineral working interest of approximately 79% in 15,719 hectares of developed lands and 10,291 hectares of undeveloped lands in the Wayne, Alberta area (approximately 150km northeast of Calgary) and Persist operates a 100% net revenue production facilities interest in all facilities associated therewith. Wayne has an oil handling capacity of 10,000 bbl/d, an inlet gas flow capacity of 4,400 Mcf/d, a water handling capacity of 7,000 bbl/d and a truck in terminal capacity of 72 trucks/day.
- 7.12 The field is largely characterized by medium to light sweet oil production and associated gas production from Ellerslie formation sandstone deposited in a shallow-marine setting; locally, channel sandstone deposits also occur. The area also includes subordinate oil and gas production associated with channel sandstone deposits of the Glauconitic formation. The majority of Ellerslie and Glauconitic reservoir development in Wayne occurred in the last 20 years through vertical drilling. Exploration and development using horizontal drilling and multi-stage fracture stimulation technology started in the last 5 years. The Wayne facility has the capacity to process 25,000 bbls/d of emulsion (oil/water mix) and to dispose of 26,000 bbls/d. The plant utilises leading edge measurement and processing technology, has four truck-in risers connected into Inter Pipeline's clean oil system and processes third party volumes.

#### **Foothills Infrastructure**

#### **Stolberg**

- 7.13 The Stolberg Property consists of an average mineral working interest of approximately 56% in 18,855 hectares of developed lands and 17,587 hectares of undeveloped lands in the Stolberg, Alberta area (approximately 80km west of Rocky Mountain House) and Persist operates a 70% net revenue production facilities interest in all facilities associated therewith.
- 7.14 The field is dominated by light sweet oil production (~39 API) from Cardium formation shoreface sandstone deposits. The area also includes large natural gas reserves in channel-dominated sandstone of the Mannville Group. Given its location within the Foothills, the area is characterized by natural fracturing which tends to enhance porosity and permeability. Cardium oil deposits in the area were initially developed in the 1990's and early 2000's by vertical and deviated wells but have more recently been developed utilizing unstimulated horizontal wells.
- 7.15 The foothills infrastructure consists of 3 oil batteries as follows:
  - Stolberg 15-1 oil battery: 100% working interest, oil handling capacity of 5,000 bbl/d, an inlet gas flow capacity of 11,750 Mcf/d and water handling capacity of 60 bbl/d.
  - Stolberg 6-21 oil battery: 66.7% working interest, oil handling capacity of 2,500 bbl/d, an inlet gas flow capacity of 4,250 Mcf/d and water handling capacity of 60 bbl/d.
  - Stolberg 13-15 oil battery: 30% working interest, oil handling capacity of 2,000 bbl/d, an inlet gas flow capacity of 3,550 Mcf/d and water handling capacity of 60 bbl/d.

#### **Joint Venture**

- 7.16 In April 2019, Persist acquired oil and gas interests in the Carseland, Golden, Grassy Lakes, Rockford, Stolberg, Wayne and Wildcat Hills areas for consideration of C\$29.8m (the "CSW acquisition") from Manitok Energy Inc. Consideration included 2,993,595 class C shares in Persist with a share price of C\$2 per share (with the share price based on the latest C class share issue in November 2018) and cash consideration.
- 7.17 The CSW acquisition involved Persist entering into a joint venture agreement with Stream Asset Financial Manitok LP ("SAFM LP"), a limited partnership formed in Alberta, Canada. Persist is the operator and manager of the Facilities.



7.18 If a default event occurs under the agreement i.e. through non-payment of the Facilities Tariff, or non-payment of any debt or other obligations under a material agreement or instrument (unless remedied or waived), Persist shall be obligated to assign legal title of the Facilities to SAFM LP. On repayment of all Facilities Tariffs and all amounts payable, SAFM LP shall assign all rights and title associated with the Facilities, free of all securities, to Persist.

## **Group Structure**

7.19 At the date of this report Persist does not have any subsidiaries.

## **Board of Directors**

7.20 Persist have the following directors:

Name	Title	Experience
David Moscovitz	Chairman and Non- Executive Director	Mr Moscovitz is a retired lawyer with over 35 years of experience in acquisitions, divestments, dispositions, financing and joint ventures. He was appointed as a director of Persist in April 2019. Mr Moscovitz is also a director if TVI Pacific Inc. (TSXV:TVI)
Massimo Geremia	President, CEO and Executive Director	Mr Geremia has experience in oil and gas development, real estate and finance. Prior to working with Persist, Mr Geremia was President and CEO of Manitok Energy Inc. Mr Geremia has been a director of Persist since February 2018.
Doug DeMuth	Director	Mr DeMuth is the managing partner of Jackson Valley Capital Management and was appointed as a director of Persist in August 2019.
Dan Martin	Director	Mr Martin is a partner at Integral Capital Markets and was appointed as director or Persist in June 2019. He is a CFA charter holder with expertise in the technical evaluation of oil and gas assets, reserves and operations, and the evaluation of oil and gas project efficiency.
Frank Y Sur	Director	Mr Sur is a partner at international law firm, Gowling WLG (Canada) LLP and was appointed director of Persist in April 2021. Mr Sur has expertise in the areas of mergers and acquisitions, capital markets with a focus on technology, energy and mining sectors.



#### **Historical Financial Information**

## **Financial Position**

7.21 The information below provides a summary of the financial position of Persist as at 31 December 2019 and 31 December 2020 and 30 June 2021. The financial information has been derived from the audited financial statements of Persist for the year ended 31 December 2020 and the reviewed financial statements for the half year ended 30 June 2021.

		Audited	Audited	Reviewed
Statement of Financial Position		31-Dec-19	31-Dec-20	30-Jun-21
	Ref	C\$	C\$	C\$
ASSETS				
CURRENT ASSETS				
Cash and cash equivalents	i	6,155,330	6,987,109	1,901,199
Trade and other receivables	ii	4,562,715	3,857,603	4,058,267
Other assets	iii _	325,511	316,208	799,907
TOTAL CURRENT ASSETS		11,043,556	11,160,920	6,759,373
NON-CURRENT ASSETS				
Exploration and evaluation assets	iv	842,610	1,788,593	2,053,502
Property, plant and equipment	V	49,055,637	51,321,743	46,891,783
Right of use assets	vi _	1,547,783	1,002,858	650,294
TOTAL NON-CURRENT ASSETS		51,446,030	54,113,194	49,595,579
TOTAL ASSETS		62,489,586	65,274,114	56,354,952
LIABILITIES	_			
CURRENT LIABILITIES				
Trade and other payables		6,219,173	4,960,385	5,567,382
Commodity derivative financial instruments	vii	439,834	94,477	2,833,885
Stream JVA obligation	viii	750,000	1,124,307	1,336,009
Lease liabilities	ix	490,846	559,302	968,844
Senior secured note	X	-	1,608,663	4,966,835
Flow through share premium	_	11,778	-	
TOTAL CURRENT LIABILITIES		7,911,631	8,347,134	15,672,955
NON CURRENT LIABILITIES	_			
Bank debt		-	60,000	-
Stream JVA obligation	viii	14,473,275	14,706,402	14,322,718
Lease liabilities	ix	1,181,610	783,675	107,529
Decommissioning provisions	хi	14,547,366	22,047,277	19,789,323
Senior secured note	X	12,564,891	9,989,315	-
Preferred shares	_	12,390	12,390	12,390
TOTAL NON-CURRENT LIABILITIES		42,779,532	47,599,059	34,231,960
TOTAL LIABILITIES	_	50,691,163	55,946,193	49,904,915
NET ASSETS	_	11,798,423	9,327,921	6,450,037
EQUITY	=			
Issued capital		19,868,404	19,868,404	17,772,888
Contributed surplus		-	328,948	532,901
Accumulated losses		(8,069,981)	(10,869,431)	(11,855,752)
TOTAL EQUITY	_	11,798,423	9,327,921	6,450,037
	=		. ,	

7.22 Persist's auditor issued an unmodified opinion on the Group financial report for the years presented above. The audit reports for those periods did include an Emphasis of Matter paragraph regarding a material uncertainty related to going concern due to the uncertainty over Persist's ability to repay the senior secured note which matures on 1 April 2022. Failure to repay the loan or extend the maturity date of the senior secured note would constitute an event of default on the JVA obligation, causing that instrument to also become due.



- 7.23 We note the following in relation to the financial position of Persist as at 30 June 2021:
  - Cash and cash equivalents have declined during the 6 months to 30 June 2021 due to the partial repayment of the senior secured loan note during the 6 months to 30 June 2021.
  - ii. Trade and other receivables have been confirmed as recoverable.
  - iii. Other assets relate to prepayments and deposits held.
  - iv. Exploration assets relate to exploration and evaluation costs capitalised where the technical feasibility and commercial viability has not yet been determined. The costs mostly relate to the Carseland and Wayne areas for identifying potential drilling locations and renewing/acquiring mineral rights for undeveloped land.
  - v. The property, plant and equipment of Persist consists of producing liquid and natural gas assets (both tangible and intangible) and office equipment.

Office equipment is measured at depreciated cost.

Producing liquid and natural gas assets relate to assets used in the production of oil and gas and include costs such as land acquisition costs, geological and geophysical expenditure, drilling costs, estimated costs for restoration etc. The producing assets are measured at their value in use using a discounted cash flow ("DCF") method prepared by Persist management with technical inputs from Sproule based on an independent assessment of the reserves as at 30 June 2021. Depletion of the producing assets are recognised on the unit of production method based on Persists share of the total proved and probable reserves.

- vi. Right of Use assets consist of operating leases associated with field equipment and the office lease.
- vii. Derivative financial instruments relate to natural gas and crude oil derivatives. All expire by March 2022. Persists policy is to limit swap commodity price contracts to approximately 50% of forecast production volumes.
- viii. The Stream JV Obligation was assumed as part of the CSW acquisition in April 2019. It relates to a C\$15m agreement on the Wayne and Stolberg facilities on which Persist is required to make monthly repayments plus interest. Persist is obligated to repay C\$750,000 of capital per annum plus interest with an effective interest rate of 11% per annum. The liability is secured and is carried at amortised cost.
- ix. Lease liabilities relate largely to field equipment leases (approximately 90%), with the balance relating to an office lease.
- x. The senior secured note is a non-revolving term loan with interest payable in cash on a monthly basis. The interest rate is based on the senior net debt to EBITDA ratio. If the senior net debt to EBITDA ratio is <1.5 the interest rate is 9 percent, if it is between 1.5 and 2.0 it is 9.5 percent, between 2.0 and 2.5 it is 10 percent and greater than 2.5 the interest rate is 12.5 percent. EBITDA is an annualised figure, calculated on a rolling four quarter basis. For purposes of the senior net debt to EBITDA ratio, senior net debt is the amount outstanding under the Senior Secured Note less cash and cash equivalents. The value of the monthly payment is contingent on the average commodity price in the prior month. The loan matures on 1 April 2022 and is carried at amortised cost.
- xi. The decommissioning provision relates to the likely outflow of economic benefit arising from the abandonment and rehabilitation of the producing assets in Canada and is based on Persists net ownership interest, estimated costs to reclaim and abandon its wells, facilities and gathering systems and the estimated timing of the costs to be incurred in future years.



#### **Financial Performance**

7.24 The table below sets out a summary of the financial performance of Persist for the years ended 30 June 2019 and 30 June 2020 and the half years ended 30 June 2020 and 30 June 2021. The financial information has been extracted from the audited financial statements of the Company for the year ended 30 December 2020 and the reviewed financial statement for the half year ended 30 June 2021.

Statement of Financial Performance	Ref	Audited CY19	Audited CY20	Reviewed H1 FY20	Reviewed H1 FY21
Statement of Financial Feriorniance	Kei	C\$	C120	C\$	C\$
Revenue					,
Sale of liquids and natural gas		18,951,686	22,498,407	9,512,694	18,036,175
Royalties		(4,660,628)	(3,983,747)	(1,661,191)	(3,820,583)
Liquids and natural gas revenue	i	14,291,058	18,514,660	7,851,503	14,215,592
Processing income	ii	946,322	1,067,179	698,498	306,822
Realised gain (loss) on commodity financial derivative instruments	iii	(521,287)	4,004,050	2,510,959	(759,713)
Unrealised gain (loss) on commodity financial derivative instruments	iii	(439,834)	345,357	2,149,499	(2,739,408)
Total Revenue		14,276,259	23,931,246	13,210,459	11,023,293
Expenses					
Operating expenses	iv	(9,139,930)	(11,491,708)	(5,677,639)	(6,145,580)
Transportation expenses		(756,647)	(1,097,985)	(521,987)	(553,729)
General and administrative expenses		(2,088,839)	(1,619,271)	(827,650)	(1,121,572)
Exploration and evaluation expenses		-	(45,843)	(10,752)	-
Transaction costs		(286,243)	(15,535)	-	(8,802)
Share based compensation		-	(328,948)	-	(203,953)
EBITDA	V	2,004,600	9,331,956	6,172,431	2,989,657
EBITDA percentage		14.0%	39.0%	46.7%	27.1%
Depreciation and amortisation	vi	(6,182,300)	(8,751,112)	(3,974,993)	(4,306,582)
Interest expense	vii	(2,568,523)	(3,486,335)	(1,721,775)	(1,822,958)
Interest received		81,177	94,263	47,453	58,046
Net Profit/(loss) before tax		(6,665,046)	(2,811,228)	523,116	(3,081,837)
Income tax benefit/(expense)		110,302	11,778	-	-
Net Profit/(loss) after tax		(6,554,744)	(2,799,450)	523,116	(3,081,837)

- 7.25 We note the following in relation to Persist's financial performance:
  - i. Revenue is derived from the sale of liquids and natural gas provided to third parties on variable price contracts, after payment of royalties. Sales revenue fluctuated significantly during the period presented due to volatility in commodity prices and the impact on demand of OPEC production quota abandonment and covid19. The significant increase in revenue during the 6 months ended 30 June 2021 is due to the increase in commodity prices with average oil sale price for the 6 months increasing to C\$53.77/BOE, compared to an average of C\$45.79/BOE for the six months prior.
    - Royalty costs represent payments to government and third parties and were approximately 21% of revenue from the sale of liquids and natural gases for the 6 months ended 30 June 2021 (CY20: 18%).
  - ii. Processing income relates to handling, transportation and compression income from third parties.
  - iii. Gains and losses on financial derivatives relate to realised and unrealised gains and losses on commodity price related derivatives.
  - iv. Operating expenses include transportation, gathering, compressing and processing costs, power, labour costs, repairs and maintenance, lease costs and insurance etc. Operating



- expenses increased over the six months to 30 June 2021 with the average cost of production per barrel increasing to C\$12.90/BOE, up from C\$11.86 in the 6 months prior.
- v. Earnings before interest, tax, depreciation and amortisation.
- vi. Depreciation and amortisation includes the value of depletion of producing assets based on actual production per period.
- vii. The interest expense relates to the interest charge on loans and borrowings, most notably the Senior Secured Note and the Stream JV Obligation.

## **Capital Structure**

- 7.26 At the date of this report Persist had the following shares on issue:
  - 3,439,238 Class A ordinary shares;
  - 148,000 Class B ordinary shares;
  - 9,157,629 Class C ordinary shares; and
  - 1,238,975 Preferred Shares.
- 7.27 Preferred shares are convertible into Class C ordinary share at a 1:1 ratio when a liquidity event occurs or at the option of the preferred shareholder. Dividends are payable on the preferred shares at a C\$0.0375 per share, payable when quarterly cash flows from operations are C\$2.5m or higher. The cumulative unpaid preferred share dividend as at 30 June 2021 is C\$464,616.

## 8. VALUATION APPROACH

#### **Definition of Value**

8.1 RG 111 states that a transaction is fair if the value of the consideration is greater than the value of the net assets being disposed of. This comparison should be made assuming a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length. Further to this, RG 111 states that a transaction is reasonable if it is fair. It might also be reasonable if despite being 'not fair' the expert believes that there are sufficient reasons for security holders to accept the offer in the absence of any higher bid.

## **Valuation Approach Adopted**

- 8.2 There are a number of methodologies which can be used to value a company. The principal methodologies which can be used are as follows:
  - Capitalisation of maintainable earnings ('CME');
  - Discounted cash flow ('DCF');
  - Quoted market price basis ('QMP');
  - Net asset value ('NAV'); and
  - Market approach method ('Comparable market Transaction').
- 8.3 A summary of each of these methodologies is outlined in Appendix B.

#### Value of a Hawkley Share prior to the Proposed Transaction

8.4 In assessing the value of a Hawkley share prior to the Proposed Transaction, we have utilised the net assets on a going concern basis as our primary methodology. We have considered all other valuation methodologies and their applicability to the business of Hawkley but, in our opinion, no other methodology is appropriate. We set out our reasoning below:



- Hawkley is a non-trading entity with negligible business activities, and does not have a history
  of profitable normalised earnings. As such the DCF or FME methodologies are not
  considered to be appropriate;
- Hawkley's shares were suspended from the ASX since May 2017 and the Company delisted in June 2020 after a period of continuous suspension, as such there is no observable market data for a Hawkley share. We note that there have been some recent capital transactions that may provide some meaningful guide to its value;
- 8.5 Our valuation of Hawkley prior to the Proposed Transaction has been performed on a control basis.

## Value of a Hawkley Share following the Proposed Transaction

- 8.6 In assessing the value of Hawkley following the Proposed Transaction we have selected the Sum of Parts approach as our primary methodology. The Sum of Parts methodology estimates the value of a Company by assessing the value of the assets and liabilities separately. The valuation of Persist includes the consideration of DCF methodology to value Persist's interest in its oil and gas production assets and the NAV methodology to value the other assets and liabilities of Persist.
- 8.7 Our valuation methodology was selected on the following basis:
  - Persist has prepared a DCF financial model to 2029 ("Persist DCF Model") which reflects the
    expected production of the proved and probable resources and reserves that Persist has an
    interest in. The reserves and other technical inputs and assumptions have been reviewed by
    Chapman Petroleum Engineering Ltd ("Chapman") who have prepared an Independent Expert
    Report as of 22 October 2021 to provide an opinion on the reasonableness of the technical
    inputs and assumptions used in the Persist DCF Model.
  - The oil and gas reserves that the Persist DCF Model is based on were last evaluated by Sproule Associates as at 30 June 2021 in an Evaluation for the Petroleum & Natural Gas Reserves dated 29 July 2021 ("Sproule Report"). Chapman has used the Sproule Report in his assessment of the technical inputs and assumptions used in the Persist DCF Model.
  - As Persist's shares are not listed, there is no regulated and observable market for them.
  - Persist does not have a history of profitable earnings, therefore the FME approach is not considered to be appropriate.
- 8.8 As a cross check to our valuation, we have also considered the enterprise value / 2P resource and reserves (EV/2P inc reserves) multiples, and enterprise value / EBITDA multiples observed in the market for comparable companies to Persist.
- 8.9 Our valuation of Hawkley post the Proposed Transaction has been performed on a minority basis.



## 9. VALUATION OF A HAWKLEY SHARE PRIOR TO THE PROPOSED TRANSACTION

9.1 As stated in Section 8, we have assessed the value of Hawkley on a control basis using the Net Assets on a going concern methodology, as summarised below:

	Ref	Low A\$	High A\$
Fair value of Hawkley net assets as at 30 June 2021	9.2	(585,417)	(585,417)
Cash proceeds from issue of balance of Convertible Notes	9.4	1,060,000	1,060,000
Net Present value of Convertible Note financial liability payable in cash	9.6	(53,333)	(51,064)
Fair value of delisted shell	9.3	-	500,000
Equity value of Hawkley prior to the Proposed Transaction on a control basis	<del>-</del>	421,250	923,519
Fair value of the conversion option of Convertible Notes assuming no relisting event	9.9	(1,200,000)	(1,200,000)
Equity value of Hawkley attributable to ordinary shareholders prior to the Proposed Transaction on a control basis		(778,750)	(276,481)
No of shares on issue in Hawkley prior to the Proposed Transaction (post consolidation)	3.15	4,436,033	4,436,033
Value of a Hawkley share prior to the Proposed Transaction		(0.18)	(0.06)

9.2 The fair value of the net assets of Hawkley as at 30 June 2021 are summarised below:

Hawkley Oil and Gas Limited		Audited		
Net Assets		30-Jun-21	Low	High
	Ref	A\$	A\$	A\$
ASSETS				
Cash and cash equivalents		45,617	45,617	45,617
Trade and other receivables		2,864	2,864	2,864
TOTAL ASSETS		48,481	48,481	48,481
LIABILITIES	<del>=</del>			
Trade and other payables		515,849	515,849	515,849
Convertible note	i	140,000	-	-
Unsecured loan		118,049	118,049	118,049
TOTAL LIABILITIES	_	773,898	773,898	773,898
NET ASSETS		(725,417)	(585,417)	(585,417)

- i. The Convertible note balance relates to interim convertible note funding as at 30 June 2021. The Company is planning to raise a total of A\$1.2m of interim Convertible Notes prior to the Proposed Transaction. As the interim fundraising will proceed prior to the Proposed Transaction completing and is not conditional on the Proposed Transaction, we have assumed that the full A\$1.2m of Convertible Notes are raised in the table at paragraph 9.2. In order to prevent any double counting of the interim convertible notes raised during the period to 30 June 2021, we have included a nil value for these in the table above.
- 9.3 We have assumed a fair value for the delisted shell of nil in our low valuation, and A\$500,000 in our high valuation.

## **Convertible Note**

9.4 The Company is planning on raising funds of A\$1.2m through the issue of Convertible Notes prior to the completion of the Proposed Transaction. As this interim funding is not contingent on a relisting, or the completion of the Proposed Transaction, for the purposes of this valuation we have included the impact of this interim funding in the valuation above. We note that as at 30 June 2021 the Company had already raised interim funding of A\$140,000 and we understand that at the date of this report the Company has commitments for a total of A\$500,000, with the remaining A\$700,000 expected to be committed to in the next couple of weeks. For the purposes of this valuation, we have assumed that the balance of A\$1,060,000 is raised.



- 9.5 The Convertible Notes are mandatorily convertible into Hawkley shares either on relisting (at a 75% discount to the expected relisting price) or at A\$0.01 if no relisting event occurs prior to 30 June 2022. Assuming no relisting event occurs, the Convertible Notes are therefore convertible at a fixed number of Hawkley shares and so the convertible component of the Convertible Notes is classified as equity and has been deducted from the equity value of Hawkley arrived at above.
- 9.6 Hawkley has a contractual obligation to pay the coupon in cash. We have valued the liability component of the Convertible Note using the effective interest method as follows:

	Ref	Low A\$	High A\$
Face value of the Convertible Note	9.4	1,200,000	1,200,000
Term to maturity <sup>1</sup>		6 months	6 months
Year 1 coupon interest (10%)		60,000	60,000
Discount rate applied to cash flows	9.7	25%	35%
Net present value of financial liability	9.1	53,333	51,064

<sup>&</sup>lt;sup>1</sup>Estimated to be 6 months to 30 June 2022 (being the maturity date of the notes)

- 9.7 All of Hawkley's borrowings as at 30 June 2021 include a conversion feature and as such the related coupon rates include a discount for the potential upside from the conversion option. Hawkley has no current trading activity and no assets as security for any potential borrowing. There is limited information available on appropriate interest rates for unlisted companies in this position and in our opinion Hawkley would be required to source debt funding from a lower tier lender who would expect equity type returns. As such we have assumed an implied discount rate of between 25% and 35%.
- 9.8 In the fair value calculation of this liability above, we have assessed the Net Present Value of the coupon cash payments of the Convertible Notes. We have used the annual 10% coupon rate in this calculation, as per the terms of the Convertible Notes. The Net Present Value of the interest payable is classed as a liability and included as debt in the valuation of Hawkley in paragraph 9.2 above.

## **Conversion Option**

- 9.9 For the purposes of the valuation of Hawkley prior to the Proposed Transaction, we have assumed that the Convertible Notes convert without a relisting event. In this scenario, the conversion is on a fixed for fixed basis, with the conversion price being A\$0.01/share. This conversion feature is therefore classed as equity and deducted from the total equity value of Hawkley above. As the Convertible Notes have a mandatory conversion feature, the Company has an unconditional right not to repay the notes in cash. The Company has an obligation to issue a fixed number of shares and therefore we have attributed the full face value of the Convertible Notes, being A\$1.2m, to the value of the conversion feature.
- 9.10 We note that the interim Convertible Note funding is not subject to the Proposed Transaction, and the Proposed Transaction is not conditional on the interim Convertible Note funding. As at the date of this report we understand that the Company has secured commitments for A\$500,000 of these Convertible Notes, with the balance of A\$700,000 expected to be raised in the next couple of weeks. For the purposes of our valuation of Hawkley prior to the Proposed Transaction, this interim funding is deemed to be an event subsequent to 30 June 2021 rather than an element of the Proposed Transaction. We note that the valuation of a Hawkley share per the table at paragraph 9.1 is nil in both our high and low valuations. If we were to assume that no additional Convertible Notes were raised in Hawkley subsequent to 30 June 2021, our valuation of Hawkley in both our high and low valuations would still be nil.



## **Secondary Valuation: Recent capital transactions**

9.11 During FY20 and FY21, Hawkley issued ordinary shares on an arm's length basis as follows:

Date	No of shares (pre consolidation)	Description	Low A\$	High A\$	Low A\$	High A\$
			Pre consc	olidation	Post consc	olidation
30 June 2020	18,750,000	Conversion of interim convertible note funding to ordinary shares (included 9,375,000 options)	0.020	0.020	0.40	0.40
22 July 2020	19,000,000	Termination of contracts with corporate advisors (included 3,500,000 options)	0.032	0.032	0.65	0.65
12 April 2021	5,337,423	Settlement of outstanding directors' fees	0.030	0.030	0.60	0.60

9.12 Our valuation of Hawkley prior to the Proposed Transaction is on a controlling basis and as such we have added a control premium to the weighted average value of the recent capital transactions as follows:

	Ref	Low A\$	High A\$
Weighted average recent share price for a Hawkley share on a minority basis (post consolidation)	9.11	0.534	0.534
Add: premium for control	9.16	20%	30%
Weighted average recent share price for a Hawkley share on a control basis (post consolidation)		0.641	0.695

9.13 We have assessed the secondary value of a Hawkley share prior to the Proposed Transaction on a controlling basis based on the review of recent arm's length transactions to be in the range of approximately A\$0.641 to A\$0.695. We note that the funds raised in July 2020 and April 2021 relate to share based payments in exchange for services provided rather than a capital raising. The shares issued in June 2021 relate to interim fund raising via the issue of convertible notes that converted at A\$0.40 per share (on a post consolidation basis). At the time of this capital raising, Hawkley was raising funds for a potential project and therefore it is highly likely that funds previously invested in Hawkley were contributed on the assumption that Hawkley will proceed with that project and relist on the ASX. As such, in our opinion, the recent capital transaction value of a Hawkley share is not truly reflective of the underlying value of Hawkley and captures the potential upside from a future liquidity event.

## **Control premium**

- 9.14 We note that the share prices noted above represent the value of a non-controlling interest in Hawkley and they do not reflect a premium for control.
- 9.15 We have reviewed the control premiums paid in recent years by companies listed on the ASX. There is significant variability in control premiums paid which are affected by such factors as:
  - Nature and magnitude of non-operating assets;
  - Quality of management;
  - Nature and magnitude of business opportunities/assets not currently being exploited;
  - Degree and confidence in future synergies;
  - Level of pre-announcement speculation of the transaction;
  - · Level of liquidity in the trade of the acquiree's securities; and
  - The stage in the economic cycle.
- 9.16 A review of control premiums paid by acquirers of companies listed on the ASX in recent years indicates a range of premiums between 20% and 30% is reasonable. We believe that this reflects an appropriate rate of control premium to be applied in our valuation of Hawkley.



## 10. VALUATION OF A HAWKLEY SHARE FOLLOWING THE PROPOSED TRANSACTION

- 10.1 As stated in Section 8, we have assessed the value of a Hawkley share following the Proposed Transaction on a minority basis using the Sum of Parts Valuation methodology, by valuing the assets and liabilities of Hawkley and Persist separately as follows:
  - · Value of the production assets;
  - · Value of the exploration assets; and
  - · Value of the other assets and liabilities.
- 10.2 The Sum of Parts valuation has been summarised in the table below:

	Ref	Low A\$	High A\$
Valuation of Production assets	10.21	42,615,000	47,371,000
Valuation of other assets and liabilities	10.3	(308,371)	1,895,326
Net asset value for Hawkley	9.2	(585,417)	(585,417)
Convertible note interim funding – balance to A\$1.2m	9.4	1,060,000	1,060,000
Capital raising less capital raising costs (minimum and maximum)	3.4	11,280,000	14,100,000
Net present value of Convertible Note liability at completion	10.6	(1,200,000)	(1,172,093)
Equity Value of Hawkley post the Proposed Transaction on a control basis	•	52,861,212	62,668,816
Minority discount	10.14	23%	17%
Equity Value of Hawkley post the Proposed Transaction on a minority basis	•	40,703,133	52,015,117
Fair value of Convertible Note embedded derivative	10.10	(3,600,000)	(3,600,000)
Equity Value of Hawkley post the Proposed Transaction attributable to ordinary shareholders on a minority basis	•	37,103,133	48,415,117
No of shares on issue in Hawkley immediately following the Proposed Transaction	3.15	184,268,265	199,268,265
Value of a Hawkley share post the Proposed Transaction on a minority basis		0.20	0.24



#### 10.3 The other assets and liabilities of Persist are summarised in the table below.

		As at 30 June 2021	Low	High
Assets and liabilities of Persist	Note	C\$	C\$	C\$
Other assets				
Cash and cash equivalents	i	1,091,200	(341,800)	(341,800)
Trade and other receivables	ii	4,058,267	910,269	910,269
Other assets	iii	799,907	799,907	799,907
Exploration and evaluation assets	iv	2,053,502	-	2,053,502
Property, plant and equipment	V	46,891,783	368,550	368,500
Right of use assets	vi	650,294	52,240	52,240
Total assets		56,354,952	1,789,166	3,848,670
Other liabilities				
Trade payables	vii	5,567,382	1,917,382	1,917,382
Commodity derivative financial instruments	viii	2,833,885	-	-
Stream JVA obligation	ix	15,658,727	-	-
Senior secured note	ix	4,966,835	-	-
Lease liabilities	vi	1,076,373	159,138	159,138
Decommissioning Provisions	X	19,789,323	-	-
Preferred Shares		12,390	-	-
Total liabilities		49,904,915	2,076,520	2,076,520
Other net liabilities		6,450,037	(287,354)	1,766,150
Exchange rate as at 30 June 2021 (C\$1:A\$1.07314)		A\$6,921,793	(A\$308,371)	A\$1,895,326

Source: Reviewed financial information for Persist for the year ended 30 June 2021

- i. Cash and cash equivalents of (C\$341,800) have been included in the table above, being the difference between the opening cash position in balance sheet of the Persist DCF Model and the cash position per the Persist reviewed financials as at 30 June 2021.
- ii. Trade and other receivables have been confirmed as recoverable with Persist management. Trade and other receivables of C\$910,269 have been included in the table above, being the difference between the opening receivables position in balance sheet of the Persist DCF Model and the receivables position per the Persist reviewed financials as at 30 June 2021.
- iii. Other assets consist of prepayments and deposits.
- iv. Exploration and evaluation assets relate to costs capitalised where, due to the early stage of exploration of these sites, the technical feasibility and commercial viability of the project area has not yet been determined. The costs mostly relate to the Carseland and Wayne areas for identifying potential drilling locations and renewing/acquiring mineral rights for undeveloped land. Due to the lack of advanced information on how viable these areas are for commercial development, we have assumed a nil value in our low value, assuming that these costs may not be recovered, In our high valuation, we have assumed the book value of the exploration assets, on the assumption that these costs may be recovered through future development.
- v. The property, plant and equipment of Persist includes the value of liquids and natural gas interests and infrastructure which have been valued separately as part of the financial model. For the purposes of this valuation, we have only included the value of office related property plant and equipment in the table at paragraph 10.3.
- vi. Right of Use assets and associated lease liabilities include field equipment leases, the benefit and associated cash flows of which are included in Persist DCF Model for the producing assets. For the purposes of this valuation, we have only included the right of use assets relating to the office lease in the table at 10.3 above.



- vii. Trade and other payables of C\$1,917,382 have been included in the table above, being the difference between the opening payables position in balance sheet of the Persist DCF Model and the payables position per the Persist reviewed financials as at 30 June 2021.
- viii. The realised gains and losses from hedged commodity prices are included in the Persist DCF Model and therefore we have not included a separate value for the derivative liability in the table above.
- ix. The principal and interest repayment cash flows for the Stream JV obligation and Senior Secured loan note are factored in the to the Persist DCF Model for the producing oil and gas assets. As such we have not included a separate value for these liabilities in the table above.
- x. The cash flows associated with the decommissioning provisions have been included in the Persist DCF Model. We have therefore not included a separate value for the decommissioning provisions in the table above.

#### **Convertible Note**

- 10.4 The Company is planning on raising funds of A\$1.2m through the issue of Convertible Notes prior to the completion of the Proposed Transaction. The Convertible Note is mandatorily convertible into Hawkley shares on relisting, at a 75% discount to the expected relisting price. As the number of shares to be issued on relisting varies based on the share price of Hawkley, the conversion feature gives rise to a derivative liability.
- 10.5 Hawkley does not have a contractual obligation to repay the cash component of the loan note if the Company does not relist by the maturity date, as the Convertible Notes would just convert to Hawkley shares at a significantly lower conversion price in this instance. As the Company has an obligation to deliver a variable quantity of its own equity instruments, the Company has a financial liability.
- 10.6 We have valued the liability component of the Convertible Note using the effective interest method as follows:

	Ref	Low A\$	High A\$
Face value of the Convertible Note	10.4	1,200,000	1,200,000
Term to maturity <sup>1</sup>		6 months	6 months
Year 1 coupon interest (10%)	10.8	60,000	60,000
Year 1 principal		1,200,000	1,200,000
Discount rate applied to cash flows	10.7	10%	15%
Net present value of financial liability	10.2	1,200,000	1,172,093

<sup>&</sup>lt;sup>1</sup>Assumed to be 6 months to 30 June 2022 (being the maturity date of the notes)

- 10.7 As at 30 June 2021, Persist had third party borrowings of 9% (Senior Secured Note) and 11% (Stream JV Obligation). These loans are at an arm's length basis and do not include a conversion feature. As such, we have included an implied discount rate of 10% in our low valuation and 15% in our high valuation.
- 10.8 In the fair value calculation of this liability above, we have assessed the Net Present Value of the host debt element of the Convertible Notes. We have used the annual 10% coupon rate, maturity term (as per the terms of the Convertible Note) and face value of the Convertible Note to calculate the Net Present Value of the principal and interest payable. The Net Present Value of the principal and interest is classed as a liability of the Company.

#### **Embedded Derivative**

10.9 In order to calculate the value of the embedded derivative included in the notes, we used the intrinsic value of the derivative. The intrinsic value of the embedded derivative is \$3,600,000, as per the table below. The expected conversion of the notes is likely to remain at a 75% discount to the relisting price. As such, the embedded derivative is always "in the money". Due to the variable nature of the number of shares that could be issued on conversion, the value of the embedded derivative is the difference between the uplift from the 75% discount to whatever price a future



- capital raising is completed, multiplied by the number of shares that would be issued. As such, regardless of the relisting price achieved, the value of the derivative doesn't change.
- 10.10 The table below demonstrates the variable impact on the number of shares that could be issued and the subsequent similarities in intrinsic values:

	Scenario 1 A\$	Scenario 2 A\$	Scenario 3 A\$	Scenario 4 A\$
Relisting price per share	0.100	0.200	0.500	1.000
Conversion price per share (75% discount)	0.025	0.050	0.125	0.250
Intrinsic value per share	0.075	0.150	0.375	0.750
No of shares issued on conversion	48,000,000	24,000,000	9,600,000	4,800,000
Intrinsic value of embedded derivative	A\$3,600,000	A\$3,600,000	A\$3,600,000	A\$3,600,000

## **Minority Discount**

- 10.11 The sum of parts valuation method implies a premium for control has already been factored into the value. Therefore, our calculation of the fair value of a Hawkley share post the Proposed Transaction needs to include an adjustment to reflect the minority basis.
- 10.12 We have reviewed the control premiums paid in recent years by companies listed on the ASX. There is significant variability in control premiums paid which are affected by such factors as: Nature and magnitude of non-operating assets;
  - Quality of management:
  - Nature and magnitude of business opportunities/assets not currently being exploited;
  - Degree and confidence in future synergies;
  - Level of pre-announcement speculation of the transaction;
  - · Level of liquidity in the trade of the acquiree's securities; and
  - The stage in the economic cycle.
- 10.13 A review of control premiums paid by acquirers of companies listed on the ASX in recent years indicates a range of premiums between 20% and 30% is reasonable.
- 10.14 A minority interest discount is the inverse of a premium for control and is calculated using the formula 1 [1 / (1+control premium)]. Therefore, the minority interest discount is between 17% and 23%

#### **Independent Assessment of Production Assets**

- 10.15 A DCF valuation has been prepared by Persist in order to value the production assets owned and operated by Persist (the "Persist DCF Model"). A DCF is an estimate of future cash flows over the producing life of the assets, discounted to a present value using an appropriate discount rate. The Model runs to December 2029 and is based on the reserve estimates assessed by Sproule as at 30 June 2021.
- 10.16 The Persist DCF Model has been prepared on a post-tax basis and includes the following key assumptions:
  - The Persist Model assumes production arising from wells at Carseland, Garrington, Stolberg and Wayne areas only with available reserves based on the Evaluation of the P&NG Reserves Report prepared by Sproule with an effective date of 30 June 2021:
  - No value is taken into consideration for the exploration sites;
  - The term of the Persist Model is to 31 December 2029;
  - Sproule's short-term outlook for oil and gas prices is based on information obtained from various sources, including government agencies, industry publications, oil refiners, and natural gas marketers as well as considerations for the New York Mercantile Exchange (NYMEX) and



Intercontinental Exchange (ICE) futures markets. The forecasts used in the evaluation were derived as of 30 June 2021.

- The discount rates applied are between 12% and 15%;
- The inflation rate applied is nil%;
- The lessor and overriding royalties were based on existing agreements and government regulations. The Crown royalty rates and the Freehold Mineral Taxes were based upon existing provincial regulations.
- Persist successfully refinances the Stream JV Obligation and Senior Secured Note in the last quarter of 2021 and refinances with a new C\$15m debt facility with a 12% interest rate repayable over 3 years;
- The combined federal and provincial corporate income tax rate applied is 23%;
- Non-capital tax losses can be carried forward and utilised in full on a change in ownership;
   and
- Minimum work obligations under the leases will be met and therefore applicable production licences renewed.
- The model assumes a consistent exchange rate of 1AUD to 0.918776CAD
- 10.17 We have utilised the expertise of Chapman Petroleum Engineering Pty Ltd ("Chapman") as technical specialists to verify the technical inputs into the Persist Model and their assessment of the reasonableness of these inputs and assumptions. Chapman have concluded that the Persist DCF Model contains, "in all respects, a representation of the future production, reserves and cash flow, that is fair and reasonable and contains no misrepresentations".
- 10.18 We have reviewed the projections which have been prepared on a real basis (not a nominal basis) and where appropriate, made changes to key assumptions based on our review of current market factors
- 10.19 Our review of projections has included:
  - · Confirmation that the model reflects the key inputs of the reserves report;
  - Review of the integrity and accuracy of the calculations in the financial projections; and
  - Consideration of the key assumptions in the Model and the performance of sensitivity analysis
    on the assumptions to highlight the impact of movements in the key assumptions on the value
    of the Persist production assets.
- 10.20 We have not undertaken a review of the Persist DCF Model in accordance with ASAE 3450 Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information.
- 10.21 The table below provides a summary of the DCF valuation of the Persist production assets. We have assessed the Fair Value of the assets to be in the range of A\$42.6m and A\$47.3m.



Discounted Cash Flows	Ref	Total	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
A\$000's Production											
Oil (bbl/d)			696	1,564	2,151	2,480	2,034	1,426	1,096	876	707
Oli (bbl/d)			030	1,304	2,101	2,400	2,004	1,420	1,090	070	707
Gas (mcf/d)			11,071	14,922	19,477	20,890	17,721	13,351	10,471	8,379	7,028
NGL (bbl/d)			345	359	341	346	305	243	202	166	143
Total (BOE/d)		36,032	2,886	4,410	5,738	6,308	5,292	3,895	3,044	2,438	2,021
Commodity Prices											
WTI (USD)			66.94	68.74	62.64	58.45	55.48	53.46	52.31	51.88	52.07
Realized Oil (A\$)			80.84	84.65	76.80	71.41	67.58	64.99	63.50	62.95	63.20
Realized Gas (A\$)			3.80	3.82	3.32	3.08	3.10	3.12	3.13	3.14	3.14
Total Revenue (A\$'000)	0%	542,423	42,665	77,166	91,852	96,014	76,559	54,266	41,938	33,860	28,103
Hedging gains (losses)			(3,522)	(1,185)	-	-	-	-	-	-	-
Royalties			(8,761)	(13,801)	(15,672)	(16,203)	(12,684)	(8,894)	(6,715)	(5,234)	(4,204)
Operating expenses	0%		(14,675)	(19,692)	(24,030)	(25,701)	(23,770)	(20,643)	(18,640)	(17,299)	(16,277)
Interest expense General &			(6,786)	(2,567)	(2,002)	(1,399)	(647)	(149)	-	-	-
Administration			(2,675)	(5,986)	(5,986)	(5,986)	(5,986)	(5,986)	(5,986)	(5,986)	(5,986)
Net Income (A\$'000)		200,708	6,246	33,935	44,162	46,725	33,472	18,594	10,597	5,341	1,636
Less: CAPEX	0%	(107,597)	(3,652)	(29,921)	(21,672)	(29,632)	(4,544)	(4,544)	(4,544)	(4,544)	(4,544)
Less: Debt repayments		(18,963)	5,480	(4,944)	(4,743)	(8,534)	(729)	(5,493)	-	-	-
Less: Change in Working Capital		(872)	(64)	1,245	(2,359)	1,439	1,126	612	404	276	
Free Cash flows (A\$'000)		75,956	7,202	(994)	18,992	6,200	29,638	9,683	6,665	1,201	(2,632)
NPV (A\$'000)											
@12.0%		47,371									
_ @13.0%		45 706									

@13.0% 45,706 @15.0% 42,615

Source: MACF Analysis



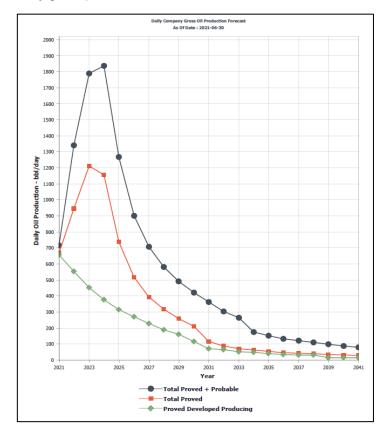
#### **Key assumptions**

#### **Production**

10.22 Production is based on the total proven and probable reserves calculated for the Persist assets. The recoverable reserves for Crude Oil, Gas and Natural Gas were reviewed by Sproule Associates Limited as at 30 June 2021.

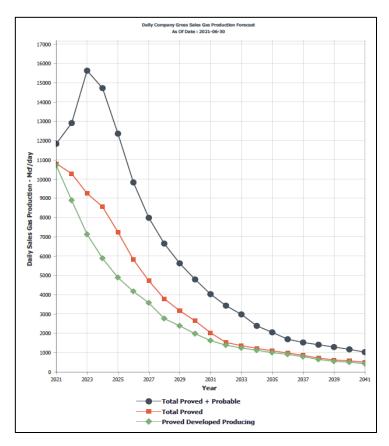
Property	Oil	Gas	Sol.Gas	NGLs	Sulphur
	MBbl	MMcf	MMcf	MBbl	MLt
Stolberg	1,412.4	208	5,451	21.3	-
Carseland	403.7	-	6,205	209.1	-
Wayne	1,206.3	-	4,694	109.1	-
Fenn BV	945.5	-	-	-	-
Stolberg Gas	-	14,051	-	31.7	-
Garrington Sour	422.4	-	724	27.2	-
Garrington Sweet	6.5	4,973	-	659.9	6.9
Carseland Shallow Gas	-	7,964	-	15.1	-
Wildcat Hills	-	1,070	-	61.7	-
Caroline	38.4	349	37	18.9	-
Golden	8.3	-	-	-	-
Rockyford	0.7	-	4	0.1	-
Total	4,444.2	28,615	17,115.0	1,154.1	6.9

10.23 Daily gross production forecast as of 30 June 2021.



Source: Company





Source: Company

#### **Commodity Prices**

#### Oil and Gas price

10.24 We have reviewed forecast oil price data compiled by Capital IQ and by Consensus Economics and compared this to the price data utilised by Persist in the model. The data compiled is taken from a number of economic and market analysis forecasts and averaged to present an estimated forecast price. There were no significant differences in the prices compiled by Capital IQ and Consensus Economics compared to those adopted by Persist. Our assumed forecast oil and gas prices are set out in the table below:

	Dec 21 (nominal)	Dec 22 (nominal)	FY23	FY24	FY25	FY26-30 (nomin al)	FY26-30 (real)			
Consensus Economics Mean Forecast prices										
Crude Oil - WTI (US\$/barrel)	68.91	64.96	62.07	60.74	59.48	62.92	54.84			
Crude Oil - Brent (US\$/barrel)	71.64	68.31	65.12	64.42	63.58	68.84	59.71			
Natural Gas - US (US\$/MMBtu)	3.52	3.17	3.10	3.14	3.27	3.32	2.96			
S&P Capital IQ Forecast prices										
Crude Oil - Light (US\$/barrel)	83.76	72.06	66.91	63.02	60.7	n/a	n/a			
Natural Gas - US (US\$/MMBtu)	5.9	4.4	3.74	3.56	3.43	n/a	n/a			

Source: S&P Capital IQ and Consensus Economics



#### Expenditure, royalties and production taxes

10.25 The table below summarises the last three years' royalties, operating expenses, general administration expenses and taxes and compares them to the forecast expenses to 31 December 2025.

#### **Comparison of Historic Costs to Forecast Costs**

A\$000's	FY19	FY20	FY21	FY22	FY23	FY24
Hedging gains/(losses)	-	-	(3,522)	(1,185)	-	-
Royalties	-	-	(8,761)	(13,801)	(15,672)	(16,203)
Operating expenses	(9,140)	(11,492)	(14,675)	(19,692)	(24,030)	(25,701)
General & Administration	(2,089)	(1,619)	(2,675)	(5,986)	(5,986)	(5,986)

- 10.26 Costs of production are based on actual costs and contract costs.
- 10.27 Royalties are calculate based on existing agreements and government regulations. The Crown royalty rates, and the Freehold Mineral Taxes were based upon existing provincial regulations.

#### Capital costs

10.28 Capital cost estimates were reviewed for reasonableness based on professional judgement and historical spending of Persist. The table below breaks down the various capital cost categories.

	FY21	FY22	FY23	FY24	FY25-29
Less DCET Capex	1,827	25,104	16,938	25,088	-
Less Land & Infrastructure	1,450	3,565	3,428	3,238	16,190
Less ABD Capex	375	653	653	653	3,265
Less Workover Capex		599	653	653	3,265
Total	3.652	29.921	21.672	29.632	22,720

#### Calculation of an appropriate discount rate

- 10.29 The discount rate we have selected allows for both the time value of money and the risks attached to future cash flows. In addition, it is a real discount rate on the basis that the Model does not consider inflation. The applicable discount rate is the likely rate of return an acquirer of the Persist assets would require for the risks inherent in investing in the assets.
- 10.30 We have utilised the weighted average cost of capital ("WACC") as our discount rate. We have assessed the WACC to be in the range of 12% to 15% on a real post-tax, pre-debt basis. Details of our assessment of the preferred range for the WACC are included in Appendix F.

#### Sensitivity Analysis

- 10.31 We have performed three key sensitivities in our DCF for the Persist assets. We have selected our sensitivities based on the likelihood of changes in the key assumptions that underpin the Model. We consider the key sensitivities to be:
  - Changes in the price of oil, and gas directly impacting Total Revenue generated by the assets.
  - Changes in the operating costs; and
  - Changed in the capital expenditure.
- 10.32 The tables below summarise the impact of the changes in our key assumptions assuming a range of discount rates.



#### Impact of sensitivities on value (A\$000's)

		Total Revenue (A\$000's)									
		-20%	-10%	0%	10%	20%					
it rate	12%	(20,574)	13,398	47,371	81,343	115,315					
Discount	13%	(19,948)	12,879	45,706	78,533	111,360					
Dis	15%	(18,802)	11,907	42,615	73,324	104,033					

		Change in operating costs (excluding royalties and taxes) (A\$000's)							
		-20%	-10%	0%	10%	20%			
ıt rate	12%	68,865	58,118	47,371	36,623	25,876			
Discount	13%	66,404	56,055	45,706	35,357	25,008			
Dis	15%	61,851	52,233	42,615	32,998	23,380			

		Change in CAPEX (\$A000's)								
		-20%	-10%	0%	10%	20%				
rt rate	12%	61,727	54,549	47,371	40,193	33,015				
Discount	13%	59,638	52,672	45,706	38,740	31,774				
Dis	15%	55,756	49,186	42,615	36,045	29,475				

#### **Summary of Technical Report**

- 10.33 Chapman Petroleum Engineering Ltd ("Chapman"), an independent oil and gas advisory firm, was engaged to prepare an Independent Technical Specialist Report ("ITSR") which we have relied upon in our assessment of the technical inputs included in the Persist DCF Model.
- 10.34 The ITSR has been prepared by a Qualified Petroleum Reserves and Resources Evaluator ("QPRRE") as defined by ASX listing rules, with over 40 years' experience in the conduct of evaluation and engineering studies relating to the oil and gas fields in Canada and around the world. The QPRRE is a registered professional engineer, a member of the Association of Professional Engineers and Geoscientists of Alberta and a member of the Australasian Institute of Mining and Metallurgy.
- 10.35 Chapman have provided an opinion on the reasonableness of the technical inputs used in the Persist DCF Model and have opined that the Persists DCF Model contains in all respects, a representation of the future production, reserves and cash flow that is fair and reasonable and contains no misrepresentations. A copy of RISC's ITSR has been included in Appendix E.
- 10.36 Chapman have made the following observations in their report:
  - The forecast production of existing well sites presented in the Model is considered to be fair and reasonable when compared to the Sproule production estimates and Chapman's own estimates. The Proved Producing Reserves and Production Forecasts in the Model are based on the Sproule evaluation and match within 3% of the Sproule reserves estimate.
  - Given the inherent uncertainties in the petroleum business, the forecasts presented in the Model for the new wells are considered to be drilled are fair and reasonable.



- Capital expenditure ("Capex") assumptions used in the Model were considered to be reasonable after comparison with the Sproule report conclusions and other information provided.
- Historical productivity data relating to the existing infrastructure confirms that production capacity included in the Model is reasonable.
- Based on a review of supporting information for operating expenditure ("Opex") assumptions used, the Opex forecasts used in the model are considered to be fair and reasonable.
- The assumptions around the end of well life and Asset Retirement Obligations ("ARO") are considered to be reasonable.
- Chapman have relied on information supplied by Persist, supplemented by information included in the Sproule report. Chapman did not conduct a site visit.
- 10.37 Given the conclusions reached in Chapman's report we consider there is reasonable basis rely on the Persist DCF Model and as such, we have included a DCF as part of our valuation methodology.

#### Cross Check Value of the Production Assets; EV/2P Ratio

- 10.38 As a cross check to the DCF valuation, we have considered enterprise value to reported proved and probable resources (EV/2P) multiples of ASX listed companies and applied a range of multiples to the reported reserve of Persist. The ratio gives an indicator as to the value and growth potential of the producing assets in an oil and gas company. The 2P reserves comprise both proved and probable reserves, being proved reserves which have at least a 90% likelihood of being produced, and probable reserves which have at least a 50% likelihood of being produced. In selecting comparable companies, we have reviewed transactions on the following basis:
  - Listed companies involved in oil and gas production;
  - Revenue between A\$1 and A\$100 million;
  - EBITDA positive;
  - Oil and gas production based in Canada; and
  - Publicly available information where 2P resources are reported.
- 10.39 The following table sets out a summary of the historic EV to 2P resource ratio ("EV/2P ratio") of a selection of entities listed on the ASX whose operations and activities are comparable to those of Persist. The 2P resource includes reported reserves. A brief description of each of the companies is listed in Appendix D.



#### Summary of comparable company EV/2P ratios

Ticker code	Company name	LTM Revenue A\$m	Market Cap A\$m	Cash A\$m	Debt A\$m	Enterprise Value A\$m	Enterprise Value (control)* A\$m	Total 2P reserves MmBoe	EV/2P Ratio
TSX: GXE	Gear Energy Ltd.	91.3	245.4	-	41.0	286.4	347.8	23.5	14.8
TSXV: LXE	Leucrotta Exploration Inc.	30.3	242.6	61.3	-	181.3	242.0	43.6	5.6
TSX: PRQ	Petrus Resources Ltd.	60.2	`83.2	0.3	122.8	204.0	226.5	41.4	5.5
TSX: QEC	Questerre Energy Corporation	26.5	80.7	11.1	13.2	81.5	103.0	31.5	3.3
TSX: JOY	Journey Energy Inc.	91.7	87.0	9.7	83.6	160.8	182.7	50.0	3.7
TSXV: TNZ	Tenaz Energy Corp.	12.4	105.7	0.5	3.4	108.7	135.0	10.6	12.7
TSXV: HME	Hemisphere Energy Corporation	27.3	89.6	2.2	22.9	110.4	132.7	14.9	8.9
TSXV: PSEC	Prairie Storm Resources Corp.	22.0	49.2	9.3	1.0	40.9	53.2	26.8	2.0
TSXV: RZE	Razor Energy Corp.	58.9	23.3	2.9	70.1	90.6	96.3	17.3	5.6
Average Median		46.7 30.3	111.9 87.0	10.8 2.9	39.8 22.9	140.5 110.4	168.8 135.0	28.9 26.8	6.9 5.6
	Persist Oil and Gas Inc	31.0	NA	1.9	20.6	NA	NA	13.2	

Source: S&P Capital IQ, MSPCF analysis

- 10.40 The EV/2P ratio expresses a company's value as a multiple of its proved and probable reserves. The table above indicates a range of between 2.0x and 14.8x. Persist's revenue, EBITDA and 2P reserves are considered comparable with the companies included in the table above.
- 10.41 Based on our analysis of the companies above, we have selected a comparable range of multiples of between 4x and 7x. As a condition of the Proposed Transaction is the relisting of Hawkley on the ASX, we have not considered it necessary to apply a discount to the EV/2P ratios identified.
- 10.42 We have applied the range of multiples as discussed in the paragraph above to the currently reported 2P reserves associated with the Persist production assets of 13.2 million barrels of oil as at 30 June 2021. This results in a range of values of between A\$52.8 million and A\$92.4 million before equity value adjustments.

<sup>\*</sup>Adjusted for control of 25%



10.43 The Sum of Parts valuation using the EV/2P valuation methodology has been summarised in the table below:

	Ref	Low A\$	High A\$
Valuation of Production assets	10.42	52,800,000	92,400,000
Surplus assets of Persist	10.44	-	2,203,695
Net debt of Persist	10.45	(20,093,863)	(20,093,863)
Net asset value for Hawkley	9.2	(585,417)	(585,417)
Convertible note interim funding – balance to A\$1.2m	9.4	1,060,000	1,060,000
Capital raising less capital raising costs (minimum and maximum)	3.4	11,280,000	14,100,000
Net present value of Convertible Note liability at completion	10.6	(1,200,000)	(1,172,093)
Equity Value of Hawkley post the Proposed Transaction on a control basis		43,260,720	87,912,322
Minority discount	10.14	23%	17%
Equity Value of Hawkley post the Proposed Transaction on a minority basis		33,310,754	72,967,227
Fair value of Convertible Note embedded derivative	10.10	(3,600,000)	(3,600,000)
Equity Value of Hawkley post the Proposed Transaction attributable to ordinary shareholders on a minority basis		29,710,754	69,367,227
No of shares on issue in Hawkley immediately following the Proposed Transaction	3.15	184,268,265	199,268,265
Value of a Hawkley share post the Proposed Transaction on a minority basis		0.16	0.35

#### Surplus assets/(liabilities)

10.44 Surplus assets and liabilities are those assets and liabilities not required to sustain the adopted level of earnings. We have reviewed the financial information of Persist as at 30 June 2021 and note that the exploration and evaluation asset of Persist of C\$2,053,502 (A\$2,203,695) is a surplus asset as the assets is not a contributor to the current earnings of the business. All other assets and liabilities are used in the operations of the business as at 30 June 2021.

#### Net (debt)/cash

10.45 We have assessed the net debt in Persist as follows from review of the financial information as at 30 June 2021:

	Ref	C\$	<b>A</b> \$
Cash and cash equivalents	7.21	1,901,199	2,040,253
Stream JVA Obligation	7.21	(15,658,727)	(16,804,006)
Senior Secured Note	7.21	(4,966,835)	(5,330,109)
Net cash/(debt)		(18,724,363)	(20,093,863)

#### **Cross Check Value of the Production Assets: Earnings multiple**

10.46 As a cross check to the DCF valuation, we have considered enterprise value to reported earnings multiples of Canadian listed companies and applied a range of multiples to the reported value of Persist's producing assets. In selecting comparable companies, we have used the comparable companies identified in paragraph 10.39 above.



10.47 The following table sets out a summary of the historic EBITDA multiples for the comparable companies identified. A brief description of each of the companies is listed in Appendix D.

#### **Summary of comparable company EBITDA multiples**

		Market		Eı	nterprise	Enterprise Value	EBITDA E	BITDA	EBITDA	EBITDA	EBITDA	EBITDA
Ticker code	Company name	Cap A\$m	Cash A\$m	Debt A\$m	Value A\$m	(control) A\$m	FY20 A\$m	LTM A\$m	NTM A\$m	multiple FY20 (x)		multiple NTM (x)
TSX: GXE	Gear Energy Ltd Leucrotta	245.4	-	41.0	286.4	347.8	36.2	34.5	75.0	9.6	10.1	4.6
TSXV: LXE	Exploration Inc	242.6	61.3	-	181.3	242.0	1.4	5.1	25.5	172.8	47.4	9.5
TSX: PRQ	Petrus Resources Ltd	83.2	0.3	122.8	204.0	226.5	35.9	22.6	46.8	6.3	10.0	4.8
TSX: QEC	Questerre Energy Corporation	80.7	11.1	13.2	81.5	103.0	5.7	10.6	45.3	18.1	9.7	2.3
TSX: JOY	Journey Energy Inc. (TSX	87.0	9.7	83.6	160.8	182.7	21.2	36.4	60.3	8.6	5.0	3.0
TSXV: TNZ	Tenaz Energy Corp Hemisphere	105.7	0.5	3.4	108.7	135.0	2.8	6.4	9.9	48.2	21.1	13.6
TSXV: HME	Energy Corporation Prairie	89.6	2.2	22.9	110.4	132.7	13.8	11.5	NA	9.6	11.5	NA
TSXV: PSEC	Storm Resources Corp	49.2	9.3	1.0	40.9	53.2	(9.4)	5.4	NA	NA	9.9	NA
TSXV: RZE	Razor Energy Corp	23.3	2.9	70.1	90.6	96.3	(1.6)	2.0	NA	NA	48.2	NA
Average		111.9	10.8	39.8	140.5	168.8	11.8	14.9	43.8	39.0	19.2	6.3
Median		87.0	2.9	22.9	110.4	135.0	5.7	10.6	46.1	9.6	10.1	4.7

Source: S&P Capital IQ, MSPCF analysis

- 10.48 The table above indicates an LTM EBITDA multiple range of between a median of 10.1x and an average of 19.2x. Based on our analysis of the companies above, we have selected a comparable range of multiples of between 9.0x and 10.0x. In particular we note a number of outliers increasing the average EBITDA multiple. As a condition of the Proposed Transaction is the relisting of Hawkley on the ASX, we have not considered it necessary to apply a discount to the EBITDA multiples identified.
- 10.49 We have applied the range of multiples as discussed in the paragraph above to an estimated CME (current maintainable earnings) of A\$8,751,000 associated with the Persist production assets of 13.2 million barrels of oil as at 30 June 2021. The CME of A\$8,751,000 has been arrived at using an average of the normalised EBITDA of Persist for the year ended 31 December 2020 and annualised for the six months ended 30 June 2021. Normalisation adjustments include adding back one off transaction costs and share based payments. The result is an enterprise valuation using the CME valuation methodology between A\$78.8 million and A\$87.5 million.

<sup>\*</sup>Adjusted for control of 25%



10.50 The Sum of Parts valuation using the CME valuation methodology has been summarised in the table below:

	Ref	Low A\$	High A\$
Valuation of Production assets	10.49	78,800,000	87,500,000
Surplus assets of Persist	10.44	-	2,203,695
Net debt of Persist	10.45	(20,093,863)	(20,093,863)
Net asset value for Hawkley	9.2	(585,417)	(585,417)
Convertible note interim funding – balance to A\$1.2m	9.4	1,060,000	1,060,000
Capital raising less capital raising costs (minimum and maximum)	3.4	11,280,000	14,100,000
Net present value of Convertible Note liability at completion	10.6	(1,200,000)	(1,172,093)
Equity Value of Hawkley post the Proposed Transaction on a control basis		69,260,720	83,012,322
Minority discount	10.14	23%	17%
Equity Value of Hawkley post the Proposed Transaction on a minority basis		53,330,754	68,900,227
Fair value of Convertible Note embedded derivative	10.10	(3,600,000)	(3,600,000)
Equity Value of Hawkley post the Proposed Transaction attributable to ordinary shareholders on a minority basis		49,730,754	65,300,227
No of shares on issue in Hawkley immediately following the Proposed Transaction	3.15	184,268,265	199,268,265
Value of a Hawkley share post the Proposed Transaction on a minority basis		0.27	0.33

#### **Summary of Production Asset values**

10.51 The table below summarises the different valuations derived from our assessment of the financial model for Persist and comparable EV to resource/reserve multiples and EBITDA multiples.

Equity Value per share on a minority basis	Ref	Low Value	High Value
Equity value per Share on a minority basis	Kei	A\$	A\$
Equity value per share attributable to an ordinary shareholder using the Persist DCF Model	10.10	0.20	0.24
Equity value per share attributable to an ordinary shareholder using the comparable EV to resource/reserve multiples	10.32	0.16	0.35
Equity value per share attributable to an ordinary shareholder using the comparable EV to EBITDA multiples	10.48	0.27	0.33
Preferred range of values of Persist production assets		0.20	0.24

10.52 Given the reasonable technical and general assumptions and inputs applied in the Persist DCF Model, and the modelling based on verified reserves as at 30 June 2021, our preferred range of values is based on the range derived from the Persist DCF Model. We consider this reasonable on the basis because it is a more specific valuation methodology that captures the characteristics of the projects operated by Persist.



#### 11. IS THE PROPOSED TRANSACTION FAIR TO HAWKLEY SHAREHOLDERS?

11.1 Our assessed values of Hawkley are summarised in the table and figure below.

#### **Assessed Values of a Hawkley Share**

		Section	Low A\$	High A\$
Pre Proposed Transaction	Assessed Fair Value of a Hawkley share prior to the Proposed Transaction on a control basis	9	Nil	Nil
Post Proposed Transaction	Assessed Fair Value of a Hawkley share post the Proposed Transaction on a minority basis	10	0.20	0.24

Source: MACF analysis

11.2 In accordance with the guidance set out in ASIC RG 111, and in the absence of any other relevant information, for the purposes of complying with Section 611 of the Act, we consider the Proposed Transaction to be fair to the Shareholders of Hawkley as the value of a Hawkley share is higher following the Proposed Transaction than prior to the Proposed Transaction.



#### 12. IS THE PROPOSED TRANSACTION REASONABLE?

- 12.1 RG111 establishes that a Proposed Transaction is reasonable if it is fair. If a Proposed Transaction is not fair it may still be reasonable after considering the specific circumstances applicable to it. In our assessment of the reasonableness of the Proposed Transaction, we have given consideration to:
  - The future prospects of Hawkley if the Proposed Transaction do not proceed; and
  - Other commercial advantages and disadvantages to the Shareholders of Hawkley as a consequence of the Proposed Transaction proceeding.

#### Future prospects of Hawkley if the Proposed Transaction do not proceed

12.2 If the Proposed Transaction does not proceed then Hawkley will continue as a delisted, non-trading entity. Due to the going concern position of Hawkley, the ability to remain solvent will be reliant upon the ability of the company to secure additional funding through issue of shares and/or debt.

#### **Advantages and disadvantages**

12.3 In assessing whether the Shareholders of Hawkley are likely to be better off if the Proposed Transaction proceeds, than if it does not, we have also considered various advantages and disadvantages that are likely to accrue to the Shareholders.

#### **Advantages of approving the Proposed Transaction**

12.4 Advantage 1 – The Proposed Transaction is fair

RG111 states that a transaction is reasonable if it is fair. We have found the Proposed Transaction to be fair to the Non-Associated Shareholders.

12.5 Advantage 2 – Relisting and liquidity

A condition of the Proposed Transaction is the relisting of Hawkley shares on the ASX, which would increase the liquidity of Hawkley shares.

12.6 Advantage 3 – Cash

The Proposed Transaction includes a capital raising of between A\$12m and A\$15m. This will provide the Company with cash to extinguish existing debt in Hawkley and to facilitate the growth and acceleration of production in existing operations of Persist. Persist has identified a number of production enhancements and associated drilling opportunities to focus on following completion of the Proposed Transaction.

12.7 Advantage 4 – Going Concern

If the Proposed Transaction is not approved, Hawkley may not be able to repay the principal and interest due on the Convertible Notes and unsecured loans by their due dates. Non-payment may cause a material going concern issue for Hawkley, in which case Hawkley may not be able to realise its assets or settle its liabilities in the normal course of business, nor at amounts stated in the financial statements. The audit report attached to the 30 June 2021 financial statements included an emphasis of matter regarding the going concern position of the Company. The Proposed Transaction strengthens Hawkley's balance sheet and allows the continuation as a going concern.

12.8 Advantage 5 – Performance Rights

Part of the Proposed Transaction includes the issue of Performance Rights which convert on the achievement of share price milestones. If Hawkley does not meet these performance milestones in the specified time constraints, then the Performance Rights will not convert, allowing risk to be shared between Hawkley and the Vendors of Persist with respect to the Proposed Transaction. It also allows all parties to benefit from the uplift in value of Hawkley's shares following the Proposed Transaction.



#### 12.9 Advantage 6 – Re-establishment as an oil and gas producer

The acquisition of Persist will lead to the Company operating as an oil and gas producer again. Non-Associated Shareholders were already exposed to the oil and gas sector so the acquisition of Persist will carry similar risks and rewards previously experienced by Non-Associated Shareholders.

#### **Disadvantages of approving the Proposed Transaction**

#### 12.10 Disadvantage 1 – Dilution of Shareholdings of Non-Associated Shareholders

In the event the Proposed Transaction is successful, the issue of new shares to the Vendors of Persist will have a significant dilutive effect on the voting interest of the Shareholders of Hawkley. Immediately following the completion of the Proposed Transaction, the combined voting power of the existing Hawkley Shareholders will decrease from a 100% interest (prior to subsequent events) to 2.4% immediately following the Proposed Transaction, assuming the minimum Capital Raising is achieved. If we assumed that the maximum Capital Raising is achieved, the existing Hawkley Shareholders combined voting interest will be 2.2% immediately following completion of the Proposed Transaction. This calculation is on the assumption that the Options and Performance Rights do not convert on completion of the Proposed Transaction. If the Options and Performance Rights converted to Ordinary Shares on completion of the Proposed Transaction, then the combined voting power of the Shareholders of Hawkley will decrease to 2.1% on the basis of the minimum Capital Raising being achieved, and 1.9% on the basis of the maximum Capital Raising being achieved. The combined voting power of the Persist Vendors will form a significant voting block at completion of the Proposed Transaction. For further information on the details of the Capital Structure of Hawkley pre and post the Proposed Transaction refer to Section 3 of this report.

#### 12.11 Disadvantage 2 – No guarantee of capital appreciation

The share price hurdles associated with the Performance Rights are no guarantee that the Company's share price will meet these targets on completion of the Proposed Transaction.

#### 12.12 Disadvantage 3 - Debt

The net assets of Persist include substantial existing debt. As at 30 June 2021, Persist had net debt of C\$19.4m, with the Senior Secured Note liability outstanding on 30 June 2021 of approximately C\$5m maturing on 1 April 2022. The Company anticipates that on completion of the Proposed Transaction. The debt will be refinanced. Persists ability to repay these amounts depends on the future performance of the business and ability of the company to continue as a going concern.

#### **Alternative Proposal**

12.13 We are not aware of any alternative proposal that is being considered or has been presented by Hawkley at the current time which might provide a greater benefit than the Proposed Transaction.

#### Consequences of not accepting the offer

1.1 If the Proposed Transaction does not proceed then Hawkley may not be able to repay the payables and borrowings and may therefore not be able to continue as a going concern. In this scenario Hawkley may be required to source alternative sources of funding to repay the borrowings by their maturity date. Should Hawkley not be able to secure additional funding on reasonable terms and on a timely basis, then this may have significant adverse consequences for Hawkley and its shareholders.

#### **Conclusion on Reasonableness**

- 12.14 In our opinion, the position of the Shareholders of Hawkley if the Proposed Transaction is approved is more advantageous than the position if it is not approved. Therefore, in the absence of any other relevant information and/or a superior Proposed Transaction, we consider that the Proposed Transaction is reasonable for the Shareholders of Hawkley.
- 12.15 An individual shareholder's decision in relation to the Proposed Transaction may be influenced by his or her individual circumstances. If in doubt, shareholders should consult an independent advisor.



#### 13. INDEPENDENCE

- 13.1 Moore Australia Corporate Finance (WA) Pty Ltd is entitled to receive a fee of approximately \$45,000, excluding GST and reimbursement of out of pocket expenses. Except for this fee Moore Australia Corporate Finance (WA) Pty Ltd has not received and will not receive any pecuniary or other benefit whether direct or indirect in connection with the preparation of this report.
- 13.2 Neither Moore Australia, a related entity of Moore Australia Corporate Finance (WA) Pty Ltd, nor Moore Australia Corporate Finance (WA) Pty Ltd, has previously provided any services to either Hawkley or Persist.
- 13.3 Prior to accepting this engagement Moore Australia Corporate Finance (WA) Pty Ltd has considered its independence with respect to Hawkley and Persist and any of their respective associates with reference to RG 112, Independence of Expert's Reports. It is the opinion of Moore Australia Corporate Finance (WA) Pty Ltd that it is independent of both Hawkley and Persist and their respective associates.
- 13.4 Moore Australia Corporate Finance (WA) Pty Ltd and Moore Australia have not had at the date of this report any relationship which may impair their independence.
- 13.5 We have held discussions with management of Hawkley and Persist regarding the information contained in this report. We did not change the methodology used in our assessment as a result of discussions and our independence has not been impaired in any way.

#### 14. QUALIFICATIONS

- 14.1 Moore Australia Corporate Finance (WA) Pty Ltd is a professional practice company, wholly owned by the Perth practice of Moore Australia, Chartered Accountants. The firm is part of the National and International network of Moore Global Network Limited independent firms and provides a wide range of professional accounting and business advisory services.
- 14.2 Moore Australia Corporate Finance (WA) Pty Ltd holds an Australian Financial Services License to provide financial product advice on securities to retail clients (by way of experts reports pursuant to the listing rules of the ASX and the Corporations Act) and its principals and owners are suitably professionally qualified, with substantial experience in professional practice.
- 14.3 The director responsible for the preparation and signing of this report is Mr Peter Gray who is a director of Moore Australia Corporate Finance (WA) Pty Ltd. Mr Gray is a Chartered Accountant and is RG146 compliant. Mr Gray has approximately 15 years' experience in capital markets and corporate finance and has significant experience in the preparation of independent expert's reports, valuations, valuation methodology and related advice. Mr Gray has previously worked as an oil and gas analyst at a major stock broking firm in Perth.
- 14.4 At the date of this report neither Mr Gray, nor any member or Director of Moore Australia Corporate Finance (WA) Pty Ltd, has any interest in the outcome of the Offer.



#### 15. DISCLAIMERS AND CONSENTS

- 15.1 Moore Australia Corporate Finance (WA) Pty Ltd has been requested to prepare this report, to be included in the Notice of Meeting which will be sent to Hawkley's shareholders.
- 15.2 Moore Australia Corporate Finance (WA) Pty Ltd consents to this report being included in the Notice of Meeting to be sent to shareholders of Hawkley. This report or any reference thereto is not to be included in, or attached to any other document, statement or letter without prior consent from Moore Australia Corporate Finance (WA) Pty Ltd.
- 15.3 Moore Australia Corporate Finance (WA) Pty Ltd has not conducted any form of audit, or any verification of information provided to us, and which we have relied upon in regard to Hawkley, however we have no reason to believe that any of the information provided, is false or materially incorrect.
- 15.4 The statements and opinions provided in this report are given in good faith and in the belief that they are not false, misleading or incomplete.
- 15.5 Neither Moore Australia Corporate Finance (WA) Pty Ltd nor Mr Gray take any responsibility for, nor have they authorised or caused the issue of, any part of this report for any third-party other than the shareholders of Hawkley in the context of the scope and purpose defined in section 4 of this report.
- 15.6 With respect to taxation implications, it is recommended that individual shareholders obtain their own taxation advice, in respect of the Proposed Transaction, tailored to their own specific circumstances. The advice provided in this report does not constitute legal or taxation advice to shareholders of Hawkley or any other party.
- 15.7 The statements and opinions expressed in this report are given in good faith and with reliance upon information generated both independently and internally and with regard to all of the circumstances pertaining to the Proposed Transaction.
- 15.8 In regard to any projected financial information noted in this report, no member or director of Moore Australia Corporate Finance (WA) Pty Ltd has had any involvement in the preparation of the projected financial information.
- 15.9 Furthermore, we do not provide any opinion whatsoever as to any projected financial or other results prepared for Hawkley, and in particular do not provide any opinion as to whether or not any projected financial results referred to in the report will or will not be achieved.

Yours faithfully

Peter Gray Director

Moore Australia Corporate Finance (WA) Pty Ltd



#### **APPENDIX A - SOURCE OF INFORMATION**

In preparing this report we have had access to the following principal sources of information:

- Application for in principle advice for ASX for Hawkley;
- Notice of Meeting for the Proposed Transaction;
- Audited financial statements of Hawkley for the years ended 30 June 2019, 2020 and 2021;
- Audited financial statements of Persist for the years ended 31 December 2019 and 2020 and the reviewed financial statements for the half year ended 30 June 2021;
- DCF financial model for producing assets in Canada, prepared by Persist;
- Reasonableness Opinion Report on the technical inputs for the Persist DCF Model prepared by Chapman Petroleum Engineering Ltd;
- Evaluation of the P&NG Reserves of Persist Oil and Gas Inc Report as of 30 June 2021 prepared by Sproule Associates Limited;
- Investor presentation prepared by Persist;
- Share registry information for Hawkley and Persist;
- OandA.com;
- Information in the public domain;
- S&P Capital IQ database; and
- Discussions with directors, management of Hawkley and Persist.



#### **APPENDIX B - VALUATION METHODOLOGIES**

We have considered which valuation methodology is the most appropriate in light of all the circumstances and information available. We have considered the following valuation methodologies and approaches:

- Discounted cash flow methodology ('DCF');
- Capitalisation of maintainable earnings methodology ('CME');
- Net assets value method ('NAV');
- Quoted market price methodology ('QMP'); and
- Market approach method (Comparable market Transaction)

#### Valuation Methodologies and Approaches

#### **Discounted Cash Flow Method**

Discounted cash flow methods estimate fair market value by discounting a company's future cash flows to their net present value. These methods are appropriate where a forecast of future cash flows can be made with a reasonable degree of confidence. Discounted cash flow methods are commonly used to value early stage companies or projects with a finite life.

#### **Capitalisation of Maintainable Earnings Method**

The capitalisation of maintainable earnings method estimates "fair market value" or "enterprise value", by estimating a company's future maintainable earnings and dividing this by a market capitalisation rate. The capitalisation rate represents the return an investor would expect to earn from investing in the company which is commensurate with the individual risks associated with the business.

It is appropriate to apply the capitalisation of maintainable earnings method where there is an established and relatively stable level of earnings which is likely to be sustained into the foreseeable future.

The measure of earnings will need to be assessed and can include, net profit after taxes (NPAT), earnings before interest and taxes (EBIT) and earnings before interest, taxes, depreciation and amortisation (EBITDA).

The capitalisation of maintainable earnings method can also be considered a market based methodology as the appropriate capitalisation rate or 'earnings multiple' is based on evidence of market Transaction involving comparable companies.

An extension of the capitalisation of maintainable earnings method involves the calculation of share value of an entity. This process involves the calculation of the enterprise value, which is then adjusted for the net tangible assets of the entity.

#### **Net Assets Value Method (Orderly Realisation of Assets)**

The net assets value method (assuming an orderly realisation of assets) estimates fair market value by determining the amount that would be distributed to shareholders, after payment of all liabilities including realisation costs and taxation charges that arise, assuming the company is wound up in an orderly manner.

#### Liquidation of assets

The Liquidation method is similar to the orderly realisation of asset method except the liquidation method assumes the assets are sold in a shorter time frame.

#### **Net assets**

The net assets method is based on the value of the assets of a business less certain liabilities at book values, adjusted to a market value.

The asset based approach, as a general rule, ignores the possibility that a company's value could exceed the realisable value of its assets as they ignore the value of intangible assets such as customer lists, management, supply arrangements, and goodwill.

The asset based approach is most appropriate when companies are not profitable, a significant proportion of assets are liquid, or for asset holding companies.

#### **Cost Based Approach**

The cost based approach involves determining the fair market value of an asset by deducting the accumulated depreciation from the asset's replacement cost at current prices.

Like the asset based approach, the cost based approach has a number of disadvantages, primarily that the cost of an asset does not necessarily reflect the assets ability to generate income. Accordingly, this approach is only useful in limited circumstances, usually associated with intangible asset valuation.



#### APPENDIX B - VALUATION METHODOLOGIES (continued)

#### Valuation Methodologies and Approaches

#### **Quoted Market Price Methodology**

The method relies on the pricing benchmarks set by sale and purchase Transaction in a fully informed market the ASX which is subject to continuous disclosure rules aimed at providing that market with the necessary information to make informed decisions to buy or to sell.

Consequently, this approach provides a "fair price", independently determined by a real market. However, the question of a fair price for a particular transaction requires an assessment in the context of that transaction taken as a whole.

In taking a quoted market price based assessment of the consideration to both parties to the proposed transaction, the overall reasonableness and benefits to the non-participating shareholders must be carefully evaluated.

#### **Market Approach Method**

The market based approach estimates a company's fair market value by considering the market prices of Transaction in its shares or the market value of comparable assets.

This includes, consideration of any recent genuine offers received by the target for an entire entity's business, or any business units or asset as a basis for the valuation of those business units or assets, or prices for recent sales of similar assets



# APPENDIX C - GLOSSARY

In this report, unless the context requires otherwise:

Term	Meaning
1P	Proved reserve, denotes a low estimate scenario of Reserves
2C	Contingent reserve, denotes a mid-estimate for potentially recoverable reserves
2P	Proved and probable reserves, denotes a mid or best estimate scenario of Reserves
A\$	Australian Dollar
Act	Corporations Act 2001
AcquireCo	2371527 Alberta Inc, a wholly owned subsidiary of Hawkley
AmalCo	The new entity formed on completion of the Proposed Transaction, being the amalgamation of Persist and AcquireCo into one corporation
APES	Accounting Professional & Ethics Standards Board
ASIC	Australian Securities and Investments Commission
Associated Shareholders	Shareholders in Hawkley who are party to, or associated with a party to, the Proposed Transaction
ASX	Australian Securities Exchange or ASX Limited ACN 008 624 691
Bbl	Barrels
Board	The Board of Directors of Hawkley
BOE	Barrels of Oil Equivalent
BOPD	Barrels of oil per day
BSPD	Barrels of water per day
Business Day	Has the meaning given in the Listing Rules
C\$	Canadian Dollar
Chapman	Chapman Petroleum Engineering Ltd
Company	Hawkley Oil and Gas Limited
Consideration	Total consideration payable by Hawkley to Persist, consisting of shares and options in Hawkley
Control basis	Assuming the shareholder/s have control of the entity in which equity is held
CPR	Competent Persons Report
CY	Calendar year
Directors	The Directors of Hawkley
Discount rate	The interest rate used to discount future cash flows to present value
Explanatory Statement	The explanatory statement accompanying the Notice
FY	Financial Year
Hawkley	Hawkley Oil and Gas Limited
IER	This Independent Experts Report
Income Tax Assessment Act	the Income Tax Assessment Act 1936 and the Income Tax Assessment Act 1997
ITSR	Independent Technical Specialist Report
LTM	Last 12 months



Term	Meaning
MMbbl	Million barrels of oil
MMBOE	Million barrels of oil equivalent
MMstb	Million stock tank barrels
Model	Discounted cash flow financial model prepared by Persist for its producing assets located in Canada
Moore Australia or MACF	Moore Australia Corporate Finance (WA) Pty Ltd
Non-Associated Shareholders	Shareholders in Hawkley who are not party to, or associated with a party to, the Proposed Transaction
Notice or NOM	The notice of meeting in relation to the Proposed Transaction
NPV	Net Present Value
NTM	Next 12 months
Option	Means an option to acquire shares
PDP	Proved Developed Producing Reserves
Persist	Persist Oil and Gas Inc
Proposed Transaction	The acquisition of 100% of the share capital in Persist by Hawkley in exchange for Consideration payable by Hawkley
Relevant interest	Shareholding or the power to control the right to vote or dispose of shares
Resolutions	Means the resolutions set out in the notice, or any one of them, as the context requires
RG111	ASIC Regulatory Guide 111 Content of Experts Reports
S&P Capital IQ	Third party provider of company and other financial information
Section	Means a section of the IER
Share	Means a fully paid ordinary share in the capital of the Company
Sproule	Sproule Associates Limited
Sproule Report	Evaluation of the Petroleum & Natural Gas Reserves of Persist Oil and Gas Inc Report as of 30 June 2021, dated 29 July 2021
Strip price	The average forward price over a set period in the future for the most comparable hydrocarbon commodity applicable
TP	Total Proved Reserves
TPP	Total Proved and Probable Reserves
WACC	Weighted Average Cost of Capital
WTI	Western Texas Intermediate Crude Oil



# APPENDIX D - COMPARABLE ASX LISTED OIL AND GAS PRODUCERS

Ticker code	Company name	LTM Revenue A\$m	Market Cap A\$m	Cash A\$m	Debt A\$m	Enterprise Value A\$m	Enterprise Value (control) A\$m	Total 2P reserves MMBoe	EV/2P Ratio
TSX: GXE	Gear Energy Ltd.	91.3	260.1	-	64.7	324.8	389.8	23.5	Gear Energy Ltd., an exploration and production company, acquires, develops, and holds interests in petroleum and natural gas properties and assets in Canada. Its oil-focused 16.6 operations are located in three core areas, including Lloydminster heavy oil, Central Alberta light/medium oil, and Southeast Saskatchewan light oil. Gear Energy Ltd. is headquartered in Calgary, Canada.
TSXV: LXE	Leucrotta Exploration Inc.	30.3	259.4	-	6.0	265.4	330.2	43.6	Leucrotta Exploration Inc., an oil and natural gas company, acquires, explores for, develops, and produces oil and natural gas reserves in northeastern British Columbia, Canada. As of December 31, 2020, it owned approximately 201,700 net acres of land. The company was incorporated in 2014 and is based in Calgary, Canada.
TSX: IP	O InPlay Oil Corp.	68.7	128.9	-	65.5	194.4	226.6	32.8	Alvopetro Energy Ltd. engages in the acquisition, exploration, development, and production of hydrocarbons in the Recôncavo basins in onshore Brazil. As of December 31, 2020, the 6.9 company holds interests in the Caburé and Gomo natural gas assets; two oil fields, including Bom Lugar and Mãe-da-lua; and two other exploration assets comprising 23,527 acres. The company was incorporated in 2013 and is headquartered in Calgary, Canada.
TSX: PRQ	Petrus Resources Ltd.	60.2	102.6	-	117.1	219.7	245.4	41.4	InPlay Oil Corp. engages in the acquisition, exploration, development, and production petroleum and natural gas properties in Canada. The company produces and sells crude oil, natural gas, and natural gas liquids. It primarily holds interests in the Cardium Formation in the Pembina and Willesden Green pools located in West Central Alberta. The company also holds interest in the Belly River light oil property; and the Duvernay Formation. InPlay Oil Corp. is headquartered in Calgary, Canada.
TSX: QEC	Questerre Energy Corporation	26.5	93.5	10.6	16.0	98.9	122.3	31.5	Petrus Resources Ltd., an energy company, engages in the acquisition, exploration, development, and exploitation of oil and gas development assets in western Canada. It primarily explores for natural gas, natural gas liquids, and crude oil and condensate. The company primarily holds an average 51% working interest in the Ferrier/Strachan area comprise 43,159 net acres, which include 29,219 net acres of undeveloped and 13,940 net acres of developed land located in west central Alberta near the town of Rocky Mountain House, Alberta. It also has an average of 64% working interest in the Thorsby/Pembina area consisting of 69,042 net acres of land covering 22,135 net acres of undeveloped land and 46,907 net acres of developed land located in the southwest of Edmonton, Alberta; and an average of 50% working interest in the Foothills area that consists of 30,748 net acres of undeveloped land and 6,687 net acres of developed land located northwest of Rocky Mountain House, Alberta. Petrus Resources Ltd. is headquartered in Calgary, Canada.
TSX: JOY	Journey Energy Inc.	91.7	92.3	6.7	84.6	170.2	193.3	50.0	Questerre Energy Corporation acquires, explores, and develops non-conventional oil and gas projects in Canada. It produces tight oil, oil shale, shale oil, and shale gas. The company primarily holds 40,800 acres located in Kakwa, west central Alberta, including a 25% working interest in 10,080 acres in Kakwa Central; 50% working interest in 4,480 acres in Kakwa North; 3.9 50% interest in 22,400 acres in Kakwa West; and 50% interest in 3,840 acres in Kakwa South. It also holds 100% working interest in 11,952 acres located in Antler, Saskatchewan; and oil shale assets in Jordan. The company was formerly known as Westpro Equipment Ltd. and changed its name to Questerre Energy Corporation in December 2000. Questerre Energy Corporation was incorporated in 1971 and is headquartered in Calgary, Canada.



Ticker code	Company name	LTM Revenue A\$m	Market Cap A\$m	Cash A\$m	Debt A\$m	Enterprise Value A\$m	Enterprise Value (control) A\$m	Total 2P reserves MMBoe	EV/2P Ratio
TSXV: ATU	Altura Energy Inc.	12.4	86.3	-	4.3	90.6	112.1	10.6	Journey Energy Inc. engages in the exploration, development, and production of crude oil and natural gas in the province of Alberta, Canada. Its cash generating units comprise power generation, Pine Creek, Pembina, Matziwin, Herronton, Skiff, Gilby, Crystal, Cherhill, and 10.6 Countess. As of December 31, 2020, it had total proved plus probable reserves of 50,004 thousand barrels of oil equivalent. The company was formerly known as Sword Energy Inc. and changed its name to Journey Energy Inc. in July 2012. Journey Energy Inc. was founded in 2007 and is headquartered in Calgary, Canada.
TSXV: HME	Hemisphere Energy Corporation	27.3	84.7	0.4	25.7	110.0	131.1	14.9	Altura Energy Inc. operates as a junior oil and gas exploration, development, and production company in central Alberta. As of December 31, 2020, the company held a 89% working interest in 44,353 acres of land at Leduc-Woodbend Rex Pool property; and a 54.1% working 8.8 interest in 1,920 acres of land in the Leduc-Woodbend Glauconitic D Unit No.1 property. It also operated 22 producing and 40 non-producing oil wells. The company was formerly known as Northern Spirit Resources Inc. and changed its name to Altura Energy Inc. in October 2015. Altura Energy Inc. is headquartered in Calgary, Canada.
TSXV: PSEC	Prairie Storm Resources Corp.	22.0	48.3	4.9	1.0	44.4	56.5	26.8	Hemisphere Energy Corporation acquires, explores for, develops, and produces petroleum and natural gas interests in Canada. It primarily owns a 100% working interest in 8,800 net acres of land in the Atlee Buffalo property located in southeastern Alberta; and a 100% 2.1 working interest in 8,024 net acres of land in the Jenner property situated in southeastern Alberta. The company was formerly known as Northern Hemisphere Development Corp. and changed its name to Hemisphere Energy Corporation in April 2009. Hemisphere Energy Corporation was founded in 1977 and is headquartered in Vancouver, Canada.
TSX: PMT	Perpetual Energy Inc.	35.5	32.8	-	107.0	139.8	148.0	35.4	Pan Orient Energy Corp., a junior oil and natural gas company, engages in the exploration, development, and production of oil and gas properties in Thailand and Canada. It holds a 100% interest in the L53/48 concession located in west of Bangkok, Thailand; and a 50% interest in the Sawn Lake property comprising 88 contiguous sections of heavy oil sands leases situated in the central Alberta Peace River Oil Sands area, Canada. The company is based in Calgary, Canada.
TSXV: RZE	Razor Energy Corp.	58.9	20.0	1.1	55.1	74.0	79.0	17.3	Prairie Storm Energy Corp. focuses on the acquisition, exploration, and development of oil and gas assets in the Willesden Green and Ferrier areas of West Central Alberta, Canada. It holds working interest in 49,785 net acres of petroleum and natural gas rights. The company is headquartered in Calgary, Canada.



# **APPENDIX E - CHAPMAN REPORT**

# **CONTACT US**

Level 15, 2 The Esplanade, Perth WA 6000

T +61 8 9225 5355

F +61 8 9225 6181

E perth@moore-australia.com.au

www.moore-australia.com.au



# Chapman Petroleum Engineering Ltd.

1122 - 4th Street S.W., Suite 700, Calgary, Alberta T2R 1M1 • Phone: (403) 266-4141 • Fax: (403) 266-4259 • www.chapeng.ab.ca

October 22, 2021

Moore Australia Corporate Finance (WA) Pty Ltd Level 15, Exchange Tower 2 The Esplanade PERTH, WA 6000

Attention: Peter Gray, Director

Dear Mr. Gray

RE: Independent Experts Report – Reasonableness Opinion Hawkley Oil and Gas Limited / Persist Oil and Gas Inc.

Chapman Petroleum Engineering Ltd has been engaged by Moore Australia Corporate Finance (WA) Pty Ltd ("Moore") to prepare an independent expert's report ("IER"), providing an opinion as to the reasonableness of the technical inputs in a financial model prepared by Persist Oil and Gas Inc. ("Persist") for certain oil and gas properties in Alberta, Canada.

The purpose of the IER is to provide comfort to Moore in support of the proposed transaction involving Hawkley Oil and Gas Limited ("Hawkley") and Persist Oil and Gas Inc. ("Persist") wherein Hawkley would acquire the shares of Persist.

Chapman has assessed the specific issues described in the letter of instruction as follows:

- i) Confirm the reasonableness of the production forecasts of new wells;
- ii) Confirm the reasonableness of the CAPEX assumptions in the model;
- iii) Confirm the production capability of the existing PPE;
- iv) Confirm the reasonableness of the OPEX assumptions in the model;
- v) Confirm the reasonableness of the remediation and end of life assumptions;
- vi) Confirm the overall reasonableness of the reserves and the production of the projects.

In preparing the specified assessments, Chapman had access to the Persist Model and a detailed presentation of the features of the model, the third-party competent persons report prepared by Sproule Associates, a reliable and reputable independent reserve and economic evaluation firm, further technical presentations presented by Persist professional staff and the extensive public data base available on all aspects of the petroleum industry in Alberta.

On the basis of our analysis, we find that the financial model prepared by Persist contains, in all respects, a representation of the future production, reserves and cash flow, that is fair and reasonable and contains no misrepresentations.

The Persist model presents the oil, gas, and NGLs production and reserves separately and includes these volumes converted to barrels of oil equivalent (BOE). BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of six Mscf to one STB is based on an energy equivalency conversion method primarily applicable to the burner tip and does not represent value equivalency at the well head.

A Discussion describing our methods and findings on each of the above issues and supporting attachments are attached hereto. In addition, we have included Appendix A, which provides an overview of the Persist properties and a description of the geological nature of the four main properties.

It has been a pleasure to prepare this report and the opportunity to have been of service is appreciated.

Yours very truly,

Chapman Petroleum Engineering Ltd.

[Original Signed By:]
[Signature], [Licensed Professional's Stamp]
[Membership ID Number]
October 22, 2021
C. W. Chapman, P. Eng.,
President

cwc/lml/6763

### PERMIT TO PRACTICE

CHAPMAN PETROLEUM ENGINEERING LTD.

[Original Signed By:] Signature *C.W. Chapman* 

Date October 22, 2021

**PERMIT NUMBER: P 4201** 

The Association of Professional Engineers and Geoscientists of Alberta

[APEGA ID Number]

#### CERTIFICATE OF QUALIFICATION

- I, C. W. CHAPMAN, P. Eng., Professional Engineer of the City of Calgary, Alberta, Canada, officing at Suite 700, 1122 4th Street S.W., hereby certify:
- 1. THAT I am a registered Professional Engineer in the Province of Alberta and a member of the Australasian Institute of Mining and Metallurgy.
- 2. THAT I graduated from the University of Alberta with a Bachelor of Science degree in Mechanical Engineering in 1971.
- 3. THAT I have been employed in the petroleum industry since graduation by various companies and have been directly involved in reservoir engineering, petrophysics, operations, and evaluations during that time.
- 4. THAT I have in excess of 40 years in the conduct of evaluation and engineering studies relating to oil & gas fields in Canada and around the world.
- 5. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Moore Australia Corporate Finance (WA) Pty Ltd, dated October 22, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
- 6. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Hawkley Oil and Gas Limited and Persist Oil and Gas Inc., their participants or any affiliate thereof. We confirm that we are completely independent of these parties.
- 7. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
- 8. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]
[Signature], [Licensed Professional's Stamp]
[Membership ID Number]
October 22, 2021
C.W. Chapman, P.Eng.
President

#### PERMIT TO PRACTICE

CHAPMAN PETROLEUM ENGINEERING LTD.

[Original Signed By:]

Signature C.W. Chapman

Date

October 22, 2021

#### **PERMIT NUMBER: P 4201**

The Association of Professional Engineers and Geoscientists of Alberta

[APEGA ID Number]

#### **TABLE OF CONTENTS**

#### **Discussion**

- 1. Confirm the reasonableness of the production forecasts of new wells
- 2. Confirm the reasonableness of the CAPEX assumptions in the model
- 3. Confirm the production capability of the existing PPE
- 4. Confirm the reasonableness of the OPEX assumptions in the model
- 5. Confirm the reasonableness of the remediation and end of life assumptions
- 6. Confirm the overall reasonableness of the reserves and the production of the projects

#### **Attachments**

Table 1: Type Curve Comparison

Table 2: Development Forecast Comparison - Sproule vs Persist

Figure 1: Plot of Persist Historical Group Production Rates

Figure 2: Proved Producing Production Forecast Profile Comparison

Table 3: ARO Estimate Criteria and Comparison to AER Directive 11

Appendix A: Synopsis of Property Particulars of Persist Oil and Gas Inc.

# REASONABLENESS OPINION PERSIST FINANCIAL MODEL DISCUSSION

Following is a discussion of the findings of Chapman Petroleum Engineering Ltd. in its assessment of the technical inputs into the financial model Prepared by Persist Oil and Gas Inc. and the approach and methodology used in reaching those conclusions.

Under our instructions, this assessment was not meant to replicate the evaluation of the Persist assets prepared by Sproule or as presented in the Persist model. The objective was to determine and ensure that the technical inputs to the Persist model reflects a fair and reasonable portrayal of the future production and cash flow from the Carseland, Garrington, Stolberg, Wayne and the minor oil and gas properties of Persist.

#### 1. Confirm the reasonableness of the production forecasts of new wells

The production forecasts for the new wells to be drilled by Persist have been based on type curves developed for each field and reserve type. Chapman first analysed the oil forecasts and found them to be properly correlated to the applicable type curves. For the most part the gas production and NGL recovery correlates to the oil production as solution gas.

Secondly, Chapman undertook to create an independent type curve for each major area by accessing production data from our public data source from surrounding analog wells in each area and creating a normalized production history plot (type curve). Our comparison to the Persist type curves were not perfect, in some cases we were lower and others we were higher, but overall, our quick analysis resulted in a higher forecast than developed by Persist. (Table 1)

We also were presented with a comparison of the development well production forecast over the next six years between Persist's model and Sproule's, which demonstrated a reasonably close comparison, although Persist's forecast was marginally higher than Sproule's, which might be expected since Persist included a few more wells in their development model than Sproule had. (Table 2)

We have concluded, given the inherent uncertainties in the petroleum business, that the forecasts presented in the model for the new wells to be drilled by Persist are fair and reasonable.

#### 2. Confirm the reasonableness of the CAPEX assumptions in the model

Chapman has been advised that the Persist capital estimates were provided in part by West Rock Energy Consultants Ltd, an experienced drilling and field operating company, which we are familiar with. Additionally, we were presented with AFEs and drilling cost results for random wells in certain areas. A comparison of those costs to those shown in the Persist model demonstrated that the model costs in at least some cases were higher than the AFEs or the drilling reports.

We note that Sproule relied on the Persist cost information after independently reviewing them for reasonableness. The total capital cost shown for the Proved plus Probable economic output in the Sproule report correlates properly with the Persist costs given the number of drilled wells in the Sproule report was slightly less than in the Persist model.

We have concluded that the drilling costs in the Persist model are reasonable.

#### 3. Confirm the production capability of the existing PPE

Chapman has been informed by Persist that the existing PPE (infrastructure) is capable of handling the future production rates predicted in the Persist model. This advice is supported by historical productivity from Persists properties indicating peak rates of 7000 STB/d of oil and 40 MMSCF/d of natural gas from public data sources. The Persist model includes peak rates of 2700 STB/d and 24 MMSCF/d of natural gas. (Figure 1)

#### 4. Confirm the reasonableness of the OPEX assumptions in the model

The Sproule operating costs used were based on a review of Persist lease operating statements and discussions with Persist staff and were apparently judged to be reasonable based on their experience in the applicable regions of Alberta.

A comparison of the operating costs in the model with the Sproule values demonstrates that the model generally contains slightly higher operating costs than used by Sproule. Likewise, the costs in the model are slightly higher than the average overall costs from the previous several months of lease operating statements.

The costs in the Persist model correlate very well with the data on the comparison page, increases are noted as well counts increase.

We have concluded that the operating costs in the Persist model are well supported by past lease operating data and have been judged as reasonable by Sproule. We consider the operating cost forecasts in the Persist model to be fair and reasonable.

#### 5. Confirm the reasonableness of the remediation and end of life assumptions

The ARO assessment presented in the Persist model and other documents of Persist is very comprehensive and well structured. It is Persist's position that with a carefully planned program they should be able to abandon and reclaim the leases at costs slightly below the values posted for various regions and well completion types on the AER Directive 11. This is not an unreasonable expectation. (Table 3)

We have concluded that the overall ARO schedule is reasonable and fair for the purposes of this model, given that these are end of life costs to be incurred in the future.

#### 6. Confirm the overall reasonableness of the reserves and the production of the projects

Proved Producing Reserves and Production Forecasts in the Persist model are a close match to the results of the Sproule evaluation and follow the decline trends of past performance of the various projects. The overall reserves match within 3% of the reserves estimated by Sproule. (Figure 2)

We have already commented on the reasonableness of the production rates and profiles of the undeveloped wells and we have compared the Undeveloped Reserves in the model to the Sproule Undeveloped Reserves. The Persist Undeveloped Reserves are higher than the Sproule Undeveloped Reserves, which is not unreasonable given that Persist included more new wells than

Sproule had included. Sproule stated in their report that they did not necessarily include all the potential locations on the Persist lands. We have concluded that the Persist model portrays a reasonable representation of the reserves and production of the existing and new development potential on the Persist lands. Chapman Petroleum Engineering Ltd. -

TABLE 1

#### Persist Oil & Gas Inc.

#### **Comparison of Type Curves**

Type Curve Analy	ysis and Compar	ison - Way	ne Ellerslie	Hztl - oil							Total Projected Recovery/Well
Oil - STB/d	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Persist	120	71	52	41	32	26	20	15	11	7	144,175
Chapman	85	40	25	20	20	18	17	15	12	7	94,535
Type Curve Analy	sis and Compar	ison - Carse	eland Glaud	: channel H	ztl -oil & ga	ıs					
Oil - STB/d	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Persist	106	48	31	22	18	14	12	11			95,630
Chapman	70	50	40	28	20	12	8	7			85,775
Type Curve Analy Oil - STB/d	rsis and Compar Year 1	ison - Garri Year 2	ngton Wab Year 3	Year 4	<b>% gas</b> Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Persist	111	53	32	23	17	14	12	10	8	7	104,755
Chapman	230	175	150	120	110	90	80	75	70	60	423,400
Type Curve Analy	sis and Compar	ison - Stolb	erg Cardiur	m -oil							
Oil - STB/d	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Persist	329	154	91	58	39	27	20	15	12		271,925
Chapman	550	250	210	140	75	45	30	22	10		486,180
Total Four Proper	ties										
Oil - STB/d	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Persist	666	326	206	144	106	81	64	51	31	14	616,485

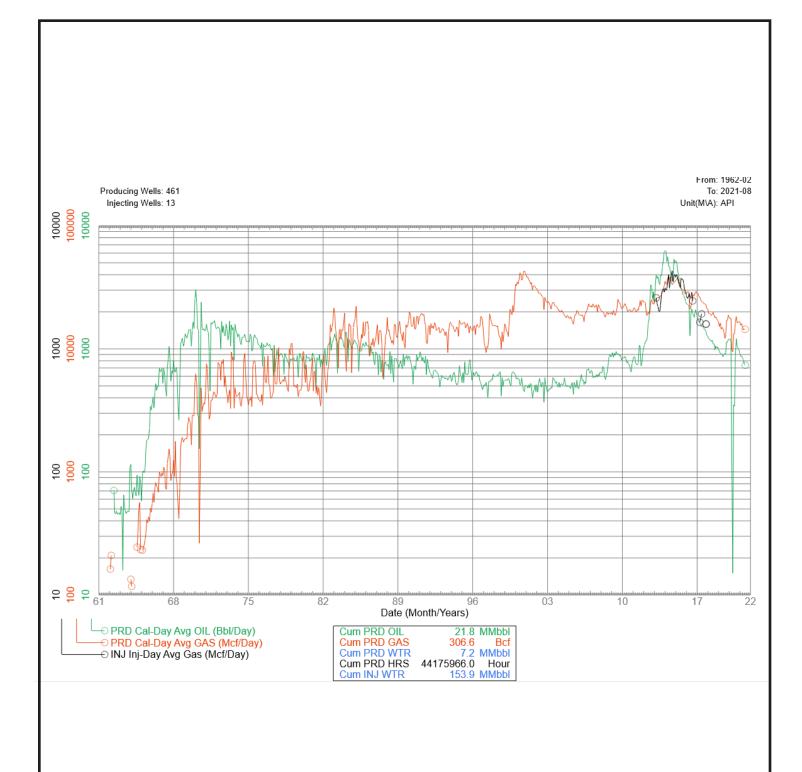
Table 2

# POG Forecast with Sproule Development timing - Persist Type Curves

Operating Model	2021	2022	2023	2024	2025	2026
Production						
Oil (bbl/d)	696	1,467	1,900	1,968	1,443	1,039
Gas (mcf/d)	11,071	11,913	14,540	12,512	9,877	7,850
NGL (bbl/d)	345	346	318	281	238	202
Total (BOE/d)	2,886	3,798	4,641	4,334	3,327	2,549
Liquids (%)	36%	48%	48%	52%	51%	49%

## Sproule Forecast (June 30, 2021) - Sproule Type Curves

Operating Model	2021	2022	2023	2024	2025	2026
Production						
Oil (bbl/d)	714	1,342	1,788	1,836	1,269	900
Gas (mcf/d)	11,813	12,900	15,604	14,709	12,344	9,817
NGL (bbl/d)	339	353	341	318	267	224
Total (BOE/d)	3,022	3,845	4,730	4,606	3,593	2,759
Liquids (%)	35%	44%	45%	47%	43%	41%



# PERSIST OIL AND GAS INC.

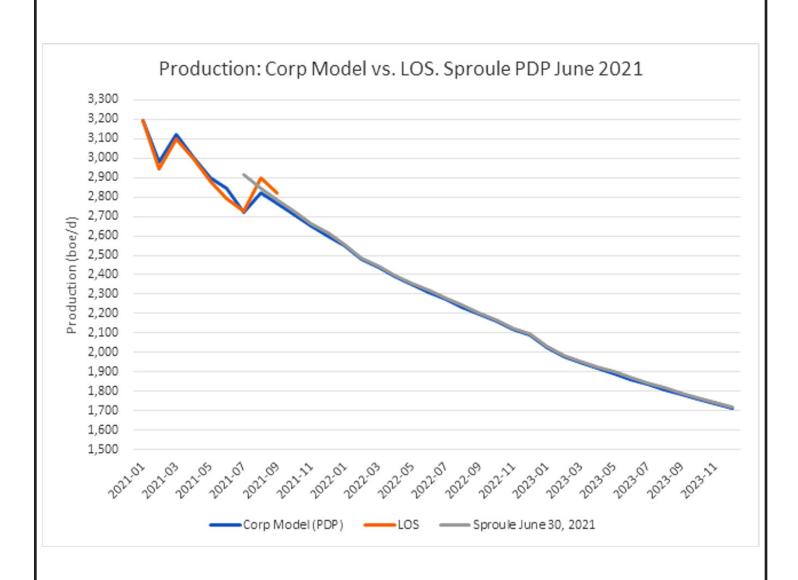
#### **COMPANY PROPERTIES**

ALBERTA

# HISTORICAL GROUP PRODUCTION RATES

OCT. 2021 JOB No. 6763 FIGURE No. 1

**Chapman** Petroleum Engineering Ltd.



# PERSIST OIL AND GAS INC.

COMPANY PROPERTIES

ALBERTA

PROVED PRODUCING
PRODUCTION PROFILE
COMPARISON

OCT. 2021 JOB No. 6763 FIGURE No. 2

Chapman Petroleum Engineering Ltd. .

TABLE 3

# ARO Estimate Criteria and Comparison to AER Directive 11 Cost estimates, per AER

#### Abandonment

ADDITION	AER Directive 11						Persist	
		Depth (m) -	Empty not	ALI Directive	Tubing	Tubing &	Tubing &	
Area	Depth (m) - low	high	perforated	Empty perforated	only	rods	rods	AER Designated AREAS
1	21	1,199	12,800	17,975	36,384	45,993	35,147	Area 1. Medicine Hat
1	1,200	1,999	12,800	19,060	41,790	50,227	38,382	
1	2,000	2,499	12,800	19,273	62,606	75,506	57,700	
1	2,500	2,999	12,800	20,757	67,950	85,003	64,958	
1	3,000		12,800	23,910	87,240	114,236	87,297	
2	(*)	1,199	13,300	13,500	41,361	50,455	38,557	Area 2. Calgary/Edmonton
2	1,200	1,999	13,300	19,562	47,411	56,505	43,180	-
2	2,000	2,499	13,300	19,741	65,782	78,105	59,686	
2	2,500	2,999	13,300	21,194	71,588	88,642	67,738	
2	3,000		13,300	24,646	92,451	119,446	91,278	
3	3.50	1,199	13,500	18,776	45,513	54,608	41,730	Area 3. Drayton Valley/Grand Prairie
3	1,200	1,999	13,500	19,862	55,568	60,658	46,354	
3	2,000	2,499	13,500	22,041	67,020	79,343	60,632	
3	2,500	2,999	13,500	24,244	72,836	89,880	68,685	
3	3,000		13,500	27,975	94,077	121,072	92,521	
4	250	1,199	12,800	17,975	36,037	46,455	35,500	Area 4. Lloydminster
4	1,200	1,999	12,800	19,060	41,790	50,227	38,382	
4	2,000	2,499	12,800	19,273	62,606	75,506	57,700	
4	2,500	2,999	12,800	20,757	67,950	85,003	64,958	
4	3,000		12,800	23,910	87,240	114,236	87,297	
5	720	1,199	13,500	18,807	45,051	53,426	40,827	Area 5. Athabasca/Peace River
5	1,200	1,999	13,500	19,776	54,991	60,081	45,913	
5	2,000	2,499	13,500	20,641	66,719	79,043	60,403	
5	2,500	2,999	13,500	22,194	72,526	89,579	68,455	
5	3,000		13,500	25,675	93,056	120,772	92,292	
6	360	1,199	17,400	26,172	58,482	65,814	50,294	Area 6. High Level
6	1,200	1,999	17,400	26,641	65,957	72,493	55,398	
6	2,000	2,499	17,400	27,510	75,769	89,069	68,065	
6	2,500	2,999	17,400	28,278	82,789	102,453	78,293	
6	3,000		17,400	28,744	102,708	134,177	102,535	

Facility

well equivalent

17,000

			• (
Reclamation	Cost multiplier	Persist	AER Directive 11
Grasslands East	1	11,880	16,500
Grasslands West	2	18,180	25,250
Parklands	3	19,620	27,250
Foothills	4	21,060	29,250
Alpine	5	30,330	42,125
Western Boreal	6	24,480	34,000
Boreal	7	17,190	23,875

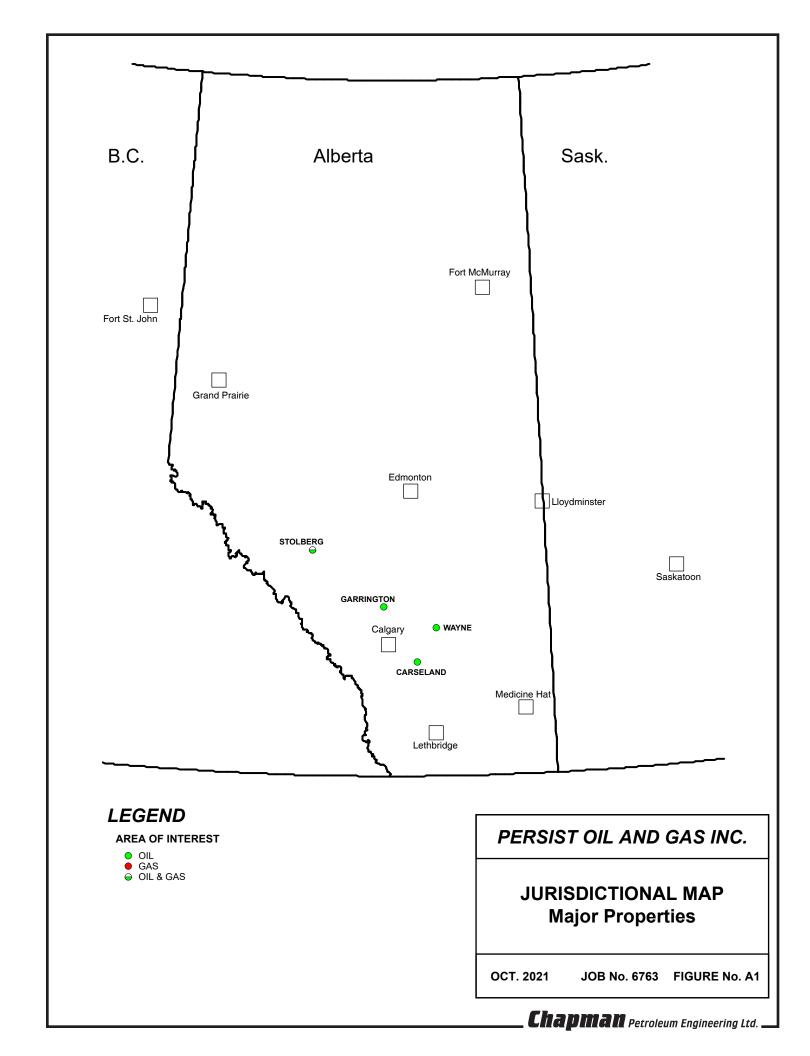
## **APPENDIX A**

# SYNOPSIS OF PROPERTY PARTICULARS OF PERSIST OIL AND GAS INC INDEX

# Jurisdictional Map - Figure 1A

# **Discussion**

- Production overview
- Company Reserves
- Development Plan
- Geological Nature and Setting
  - Corporate Overview
  - Southern Plains Wayne/Carseland
  - Southern Plains Garrington
  - Foothills Stolberg



DISCUSSION

**Production Overview** 

Persist Oil and Gas Inc. (the "Company") owns and operates oil and gas properties in Alberta, including

four major areas, Carseland, Garrington, Stolberg and Wayne plus several minor properties located as

shown on Figure 1. The company holds 100% working interest in its Wayne and Carseland properties,

and approximately an 80% operated working interest in Stolberg and Garrington.

The Company's current production amounts to approximately 2,786 boe/d consisting of 650 STB/d of oil,

11 MMSCF/d of associated and non-associated natural gas with liquid recoveries of 332 Bbls/d.

Company Reserves

The Company's gross (before royalty) reserves and NPV @ 10% DCF (BIT), according to the June 2021

evaluation report prepared by Sproule, are as follows:

Proved Producing: 5,555 MBOE consisting of Oil – 1,266 MSTB, Non-Associated Gas – 16.1 BCF,

Solution Gas - 5.2 BCF and Natural Gas Liquids - 732 MBbl; NPV10% - M\$39,605

Total Proved: 7,785 MBOE consisting of Oil – 2,471 MSTB, Non-Associated Gas – 16.1 BCF, Solution

Gas - 10.7 BCF and Natural Gas Liquids - 833 MBbls; NPV10% - M\$63,663

Total Proved Plus Probable: 13,220 MBOE consisting of Oil – 4,444 MSTB, Non-Associated Gas –

28.6 BCF, Solution Gas – 17.1 BCF, and Natural Gas Liquids – 1,154 MBbls; NPV10% – M\$110,969

Development Plan

The Proved and Probable Undeveloped Reserves are largely a result of a planned development program

on the major properties involving 32 wells to be drilled over the next few years, as follows:

Carseland: Six Horizontal Glauconitic light oil wells

Garrington: Four Wabamun sour light oil wells

Stolberg: Seven Cardium light oil wells and four Mannville gas wells

Wayne: Eleven Horizontal Ellerslie light oil wells

With the planned development the Company's production rates are estimated to peak on or around mid 2024 with oil production of approximately 2,760 STB/d, Gas production of 22,500 Mscf/d and natural gas liquids of 378 Bbls.

# **Geological Nature and Setting**

Following is a discussion of the geological setting and characteristics of the four major properties, provided by Persist technical staff, which formed part of our investigation under this engagement.

#### **CORPORATE OVERVIEW**

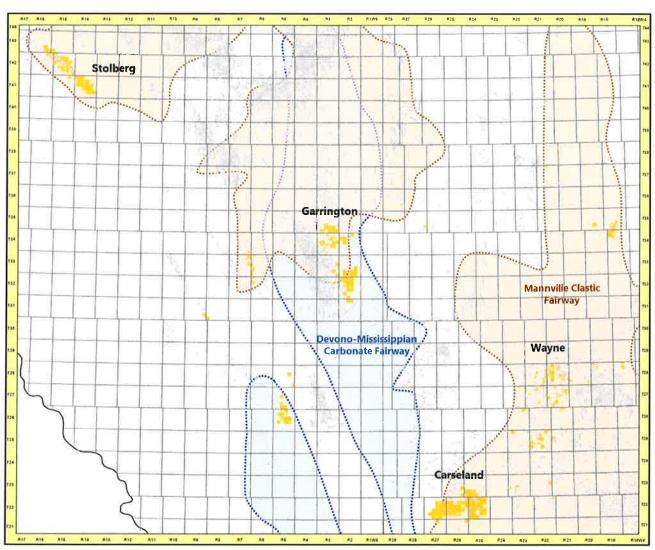


Figure 1: Corporate Map and Core Areas

Persist Oil and Gas (Persist) focuses on the production of hydrocarbons in Central and Southern Alberta. The Company holds 44,515 ha (110,000 acres) of total net acreage over prolific hydrocarbon fairways (Fig. 1), concentrated over 4 core areas: Carseland and Wayne, Stolberg, and Garrington. In Carseland, Wayne, and Stolberg, Persist is producing oil and gas from Upper and Lower Cretaceous clastic reservoirs of the Cardium Formation and Mannville Group, whereas in the Garrington area, oil production comes from Devonian carbonate reservoirs of the Crossfield Member of the Wabamun Group (Fig. 2).

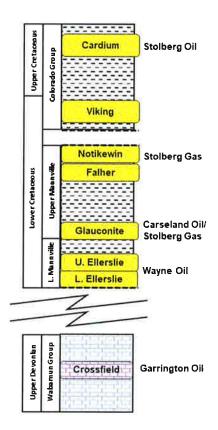


Figure 2: Simplified stratigraphic section highlighting productive zones for Persist Core Areas

## SOUTHERN PLAINS: WAYNE/CARSELAND AREA

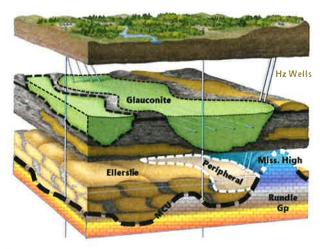
## 1. Regional Geology

The Lower Cretaceous Mannville Group represents the oldest Cretaceous rocks in the western Canada Sedimentary basin and is the dominant productive interval extending across the entire Southern Plains area and beyond. The Mannville Group's gross thickness may range up to 250m across the area. The Mannville Group is further subdivided into the Upper Mannville and Lower Mannville intervals, which host the productive Glauconite and Ellerslie channels respectively.

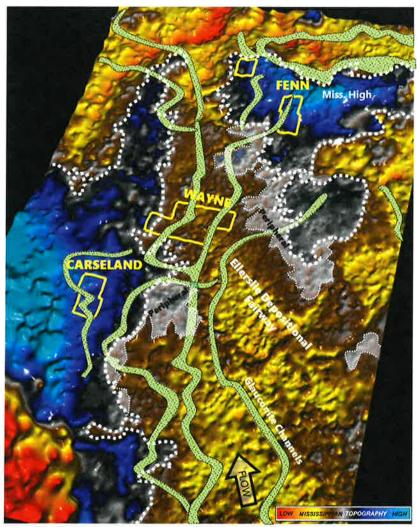
The Lower Mannville Ellerslie channels are unconformably deposited within lows, or valleys, of the underlying Mississippian strata. This unconformity represents a hiatus of approximately 200ma when the Mississippian (and older) rocks were uplifted, exposed, and eroded. The Ellerslie depositional fairway is regional in nature and consists of stacked and amalgamated continental coastal plain channels. Peripheral to, and atop localized Mississippian paleo highs (or hills) individual, isolated channels are also present.

The Ellerslie fairway is identified by mapping the underlying Mississippian unconformity using the high density well control and an extensive seismic data base across the area (fig XX). Persist has access to extensive sub-regional seismic coverage via a seismic data option with Prairie Sky Royalty.

The Upper Mannville Glauconitic interval represents a brief marine incursion and consists of erosive, laterally confined, channel fairways created as the sea regressed towards the N/NW. Although not as laterally extensive as the older Ellerslie channel systems, the Glauconitic channels are, generally, confined to the same overall depositional fairway as the Ellerslie and exhibit excellent reservoir quality. The Glauconite channels are well defined on seismic as they may get upwards to 40m of gross thickness.



**Figure 3: Mannville Group depositional model.** The Lower Mannville Ellerslie channels fill large erosive fairways created by the Mississippian unconformity (MCU). The Upper Mannville Glauconite is more erosive and confined.



**Figure 5: Mississippian Unconformity Structure Map (4<sup>th</sup> order residual).** Regional distribution of the Ellerslie depositional fairways ("hot" colors) and the Glauconite channels (green polygons). Wayne, Carseland and Fenn areas are shown in yellow.

Persist's Wayne area contains both Glauconitic and Ellerslie production. Glauconitic production is from two pools – the Q8Q and the E4E. The Q8Q pool is currently under waterflood; the E4E pool is scheduled to be under waterflood late 2021 – 2022.

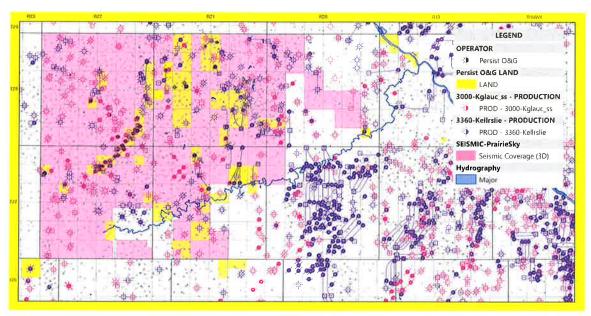


Figure 6: Wayne Area. Persist's land and operating wells are shown as yellow boxes and black wells (respectively). Productive Glauconitic and Ellerslie well are colored pink and purple (respectively).

Persist's 3D seismic data coverage is highlighted in pink.

The Carseland area produces from a Glauconitic channel in the Upper Mannville L pool. Persist also produces gas from a shallower horizon, which is beyond the scope of this report.

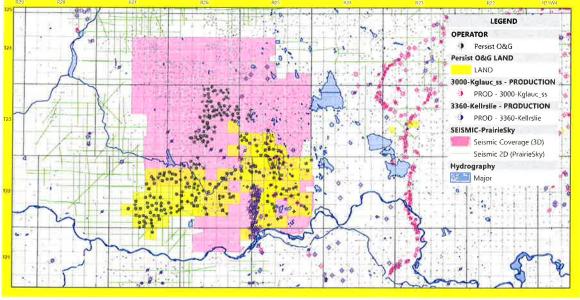


Figure 7: Carseland Area. Persist's land and operating wells are shown as yellow boxes and black wells (respectively). Productive Glauconitic and Ellerslie well are colored pink and purple (respectively). Persist's 3D seismic data coverage is highlighted in pink and 2D coverage in light green.

## 2. Reservoir Properties

The Ellerslie channel reservoir properties are divided into two groups:

1. Thick (>10m net pay), early stage, amalgamated "valley fill" style deposits. These deposits are regionally extensive. They have highly variable mineralogy with a higher abundance of lithics and chert. Porosity ranges from 12-18%; Kmax is typically less than 20mD.

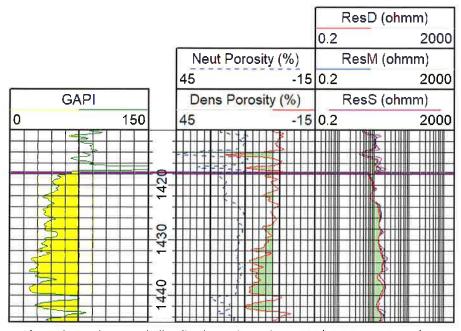


Figure 8: Amalgamated Ellerslie channel type log - 100/10-10-028-21W4/00.

Thinner (<10m net pay), late-stage isolated channels. These channels are narrow and tend to
exist adjacent to, or atop of, paleo Mississippian highs. They dominantly consist of unconsolidated
quartz grains and, as such, exhibit great overall reservoir properties. Porosity and permeability
may exceed 18% and 20mD respectively.</li>

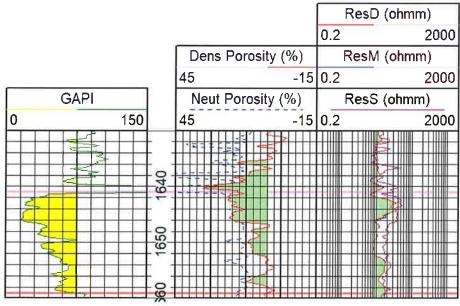


Figure 9: Single Ellerslie channel type log – 100/04-27-028-21W4/00.

Regionally the Glauconitic channel deposits can be further subdivided into Quartzose and Lithic style deposits. In Carseland the Glauconitic is lithic. It is upwards to 40m gross thickness (4m net). The average porosity is variable but is typically 10-11%.

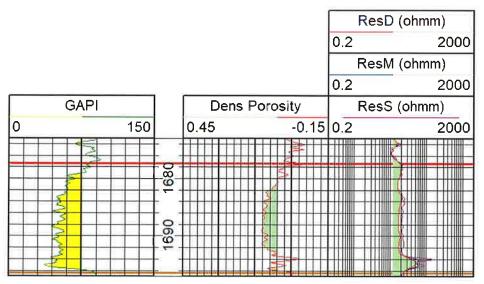
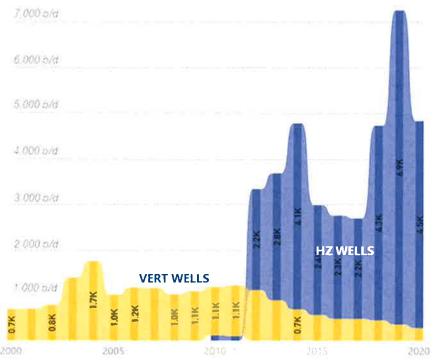


Figure 10: Lithic Glauconite channel type log - 100/08-20-023-25W4/00.

## 3. Drilling Activity

The Ellerslie play has been targeted since the 1950s. Vertical drilling targeted much of the higher porosity and permeability rock, while leaving large volumes in place in the tighter, lower K (<10mD) rock. The onset of horizontal drilling and multi-stage fracture stimulation in 2012 has reinvigorated the play and unlocked the oil deliverability in the tighter Ellerslie deposits.



**Figure 11:** Ellerslie oil production by well type (Vertical wells are yellow, Horizontal wells are blue). Increased production in 2018 is a result of Torxen acquiring the Wayne Ellerslie assets from Cenovus. Showing renewed commitment to the play concept Torxen more than doubles the daily oil production.

Persist acquired the Carseland Upper Mannville L pool in 2018. A previous operator had drilled 12 wells in the Carseland area, 7 of which targeted the Lithic Glauconitic sandstone. No additional drilling has been done since 2016.

## **SOUTHERN PLAINS: GARRINGTON AREA**

## 1. Regional Geology

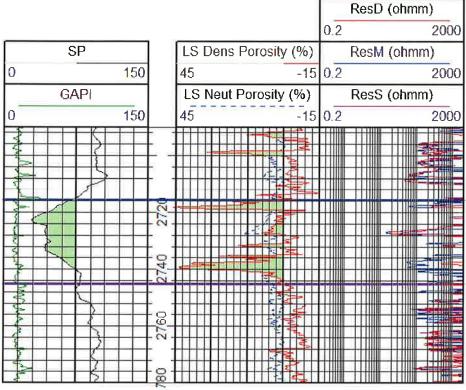
Upper Devonian strata of the Wabamun Group consists of a westwardly-thickening wedge of marine carbonates deposited along a regional marine shelf in the west, grading to massive evaporites to the east. Thickness of the Wabamun interval can reach several 100's of metres in the western portion of Alberta. In Central Alberta, the Crossfield Member of the Stettler Formation represents only a small interval of the Wabamun Group. It varies from 0 to 25m in thickness and consists of porous dolomite occurring as a north-south trending belt underlying Garrington separating open marine carbonates in the west from anhydrites to the east. The Crossfield Member is overlain by tight carbonates of the Wabamun Group, which is in turn unconformably overlain by shale of the Exshaw Formation.



Figure 12: Persist Garrington land map and operated wells (Persist Operated wells in red)

# 2. Reservoir Properties

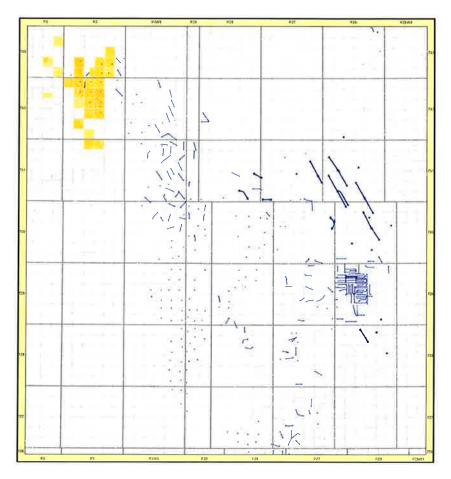
The Crossfield Member consists of various dolomitic facies, including micrite, packstone, grainstone, wackestone, and mudstone, all interfingered with a complex relationship. Gross thickness of the Crossfield Member in Garrington reaches 25 m, with net pay thickness averaging approximately 6.5 m. Reservoir porosity from core data varies from 15 to 13% with a 6% average. Permeability from core data ranges from <1 mD to >1,000 mD, with an average of 82.7 mD.



**Figure 13:** Garrington Type Log at Persist 00/14-22-032-02W5 (note: the Porosity logs are on a limestone scale. Actual dolomite porosity is approximately 7-8% greater).

# 3. Drilling Activity

Drilling for gas in the Crossfield Member began in the 1950-1960's with the discovery of large fields, such as Crossfield. In the mid-1990's, drilling along the Crossfield trend saw a resurgence with the discovery of liquid-rich fields. More recently, with the advancement of horizontal drilling and stimulation technologies, approximately 20 horizontal and deviated wells have been drilled along the porous Crossfield trend to the south and east of Persist's Garrrington land position (see Fig. 14).



**Figure 14:** Persist Garrington land map with Wabamun production (purple wells). Bold wells have been drilled since 2011.

#### **FOOTHILLS: STOLBERG AREA**

# 1. Regional Geology

Stolberg lies within the Foothills region of Central Alberta, an extensively deformed belt bordering the west flank of the Western Canadian Sedimentary Basin. One of the main reservoir intervals in Stolberg, the Upper Cretaceous Cardium Formation (Colorado Group), consists of prograding barrier island sandstone deposited in a shallow marine environment; sediment flowed into the basin in a northeasterly direction. Cardium sandstone is overlain by siltstone and shale of the Cardium Zone and is underlain by shale of the Blackstone Formation.

Stolberg also includes gas producing reservoir intervals from the Lower Cretaceous Mannville Group: the Notikewin Formation and Glauconitic Formation. The Notikewin sandstone interval is dominated by an aggradational to progradational clastic succession deposited in a fluvial to deltaic environment. Sediment transport for the Notikewin was largely in a north- to northeasterly direction. Stratigraphically, the Notikewin interval sits above the Mannville coals, and is overlain by shale of the Joli Fou Formation and sandstone of the Viking Formation. The Glauconitic interval, also of continental influence, is generally marked by a fining-upward succession overlying shale of the Lower Mannville.

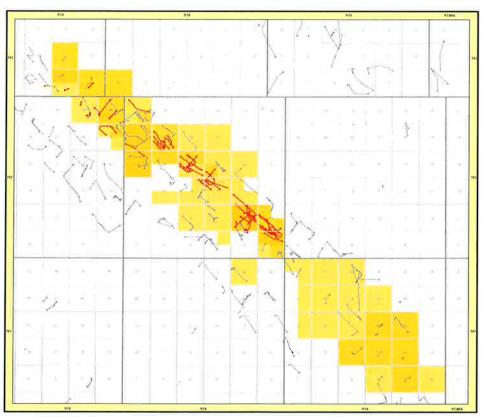


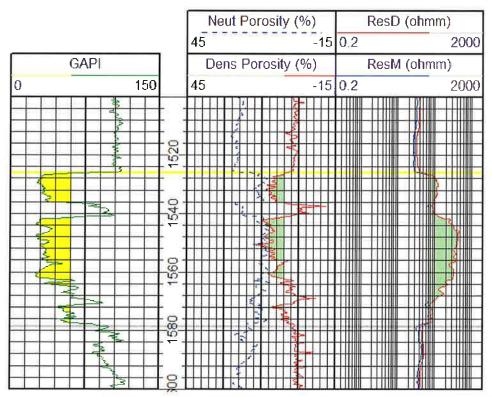
Figure 15: Persist Stolberg land map and operated wells (Persist Operated wells in red)

Due to post-depo	sition deformation, Cardiu	um and Mannville str	ata in Stolberg are cl	naracterized by		
	intense folding and thrust faulting, with a dominant structural grain oriented NW-SE. As such, natural fractures are abundant in the area, and enhance both the reservoir porosity and permeability.					
		α				
			Chanma	<b>II</b> Petroleum Engineering Lt		

## 2. Reservoir Properties

#### Cardium

Gross thickness of the Cardium Formation in the Stolberg area typically reaches 15 to 20 metres. The reservoir consists of coarsening upward, very fine-grained to fine-grained upper shoreface sandstone succession characterized by a regional shale marker near the top of the Cardium (Fig. x). Lithologically, the Cardium is dominated by clear to translucent quartz grains with minor chert and lithic fragments. Porosity reaches 12% in the "upper" Cardium above the regional marker, whereas porosity in the "main" sandstone below the marker reaches 15% (6% cut-off shown on the log). Matrix permeability varies between 0.1 and 1 mD, but extends over 100mD locally as a function of the extensive fracture network. The reservoir produces 39-42o API light sweet oil.

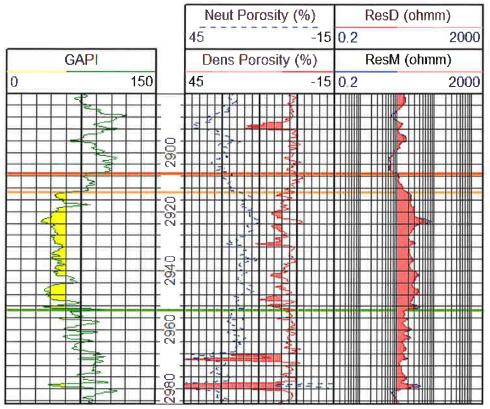


**Figure 16**: Stolberg Cardium Type Log at Persist 00/07-11-042-15W5 (note: the thickness of the Cardium is not "true stratigraphic" given the angle of incidence between the wellbore and deformed Foothills strata).

## **Notikewin**

Gross thickness of the Notikewin Formation in the Stolberg area can reach over 40 metres. The reservoir consists of very fine-grained to occasionally medium- to coarse-grained channel sandstone succession characterized by varying amount of siltstone and shale interbeds. Lithologically, the

Notikewin is dominated by clear to translucent quartz grains and lithic fragments, with minor chert and clay. Given the variable composition, the Notikewin generally reads high on the Gamma Ray curve. Porosity reaches 12% in the most porous intervals, but is typically between 3 and 9%. Permeability reaches over 100mD due to natural fracturing and fracture related dissolution.



**Figure 17:** Stolberg Notikewin Type Log at Persist 00/07-11-042-15W5 (note: the thickness of the Notikewin is not exactly "true stratigraphic" given the angle of incidence between the wellbore and deformed Foothills strata).

# 3. Drilling Activity

Historical drilling in the Stolberg Area by major oil companies such as Suncor and Husky targeted deeper carbonate sour gas reservoirs of the Turner Valley Formation (~1970-2000's). The Stolberg Cardium Oil Field was discovered in 2012 and approximately 30 deviated and horizontal wells were drilled in the Field by the previous operator over a 4-year period following the discovery, with a focus on TWP 042 RNG 15W5. Similarly, drilling for Mannville sweet gas reservoir occurred between 2011 and 2014. Since 2016, no wells have been drilled within the Stolberg Field.



# APPENDIX F - WACC CALCULATION

When assessing an appropriate discount rate to use in a discounted cash flow valuation, due regard must be given to rates of return available in the marketplace, the degree of risk attached to the business, shares or project and the required rate of return.

Businesses are normally funded by a mix of debt and equity. The Weighted Average Cost of Capital ("WACC") is widely used and accepted basis to calculate the "representative" rate of returns required by debt and equity investors. We have applied the WACC methodology to determine an appropriate discount rate to be used in assessing the Fair Value of Persist asset cashflows.

The Capital Asset Pricing Model ("CAPM") is the most frequently used model in determining the cost of equity of an investment or project and the required rate of return for debt funding is determined having regard to current borrowing costs and prevailing credit ratings. The cost of equity and cost of debt are weighted by the respective proportions of equity and debt funding to arrive at the WACC.

#### WACC

The generally accepted WACC formula is the post-tax WACC as shown below:

WACC = [Re \* E/V] + [Rd \* (1 - t) \* D/V]

Where:

Re = Expected equity investment return or cost of equity

Rd = Interest rate on debt (pre-tax)

t = Corporate tax rate

E = Market value of equity

D = Market value of debt

V = Market value of debt plus equity

## CAPM

The CAPM is based on the theory that the prudent investor will price investments so that the expected return is equal to the risk free rate of return plus a premium for risk. CAPM assumes that there is a positive relationship between risk and return; that is, investors are risk averse and therefore demand higher returns for accepting higher levels of risk.

The CAPM calculates the cost of equity through the following formula:

 $Ke = Rf + \beta[E(Rm) - Rf]$ 

Where:

Ke = Cost of equity capital or expected return on the investment.

Rf = Risk free rate of return

E(Rm) = Expected return on the market

E(Rm) - Rf = Market risk premium

 $\beta$  = Beta

We have considered each component of the CAPM below.

Risk free rate - Rf

We have assumed a risk free rate of 1.49% being the average yield on the Australian government bonds for the last 10 years, calculated from the RBA Database. We have used the 10-year bond rate as this is typically used as a proxy for the long-term risk-free rate.

Market Risk Premium – E(Rm) – Rf

Market risk premium represents the level of return investors require over and above the risk free rate in order to compensate them for the non-diversifiable risks associated with an investment in market portfolio. Strictly speaking, the market risk premium is equal to the expected return from holding shares over and above the return from holding risk-free government securities.

We have assumed a market risk premium of 6.0% in our determination of the discount rate.



#### Beta - B

The beta coefficient measures the systematic risk of the company compared to the market as a whole. A beta of 1 indicates that the company's risk is comparable to that of the market.

The choice of a beta requires judgement and necessarily involves subjective assessment as observations of beta in comparable companies may be subject measurement issues and other variations. Accordingly, depending upon circumstance, a sector average, or a basket of comparable companies may present a more reliable beta, rather than relying on a single comparable company.

Beta can be expressed as an equity beta (which includes the effect of gearing on equity returns) or as an asset beta (where the impact gearing is removed). The asset beta will be lower than the equity beta for any given investments, with the difference dependent upon the level of gearing in the capital structure.

The selection of an appropriate beta involves a degree of professional judgement, particularly where the performance drivers of the company being valued are not directly aligned with the most comparable listed companies.

The comparable company data included in the table below illustrates the observed beta coefficients for public listed companies we consider most comparable to Persist.

In assessing companies comparable to Persist, we have considered companies in oil and gas industry in Canada, whose securities are listed on the Toronto Stock Exchange.

The ungeared equity beta's for the companies selected ranged from a low of 1.137 to a high of 4.452, with an average of 2.338 as set out in the table below. We have relied on the average ungeared beta of 2.338.

Ticker:	Company	Levered beta	Total debt / equity	Unlevered beta
TSX:GXE	Gear Energy Ltd	5.186	16.5%	4.452
TSXV:LXE	Leucrotta Exploration Inc	2.202	0.0%	2.202
TSX:IPO	InPlay Oil Corp.	3.110	59.1%	1.955
TSX:QEC	Questerre Energy Corporation	2.046	16.3%	1.858
TSX:JOY	Journey Energy Inc. (TSX	3.712	97.1%	2.245
TSXV:HME	Hemisphere Energy Corporation	3.275	26.4%	2.591
TSXV:PSEC	Prairie Storm Resources Corp	0.000	2.0%	n/a
TSX:PMT	Perpetual Energy Inc.	4.131	263.3%	1.137
TSXV:RZE	Razor Energy Corp	7.205	300.0%	2.265
Average		3.430	0.867	2.338
Median		3.275	0.264	2.224

We provide descriptions of the comparable companies in the Appendix D.

#### Company specific risk premium and cost of equity assessment

We have not included a company specific risk factor in our calculation of the cost of equity as we consider the group of comparable companies to be a sufficient indication of the risks inherent in a company such as Persist.

#### Cost of debt

We have assumed a cost of debt for the Persis asset at 10%. This has been assumed based on current interest rates paid by Hawkley Oil and Gas Limited.

We have assumed that the best capital structure to employ for the Persist asset is a debt to equity value of 50%.



# **WACC** summary

We set out the detailed calculation of the WACC in the table below.

Weighted Average Cost of Capital, (WACC)						
Estimate of relative risk						
Risk Free rate (Rf)	1.49%					
Market Risk Premium (MRR)	6.0%					
Beta Co-efficient (β)	2.3x					
Small Size Premia	0.0%					
Alpha risk	0.0%					
Equals estimated cost of equity (Ke)	15.5%					
Cost of debt	10.0%					
Tax rate	23.0%					
Post tax cost of debt (Kd)	7.7%					
Debt to value ratio	50.0%					
Equals Post Tax WACC	11.6%					
Pre-tax WACC	15.1%					

Based on the assumptions set out above, we have assessed the pre-tax, nominal WACC to be 15.1%. We have selected a range of 12.0% to 15.0% in order to reflect a normal discount rate as our range of discount rates in order to reflect a value range and sensitivity on changes in discount rates.