

PUT YOUR HAND IN THE HAND OF THE MAN FROM GALILEE

Initiating Coverage: East Coast Gas Thematic with Upside

- **With over 2,500 PJ of 2C contingent resource, Galilee Energy (GLL) has one of the largest gas contingent resource holdings on the east coast of Australia, and is seeking to convert this to a material reserves position in the near term via its Glenaras Gas Project (GLL 100%) in the Galilee Basin in Queensland. While there are other companies promoting themselves as part of the east coast gas solution, very few of them have significant resources to be meaningful, and fewer still are likely to make it into production.**
- **Glenaras Gas Project to commence this month.** The Glenaras Gas Project drill program involves drilling three horizontal wells, including one producer with the two outer wells providing shielding thereby allowing the main well to sufficiently dewater and flow gas at its maximum theoretical potential. The resource at Glenaras is well defined, with over 20 exploration wells, 700 km of seismic and two-multi-well pilot having previously been completed on GLL's tenements. Furthermore, the Glenaras Gas Project is able to utilise existing infrastructure at Glenaras to reduce the costs of the project, something its peers are unable to easily replicate.
- **No miracle required in Galilee.** Galilee is cited in the Bible as the place where many miracles were performed. While there is risk around production of gas from the coal seams in the Galilee, gas has flowed from the Galilee Basin previously so a miracle should not be necessary to build on this performance with the upcoming Glenaras well, particularly when the flow required to book reserves is considered to be relatively modest at around 250 mcf/d.
- **Initiating with a Buy – a company defining year ahead.** It's going to be an exciting year for GLL with the Glenaras Gas Project drilling about to commence, followed by flow testing during 2H 2018. If all goes to plan, GLL should then be in a position to book material proven and probable (2P) reserves on the back of gas flow from Glenaras. The close proximity of the Barcardine Power Station gives GLL access to a potential gas offtaker ahead of more material gas sales into the east coast market once the Northern Gas Pipeline is extended adjacent to GLL's acreage.
- **Valuation 0.40/share.** Our GLL valuation is based on \$0.03/GJ value for its Glenaras Gas Project 2,508 PJ of 2C contingent resource. We do not include value for its Chilean and US assets.

Year End June 30	2017A	2018F	2019F	2020F	2021F
Reported NPAT (\$m)	(3.8)	(3.0)	(3.5)	(3.7)	(4.4)
Recurrent NPAT (\$m)	(5.2)	(2.9)	(3.5)	(3.7)	(4.4)
Recurrent EPS (cents)	(3.4)	(1.9)	(1.8)	(1.9)	(2.3)
EPS Growth (%)	na	na	na	na	na
PER (x)	(6.5)	(12.0)	(12.4)	(11.6)	(9.8)
EBITDA (\$m)	(5.4)	(3.0)	(3.4)	(2.9)	(2.9)
EV/EBITDA (x)	(5.2)	(9.1)	(12.5)	(15.7)	(16.4)
Free Cashflow	(3.4)	(4.7)	(5.7)	(3.6)	(2.9)
FCFPS (cents)	(2.3)	(3.1)	(3.0)	(1.9)	(1.5)
PFCF (x)	(10.0)	(7.3)	(7.5)	(11.7)	(14.7)
DPS (cents)	0.0	0.0	0.0	0.0	0.0
Yield (%)	0.0	0.0	0.0	0.0	0.0
Franking (%)	0.0	0.0	0.0	0.0	0.0

21 March 2018

12mth Rating		BUY
Price	A\$	0.23
Target Price	A\$	0.40
12mth Total Return	%	76.6

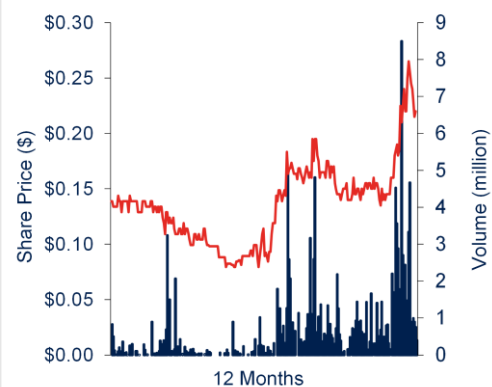
RIC: GLL.AX		BBG: GLL AU
Shares o/s	m	189.7
Free Float	%	96.9
Market Cap.	A\$m	42.7
Net Debt (Cash)	A\$m	-6.1
Net Debt/Equity	%	na
3mth Av. D. T'over	A\$m	0.10
52wk High/Low	A\$	0.27/0.08
2yr adj. beta		-0.24

Valuation:

Methodology		DCF
Value per share	A\$	0.40

Analyst:	Cam Hardie
Phone:	(+61) 3 9242 4153
Email:	chardie@psl.com.au

12 Month Share Price Performance



Performance %	1mth	3mth	12mth
Absolute	37.5	51.7	64.3
Rel. S&P/ASX 300	37.6	54.0	61.6

INVESTMENT THESIS

We are all well aware of the potential shortfall of gas on the east coast of Australia, and there are many companies out there promoting themselves as part of the solution. However very few of these have significant resources to be meaningful, and fewer still will actually make it into production in our view.

Galilee Energy (GLL) offers 2,508 PJ of 2C contingent resource in the Galilee Basin in Queensland, and it is about to commence drilling activities which could result in booking up to 500 PJ of proven and probable (2P) reserves. Furthermore, the booking of 500 PJ of 2P reserves is the stepping stone by which Jemena will look to sanction the construction of the Northern Gas Pipeline extension which is proposed to run right by GLL's Glenaras Gas Project, thereby providing an avenue for the gas to be sold into the east coast market.

We are the first to acknowledge that gas sales that may result from the construction of the NGP extension aren't likely to occur before at least 2022, however the nearby Barcaldine power station could be a potential gas offtaker in the meantime, with gas sales as early as 2020. In addition, the Barcaldine power station offers GLL an opportunity to undertake an initial phase development to prove the concept before it embarks on a larger, phase two development. This is a model that worked well for many of the coal seam gas companies in Queensland before they undertook their own larger developments.

VALUATION

We value GLL at \$0.40/share based on \$0.03/GJ value for its Glenaras Gas Project 2,508 PJ of 2C contingent resource.

Figure 1: GLL Valuation

	A\$m	A\$/share
Glenaras Gas Project	76	0.40
Other Assets	0	0.00
Net Cash (Debt)	7	0.04
Corporate Costs	-7	-0.04
Total Valuation	75	0.40

Source: Patersons Estimates

Trading Multiples of Comparable Companies

The implied 2P multiples of GLL together with comparable companies are shown in Figure 2.

Figure 2: EV/2P Multiples, GLL vs. Other Listed Oil & Gas Companies

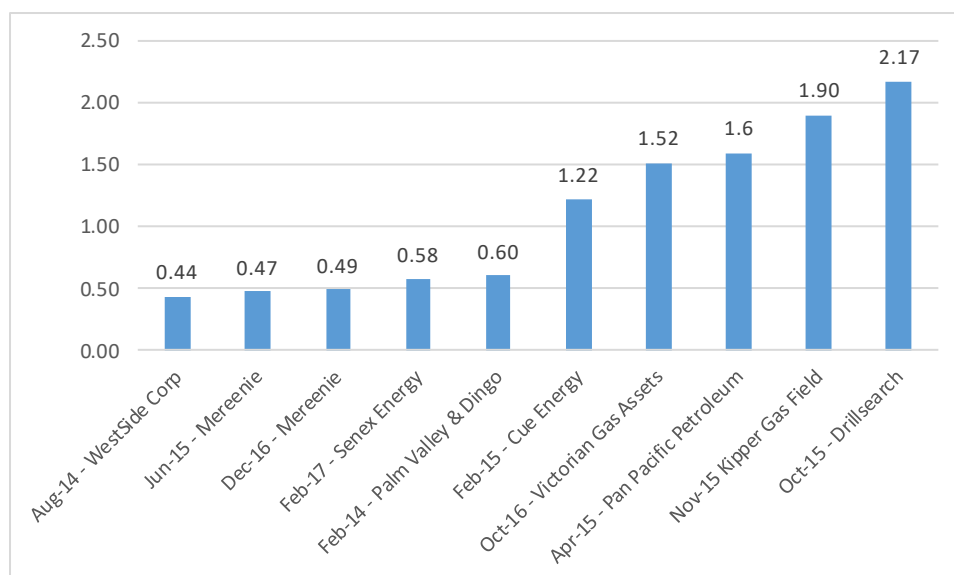
		Galilee Energy (GLL)	Strike Energy (STX)	Central Petroleum (CTP)	Blue Energy (BUL)	Comet Ridge (COI)	Real Energy (RLE)
Market Cap	A\$m	46	74	88	139	182	19
Net Cash	A\$m	10	8	-52	2	14	8
Enterprise Value	A\$m	35	66	141	137	168	10
Reserves (2P)	PJ	n/a	n/a	126	71	172	n/a
Contingent Resource (2C)	PJ	2,508	164	144	984	452	291
Contingent Resource (3C)	PJ	5,314	238	107	3,942	3,221	709
EV/2P	\$/GJ (2P basis)	n/a	n/a	1.12	1.94	0.98	n/a
EV/2C	\$/GJ (2C basis)	0.01	0.41	0.52	0.13	0.27	0.04

Source: Iress, Patersons Securities

Industry Transaction Multiples

When considering prices achieved from transactions between 2014 and 2016, we note that the majority of these were in production and/or had 2P reserves booked and are therefore not relevant to the valuation of GLL that has neither of these. However the transaction multiples are highlighted for reference in Figure 3. If we assume GLL books 500 PJ of 2P reserves at the Glenaras Gas Project, using the lowest transaction multiple below would result in a GLL valuation of \$1.14/share.

Figure 3: Industry Transaction Multiples (A\$/GJ)



Source: Iress, Patersons Securities

In 2008/09 numerous transactions took place in coal seam gas in Australia with industry keen to acquire reserves and resources to fuel the Queensland LNG projects that were under consideration. The average price for these transactions was around \$1.17/GJ on a 2P reserves basis. These transactions were done when the Brent crude price was up to US\$145/bbl which equated to an LNG price of around \$20/GJ. Given LNG prices are now more subdued, and the East Coast Gas Price forecast is well below this level, we do not consider those transactions to be representative of a gas transaction price in today's market. If we assume GLL books 500 PJ of 2P reserves, using \$1.17/GJ would result in a value for GLL of over \$3/share.

Central Petroleum Contingent Value Note

In 2017 Macquarie launched a cash offer for Central Petroleum (CTP) that, in addition to the cash component, also included a Contingent Value Note (CVN). The CVN's were dependent on the best technical estimate of the economically recoverable resource. The independent expert in the proposed acquisition calculated a value of between \$0.03/GJ and \$0.05/GJ for the economically recoverable resource in the CVN assets. We consider this valuation to be the most appropriate for valuing the Glenaras Gas Project and we have adopted the lower end of this range in our GLL valuation.

Figure 4: Central Petroleum Contingent Note Valuation

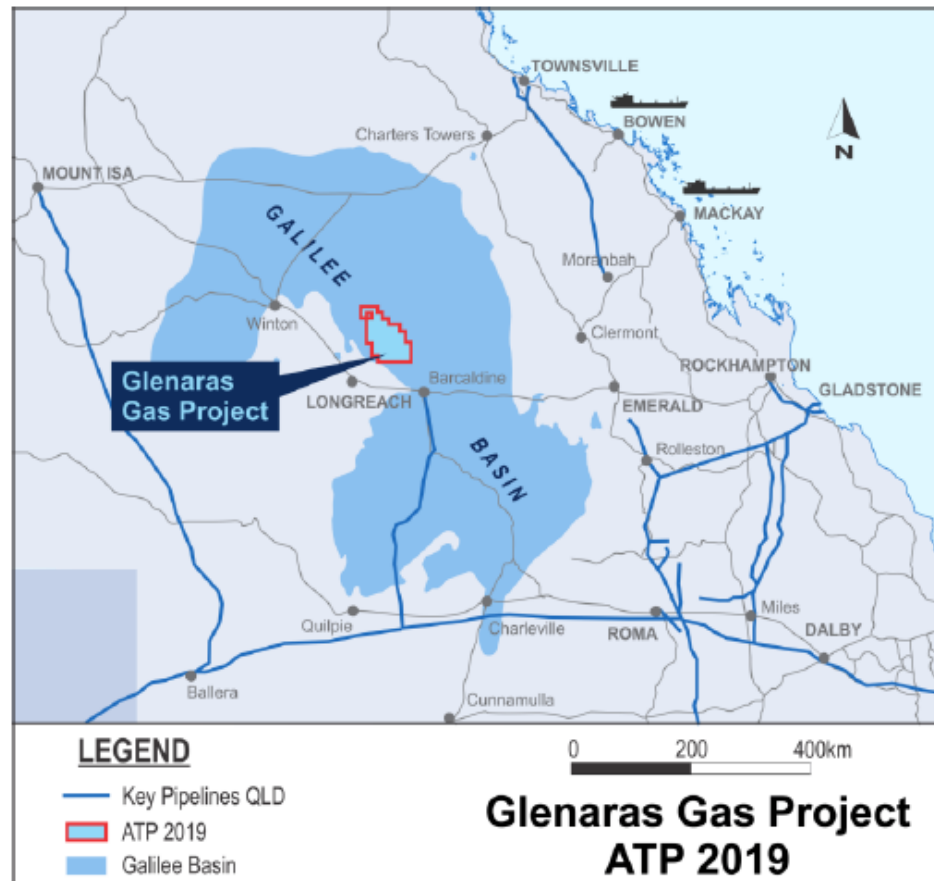
	Source	Units	Low Case	High Case
CTP Defined Resource	RISC, assumes exploration success	BCF	109	147
Likelihood of Success	RISC, assumes exploration success	%	20%	40%
Agreed payout per BCF	CVN Note Deed	\$/BCF	150,000	150,000
CVN payout in June 2021		\$m	3.3	8.8
Present Value Factor	3.5% discount factor used.	-	0.87	0.87
Value of CVN		\$m	2.8	7.7
\$/GJ of defined resource			0.03	0.05

Source: Central Petroleum Scheme Booklet, May 2017

GLENARAS GAS PROJECT

The Glenaras Gas Project (GLL 100%) is located in ATP 2019 in Queensland's Galilee Basin. The Permit covers an area of approximately 4,000km². Glenaras has one of the largest remaining uncontracted gas resources on the east coast of Australia with independently derived and certified Contingent Resource within the Betts Creek coals of 308 PJ (1C), 2,508 PJ (2C) and 5,314 PJ (3C). The Company's primary near-term focus is on converting these Contingent Resources to Reserves.

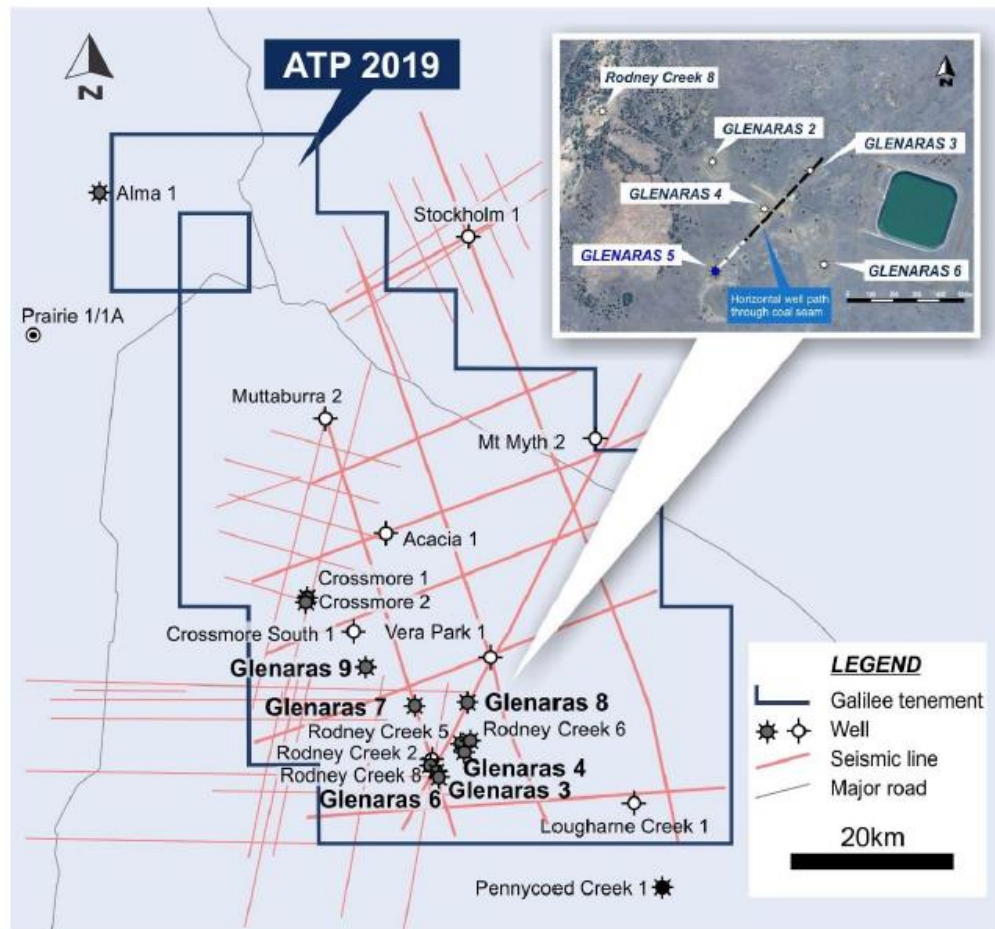
Figure 5: Location of Glenaras Gas Project



Source: Galilee Energy Limited

The original Glenaras pilot project commenced in around 2011, and it recorded a water flow rate of 3,200 bbl/d with daily flow rates greater than 100 mscf/d from multiple wells within the pilot. Following poor gas flow rates resulting from poor well completions, the Glenaras Gas Project ceased operation in March 2014. An alternative completion technique was then proposed to drawdown the coal only. However, then partner and Operator AGL, did not have the budget approved to conduct the test program of the R1 coal. The project was put on hold until June 2015 when GLL acquired AGL's 50% stake at no cost. A workover was subsequently completed by GLL in October 2015. The workover included setting a bridge plug below the R1 coal seam in the five existing pilot wells before perforating the R1 seam and re-installing production pumps. By this stage, approximately \$90m had been spent on the ATP 2019 permit, including a 450 ML water storage facility, production gathering and flare facilities.

Figure 6: Glenaras Gas Project Well Locations



Source: Galilee Energy Limited

Given the numerous failures of previous lifting systems utilised at both the Glenaras and Rodney Creek pilots, GLL changed the lifting system design, installing traditional oil field rod pumps in all wells.

No flows were reported from the wells during the test, however a lateral well was drilled between the Glenaras-5 and Glenaras-3 wells in August 2016. Upon its completion, GLL stated that the lateral “was drilled....with excellent geological control and stayed in the target R1 coal seam as planned for a total 400m horizontal in seam section”. For the following 12 months GLL reported strong water flows, and “small, but continuous, gas flow”. These flows were at rates too small to measure (RTSM).

The key findings of the Glenaras-5 well were:

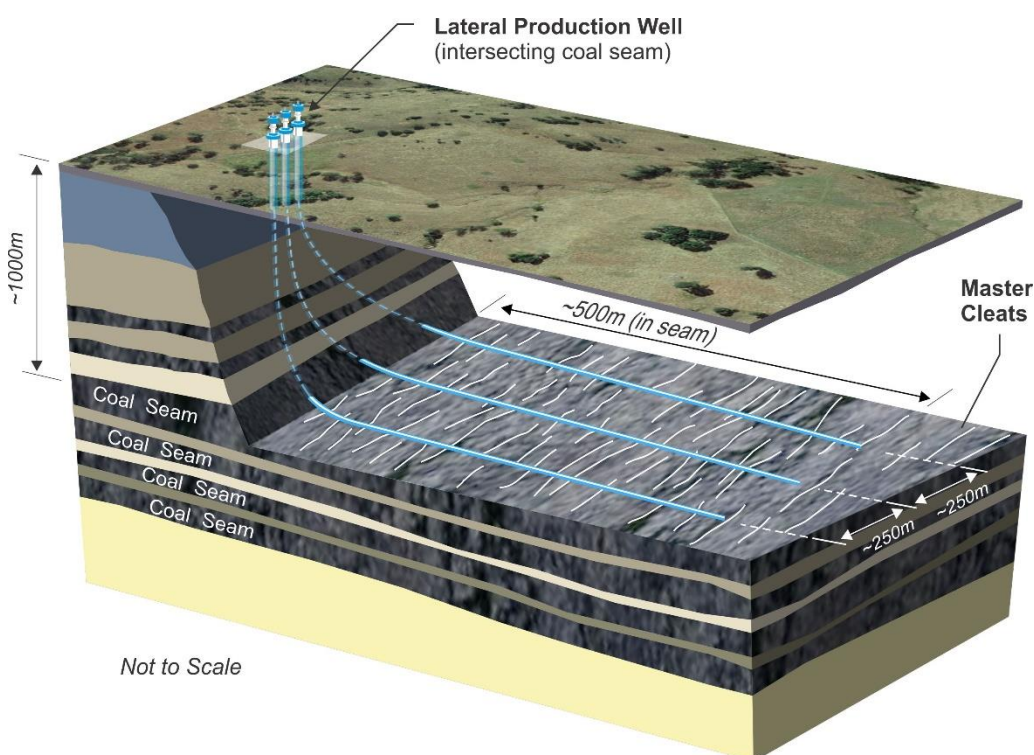
- The artificial lift used in the pilot performed well.
- The Betts Creek coals in the area have a strong directional permeability, consistent with the dominant master cleat direction within the coal. This geological feature could result in increased reservoir drainage and recovery per well resulting in a reduction in development well numbers.
- The pilot production and near well pressure data from surrounding wells confirmed isolated production from coal only. This increases confidence that the Betts Creek coals can be successfully developed without any significant interference by the interbedded sands within the Betts Creek sequence.
- The drilling technology utilised for the lateral well allowed for excellent control in this geological environment ensuring the wellbore stayed within coal and avoided neighbouring sandstone units.

Following the findings of the pilot program, GLL considered drilling an additional horizontal well on either side of the pilot horizontal, however subsequent modelling work suggested that even if they did get a flow, it would have been marginal due to the quality of the coal in this area which exhibits relatively low permeabilities (1-2 mD across the entire section drilled). As a result, GLL has chosen to essentially start again, targeting the best quality coal which has much higher permeability of 20 to 40 mD. The coals are very well defined having subsequently had 700 km of seismic completed over the area, plus data from more than twenty exploration wells has also been modelled.

The current drill program scheduled to commence this month involves three horizontal wells, including one producer with the two outer wells providing shielding and allowing the main well to sufficiently dewater and flow gas at its maximum theoretical potential. With over \$90m already spent at Glenaras, including a \$6m holding pond, flare facilities, pipelines and other infrastructure, the Glenaras pilot has significant cost savings over a new pilot in a new permit area.

The first phase of the drilling will include a vertical pilot hole to test the different coal seams and identify the optimal coal target for the lateral wells. The program is expected take around six weeks to complete and will cost around \$5m plus additional costs of \$2.5m for production testing, well completion and ancillaries. The wells will then be completed with electrical submersible pumps (ESPs), and surface facilities required thereafter. Production start-up is then expected to be completed in early June. The pilot will be on production for an extended period to de-water the coal and lower the pressure in the coal in order to achieve gas flow. This process is expected to take four to six months.

Figure 7: Proposed Glenaras Multi-Lateral Pilot



Source: Galilee Energy Limited

Normally we would be looking for a flow in excess of 1 mmscf/d to establish whether this could be a commercial development, however the proposed horizontal well will only be targeting an approximate 3m section of a total of around 19m of coal sections. As a result, we consider a flow of around 250 mscf/d+ will be the minimum acceptable limit.

OTHER ASSETS

The core focus of GLL is on delivering the Glenaras Gas Project, however it also has other assets in its portfolio, including a variety of working interests in a range of liquids rich exploration targets in Lavaca County, Texas, exploration acreage in the Anadarko Basin, Kansas and coal seam gas acreage in the Magallanes Basin, Chile. As part of its 2015 strategic review, GLL elected to cease all expenditure on its US projects and it was seeking to divest or farmout the assets. Despite some early reported interest in farmout of the Texas assets, GLL still holds the acreage.

We do not include any value for these assets, however a summary of the Magallanes Basin is shown below.

Magallanes Basin Project, Chile

In 2014 GLL completed its evaluation study of the Coal Seam Gas (CSG) potential in the Southern Magallanes Basin in Chile. The study focused on 7,200 km² (1.8 million acres) in the north-west portion of the Magallanes Basin (Puerto Natales – Seno Otway) to evaluate the potential for coal seam gas (CSG) production. Previous work has indicated the key objective to be the Eocene-Oligocene Loreto Formation, which contains 10-20m of coals at depths ranging from surface to over 1,200m.

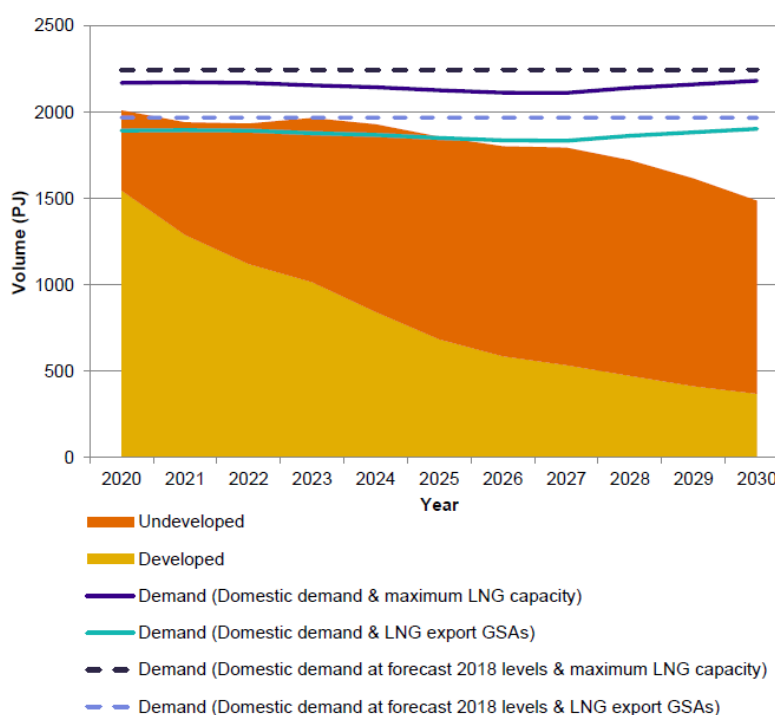
Under the terms of the memorandum of understanding (MOU) with the national oil company, Empresa Nacional del Petróleo (ENAP), the detailed results of the study remain confidential, however, it is understood that the study supports the likely presence of a significant gas resource in the coals of the Oligocene age Loreto F G.

GLL has submitted an application to the Chilean government for an exploration permit application (CEOP) over an area of almost 6,000 km² in the Southern Magallanes Basin formation. This has been ongoing since June 2015.

EAST COAST GAS MARKET

The Australian Competition and Consumer Commission (ACCC) Gas Inquiry 2017-20 Interim Report released in December highlights that the supply-demand balance remains tight in 2018, but it does not go into shortfall under its base case. Similarly, in 2019 there is no shortfall projected under the Australian Energy Market Operator (AEMO) expected demand forecast, although under its upper band domestic demand scenario, the estimated shortfall is 24 PJ.

Figure 8: Gas Supply vs Demand, East Coast Gas Market, 2020 to 2030



Source: ACCC Gas Inquiry 2017-20 Interim Report, December 2017.

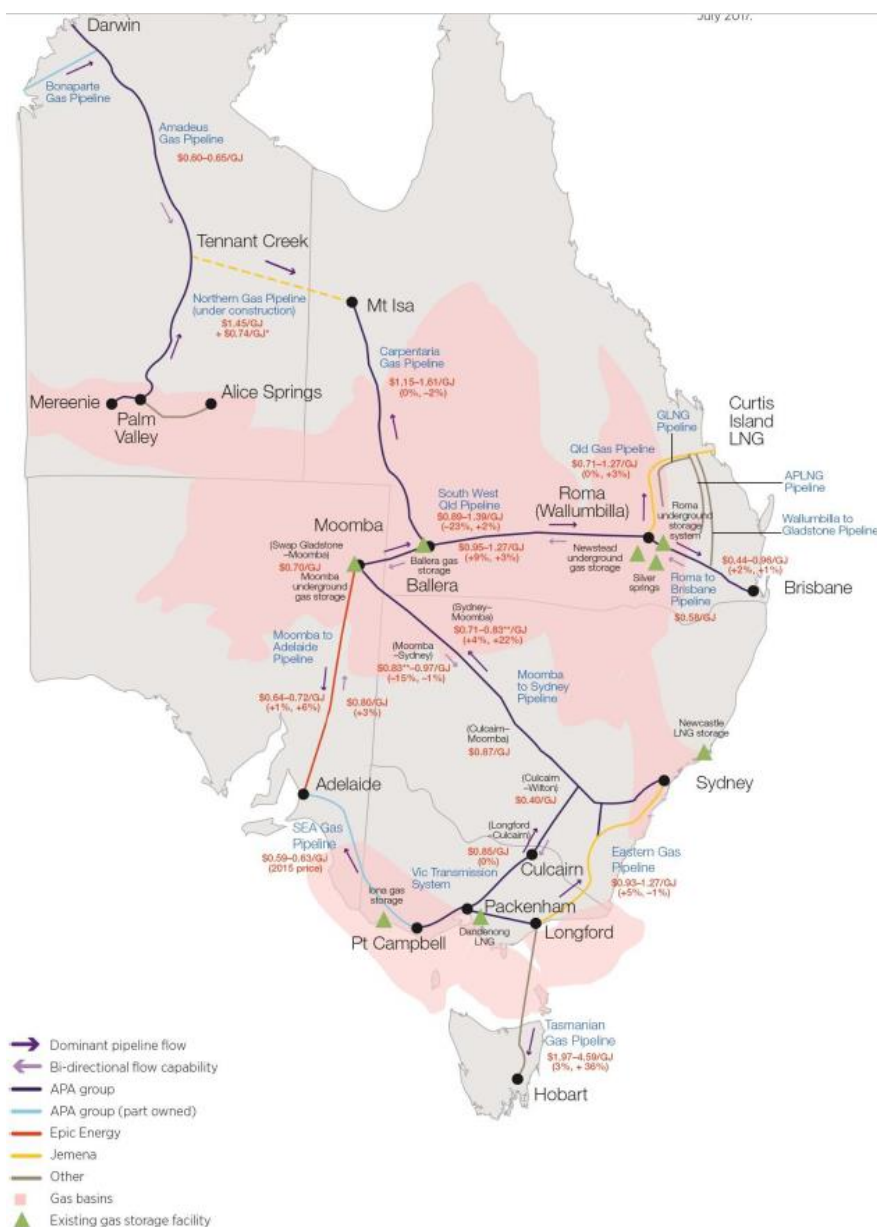
From 2020 and beyond, Figure 8 shows a tight long-term gas supply for the east coast gas market. Whether production from 2P reserves will be sufficient to meet the east coast gas demand will depend on:

- performance of the CSG fields in Queensland;
- the level of domestic demand (currently quite uncertain); and/or
- the level of LNG exports, particularly the quality of the LNG spot sales (not included in Figure 8).

Figure 8 highlights that there is currently insufficient gas forecast to be produced from 2P reserves in the east coast gas market to meet both domestic demand, and allow the LNG projects in Queensland to produce at nameplate capacity. The risk around this is if international LNG spot prices increase above their current levels and create incentives for Queensland LNG producers to maximise LNG spot sales, this will likely have an impact on gas availability for the domestic market.

Getting Gas to Market – Pipeline Infrastructure

Figure 9: East Coast Pipeline Network & Storage

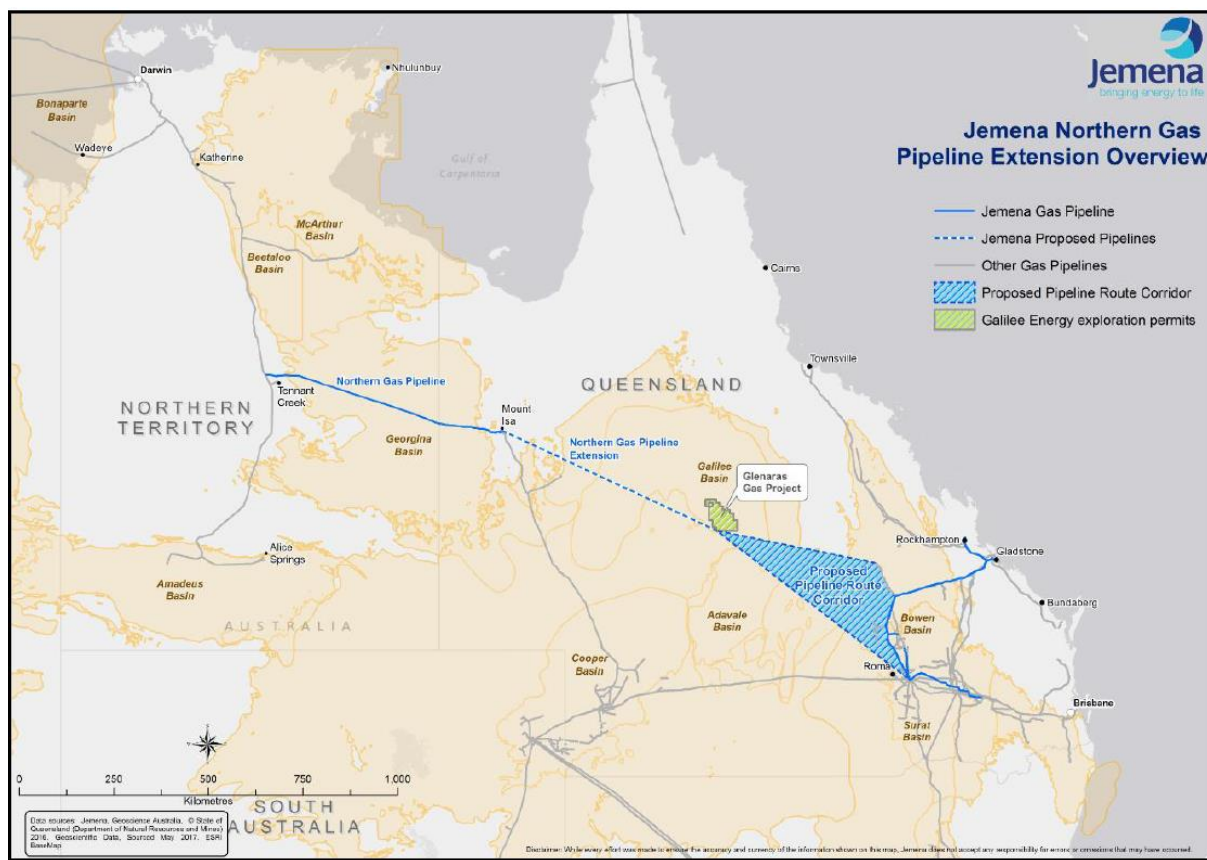


Source: ACCC Gas Inquiry 2017-20 Interim Report, December 2017.

We have previously been concerned about how gas from the Glenaras Gas Project would make its way into the east coast market. The 55 MW Barcaldine power station is approximately 80km to the south of the Glenaras Gas Project, however there are currently no pipelines that would enable transportation of molecules to a sizeable market. That concern was alleviated in October 2017 when GLL signed a binding agreement with Jemena to work towards agreed development milestones that would enable gas from GLL’s Glenaras Gas Project to be delivered into the east coast domestic market. Under the proposed plan, the Northern Gas Pipeline would be extended from Mount Isa in Queensland to the existing pipeline network at Roma.

By undertaking the early planning works for the extension, it is understood that both Jemena and GLL would be in ready to proceed to front end engineering and design (FEED) on both the pipeline extension and field development in 2019. First gas from the Northern Gas Pipeline (currently under construction) is expected to flow in late 2018. We believe Jemena would need to see 500 PJ of 2P reserves firmed up at the Glenaras Gas Project before it sanctions the pipeline extension

Figure 10: Proposed Northern Gas Pipeline Extension



Source: Galilee Energy

Gas Pricing

With the current supply-demand balance, it is expected that gas buyers in the southern states need to contract gas from Queensland gas producers to meet their 2018 gas requirements, and will therefore also be expected to bear the cost of transporting gas from Queensland to their location. However, GLL would be selling at a Queensland price and we note all long-term gas sales agreements since June 2017 have involved LNG exporters supplying gas to retailers or aggregators. Prices agreed for 2018 delivery under these agreements ranged from \$8.30 to \$9.27/GJ. Short term contracts in the same period had a volume weighted average price of \$9.32/GJ.

SHAREHOLDERS

The top five shareholders hold 21.6% of the outstanding shares in the Company. Managing Director Peter Lansom holds 5.2m shares, or 2.7% of the total shares on issue.

Figure 11: Top Five GLL Shareholders

Holder Name	Shares Held	% Holding
Ecarlate Pty Ltd	18,342,608	9.7%
Nero Resource Fund	6,914,655	3.6%
Becamal Pty Lt	5,520,945	2.9%
Peter Lansom	5,212,601	2.7%
Slade Technologies Pty Ltd	5,000,000	2.6%
Top Five Shareholders	40,990,809	21.6%

Source: Iress, Patersons Securities

FINANCIAL

GLL had \$10.1m in cash and no debt at the end of December 2017 pre any R&D rebate. The Company raised \$5.6m via a combined placement and entitlement offer undertaken in the December 2017 quarter. The current Glenaras Gas Project is expected to cost around \$7.5m, however there is potential for GLL to receive Federal government funding for the project.

RISKS

Investment risks associated with the oil and gas sector and GLL include, but are not limited to, the following:

- **Oil / gas price and FX assumption risk.** Oil/gas price and currency movements may differ materially from the assumptions used in this report, and may cause economic prospects of projects to deteriorate or improve.
- **Exploration and geological risk.** Petroleum exploration relies upon the interpretation of complex and uncertain data and information which cannot necessarily be relied upon to lead to a successful outcome. Petroleum exploration is inherently uncertain and involves significant risk of failure. Furthermore, the actual production characteristics of an oil and gas reservoir may differ significantly from initial interpretations and expectations.
- **Resource estimation risk.** Oil and gas resource estimates are based on standard industry practice, experience and judgement that carry inherent uncertainty, and future exploration may alter the current contingent resource estimates. Changes to resource estimation may affect the economics of future developments, and oil price movement can have an impact on resource estimates.
- **Project execution risk.** There is potential for developments to cost more and/or take longer to complete than originally anticipated which can have a material impact on the valuation of the assets being developed.
- **Financing risk.** GLL may require further financing to facilitate the development of the Glenaras Gas Project, if it proves to be economic. Access to suitable funding will be integral to the successful development of its assets.

DIRECTORS & KEY MANAGEMENT

Ray Shorrocks – Non-executive Chairman (incoming). With over 20 years' experience working in the investment banking industry, Ray is highly conversant and experienced in all areas of mergers and acquisitions and equity capital markets, including a significant track record of transactions in the metals and mining, industrials and property sectors. Ray is a director of Patersons Securities Limited and heads the corporate finance department in Sydney, he is also a non-executive director of Estrella Resources Limited, Draig Resources Limited, Indago Energy Limited, and a number of private companies. Ray will take over from David King as non-executive Director effective 31 March 2018.

Peter Lansom – Managing Director. Peter holds a Bachelor of Petroleum Engineering (Honours) degree from the University of NSW and has over 25 years' experience in conventional and unconventional exploration and development, working with Comet Ridge Ltd, Eastern Star Gas (ESG), Origin Energy and Santos. He has significant expertise in subsurface engineering, asset valuation, field development planning and commercial and corporate finance. In his past role at Origin, in the key management position of chief petroleum engineer, he had responsibility for delivering the corporate year end petroleum reserves report and ensuring that consistently high standards in sub-surface engineering were maintained across that company's assets. In his recent role as executive director at ESG, Peter had overall engineering responsibility for the exploration and pilot development of the company's CSG assets in NSW which resulted in certifying 3P reserves of over 3500 PJ over a 5-year period, and saw the company grow to a \$900 million market capitalisation.

David King – Non-executive Director. David was a founder and director of Sapex Ltd, Gas2Grid Ltd and Eastern Star Gas Ltd. He has substantial natural resource related experience, having previously served as Managing Director of North Flinders Mines Ltd and CEO of Beach Petroleum and Claremont Petroleum. He is a Fellow of the Australian Institute of Company Directors; a Fellow of the Australasian institute of Mining and Metallurgy; and a Fellow of the Australian Institute of Geoscientists. David is currently non-executive Chairman of Cellmid Ltd, Litigation Capital Management Ltd, and African Petroleum Corporation Ltd. David will step down from his current Non-executive Chairman position to Non-executive Director effective 31 March 2018.

Stephen Kelemen – Non-executive Director. Stephen has 40 years' experience in the Australian energy business, including 23 years in Queensland working on both conventional and unconventional projects. He was the primary driver behind the entry of Santos into the coal seam gas business that is now a source for that Company's GLNG project.

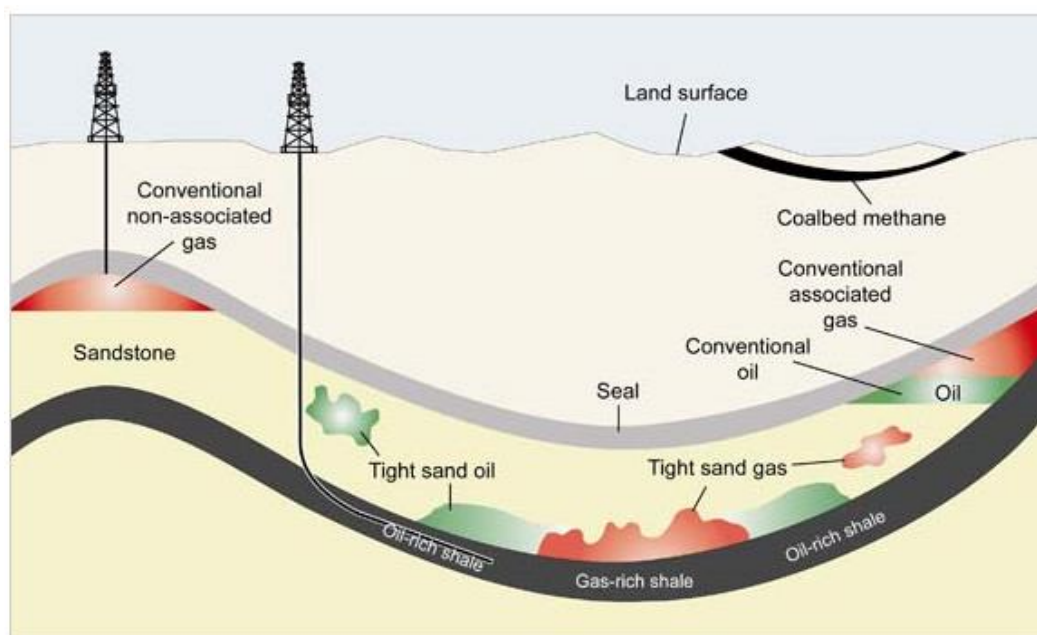
Don Langdon – Chief Financial Officer. Don is a Chartered Accountant with more than 40 years' experience. He was an Audit Principal with a large mid-tier accounting firm and has extensive experience with external and internal audit, financial reporting, due diligence for company floats and major acquisitions. Since retiring from public practice in October 2009 he has been the Chief Financial Officer (on a part time basis) of Comet Ridge Limited and has acted as the interim Chief Financial Officer for Tlou Energy Limited and was closely involved with that company's initial capital raising and listing on the ASX.

APPENDIX: COAL SEAM GAS – AN OVERVIEW

Coal seam gas (CSG), which is also known as coal seam methane, occurs naturally within coal deposits. In Queensland's major coal resource 'basins' there are many coal seams which range from close to the surface to hundreds of metres underground. CSG was formed at the same time as the coal itself and has been held under pressure within the coal. The CSG is largely composed of methane which is also the principal component of conventional natural gas.

Methane is held in coal seams principally through weak molecular surface bonding to the coal, also known as adsorption, which is maximised by a fractured or permeable coal offering greater surface area. In addition, CSG is often dissolved in the water in the seam. Both retention mechanisms are promoted by pressure. As the pressure is relieved the methane is released.

Figure 12: Schematic Geology of Natural Hydrocarbon Resources



Source: US Energy Information Administration, United States Geological Survey, National Energy Board

The adsorption process is efficient in allowing for large quantities of gas to be held in a coal seam. The coal seams are held under pressure by a static head of water, and the removal of this water is the key to gas release. The reduction in pressure also facilitates the release of the dissolved methane from the water present in the seam. The general approach is to drill a vertical well through the target coal seam and then place a pump to extract the water in the well. Once depressurised, gas will travel through a coal seam to the well. When the coal is less permeable, a technique of in-seam drilling has been developed to provide a pathway through a seam to the vertical well.

Extraction and exploitation of CSG for commercial gas supply was a feature of the United States market where it was a significant business for many years. Historically, exploitation of Australian CSG resources lagged that in the US. However Australian production eclipsed the US when Queensland coal seam gas was developed for LNG export and Australia is now the largest CSG producer in the world.

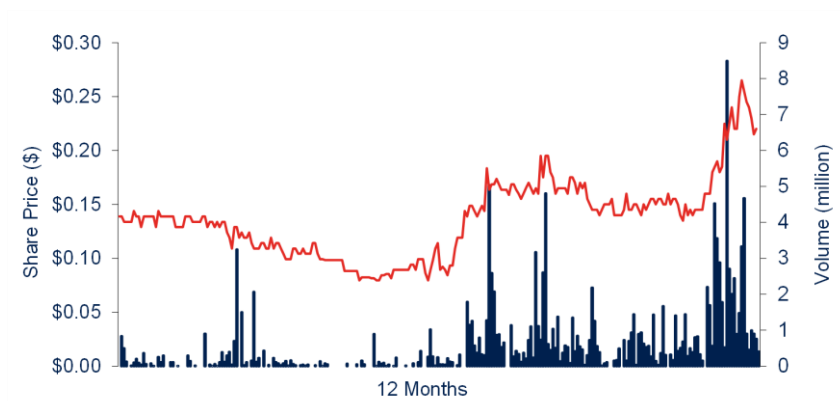
The gas passes up the annular space in the well, with the water passing through the pump line to the surface. On the surface each passes separately to the appropriate collection and distribution system. Basic dehydration of the gas to remove any entrained water mist is followed by compression, which is required to admit the gas to long distance distribution pipelines. The water is typically pumped to holding and evaporation ponds, although some producers use it for irrigation and others use reverse osmosis to produce potable water.

If the coal is fully 'saturated' with gas, its release can commence very soon after starting the water pump, however it would normally be a number of weeks or months before this occurs. Unlike shale gas which produces at a peak rate very quickly upon commencement of production, CSG production progressively increases to a peak rate. Over time the gas production begins a long, though predictable, rate of decline. International and local experience with CSG extraction indicates that each well will have a life of many years

nder th

Galilee Energy		Price		\$0.23		Year End 30 June			
Valuation		\$m	\$/sh	Commodity Assumptions		2017A	2018F	2019F	2020F
Glenaras Gas Project		76	0.40	A\$/US\$		0.75	0.78	0.79	0.79
Other Assets		0	0.00	Brent oil (US\$/bbl)		51.19	60.75	61.75	61.00
Net Cash (Debt)		7	0.04	Gas price (A\$/GJ)					
Corporate Costs		-7	-0.04						
Total Valuation (10% discount rate)		75	0.40						
Production Summary					2017A	2018F	2019F	2020F	
Oil (mmbbl)					0.0	0.0	0.0	0.0	
Gas (PJ)					0.0	0.0	0.0	0.0	
Reserves & Resources									
Resource Estimates					Total (PJ)				
1C					308				
2C					2,508				
3C					5,314				
Ratios					2017A	2018F	2019F	2020F	
P/E (x)					-10.3	-9.7	-9.1	-7.6	
Enterprise Value					29	28	44	48	
EV/EBITDAX (x)					-18.1	-19.9	-30.0	-32.4	
EV/Free Cash Flow					-6.2	-4.2	-9.3	-11.7	
EV/2C (\$/GJ)									
PFCF (x)					-7.5	-6.4	-9.3	-10.5	
Div. Yield (%)					0.0	0.0	0.0	0.0	
Franking (%)					0.0	0.0	0.0	0.0	
Directors & Senior Management									
Name		Position							
Ray Shorrocks*		Non-executive Chairman							
Peter Lansom		Managing Director							
Stephen Kelemen		Non-executive Director							
David King		Non-executive Director							
* Effective 31 March 2018					0.0				
Substantial Shareholders					Shares (m)	%			
Ecarlate Pty Ltd					18.3	9.7			
Nero Resource Fund					6.9	3.6			
Becamal Pty Lt					5.5	2.9			
Peter Lansom					5.2	2.7			
Slade Technologies Pty Ltd					5.0	2.6			
Top 5 shareholders					41.0	21.6			
Cash Flow (A\$m)					2017A	2018F	2019F	2020F	
Operating income (EBIT)					(5.4)	(3.0)	(3.4)	(2.9)	
Net interest income (expense)					0.2	0.2	(0.1)	(0.8)	
Exploration & evaluation expense					3.8	1.6	1.9	1.4	
Tax paid					0.0	(0.5)	(1.0)	(1.1)	
Other					1.4	(0.2)	0.0	0.0	
Operating Cash Flow					(3.3)	(3.0)	(4.1)	(2.7)	
Capital expenditure					(0.1)	(0.0)	0.0	0.0	
Exploration expenditure					0.0	(1.7)	(2.7)	(2.0)	
Free Cash Flow					(3.4)	(4.7)	(6.8)	(4.7)	
Dividends					0.0	0.0	0.0	0.0	
Equity raised					0.0	5.1	0.0	0.0	
Debt drawn (repaid)					0.0	0.0	10.0	0.0	
Net Change in Cash					(3.4)	0.6	3.2	(4.7)	
Cash at period end					6.1	6.7	9.9	5.1	
Net Cash (Debt)					6.1	6.7	(0.1)	(4.9)	
Balance Sheet (A\$m)					2017A	2018F	2019F	2020F	
Cash					6.1	6.6	9.9	5.1	
Total Assets					7.8	8.8	12.8	8.7	
Creditors					0.4	0.4	0.4	0.4	
Current borrowings					0.0	0.0	0.0	0.0	
Non-current borrowings					0.0	0.0	10.0	10.0	
Provisions					1.2	(1.1)	(1.4)	(1.0)	
Total Liabilities					1.6	0.9	9.5	10.2	
Shareholders Funds					6.2	7.8	3.3	(1.5)	

Recommendation History



Date	Type	Target Price	Share Price	Recommendation	Return
28 Aug 15	Research Note	na	0.09		
	Current Share Price		0.22		

Stock recommendations: Investment ratings are a function of Patersons expectation of total return (forecast price appreciation plus dividend yield) within the next 12 months. The investment ratings are Buy (expected total return of 10% or more), Hold (-10% to +10% total return) and Sell (> 10% negative total return). In addition we have a Speculative Buy rating covering higher risk stocks that may not be of investment grade due to low market capitalisation, high debt levels, or significant risks in the business model. Investment ratings are determined at the time of initiation of coverage, or a change in target price. At other times the expected total return may fall outside of these ranges because of price movements and/or volatility. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. This Document is not to be passed on to any third party without our prior written consent.

Patersons Securities Limited Disclosure of Interest

Patersons Securities and its respective officers and associates may have an interest in the securities or derivatives of any entities referred to in this material

Patersons Securities does, and seeks to do, business with companies that are the subjects of its research reports.

Patersons Securities Corporate Relationship Disclosure

88E	Patersons Securities have acted for 88 Energy Limited (88E) within the past year and have received fees for these services.
AGR	Patersons Securities have acted for Agua Resources Limited (AGR) within the past year and have received fees for these services.
AGY	Patersons Securities have acted for Argosy Minerals Limited (AGY) within the past year and have received fees for these services.
AKM	Patersons Securities have acted for Aspire Nmining Limited (AKM) within the past year and have received fees for these services.
AXL	Patersons Securities have acted for Axesstoday Limited (AXL) within the past year and have received fees for these services.
BOE	Patersons Securities have acted for Boss Resources Limited (BOE) within the past year and have received fees for these services.
BRB	Patersons Securities have acted for Breaker Resources NL (BRB) within the past year and have received fees for these services.
BUX	Patersons Securities have acted for Buxton Resources Limited (BUX) within the past year and have received fees for these services.
CSS	Patersons Securities have acted for Clean Seas Seafood Limited (CSS) within the past year and have received fees for these services.
CTL	Patersons Securities have acted for Centennial Mining Limited (CTL) within the past year and have received fees for these services.
DRG	Patersons Securities have acted for Draig Resources Limited (DRG) within the past year and have received fees for these services.
DRO	Patersons Securities have acted for DroneShield Limited (DRO) within the past year and have received fees for these services.
GLL	Patersons Securities have acted for Galilee Energy Limited (GLL) within the past year and have received fees for these services.
IPT	Patersons Securities have acted for Impact Minerals Limited (IPT) within the past year and have received fees for these services.
NUS	Patersons Securities have acted for Nusantara Resources (NUS) within the past year and have received fees for these services.
PEX	Patersons Securities have acted for Peel Mining Limited (PEX) within the past year and have received fees for these services.
PGO	Patersons Securities have acted for Primary Gold Limited (PGO) within the past year and have received fees for these services.
SYA	Patersons Securities have acted for Sayona Mining Limited (SYA) within the past year and have received fees for these services.
UUV	Patersons Securities have acted for UUV Aquabotix Ltd (UUV) within the past year and have received fees for these services.
WKT	Patersons Securities have acted for Walkabout Resources Ltd (WKT) within the past year and have received fees for these services.
XAM	Patersons Securities have received corporate advisory fees from Xandau Mines Limited (XAM) within the past year.
XTE	Patersons Securities have acted for Xtek Limited (XTE) within the past year and have received fees for these services.

Research

Cathy Moises - Head of Research	Phone: (+61 3) 9242 4030	Email: cmoises@psl.com.au
Hira Sakrani - Associate Analyst	Phone: (+61 3) 9242 4052	Email: hsakrani@psl.com.au
James Farr - Research Assistant	Phone: (+61 8) 9263 1215	Email: jfarr@psl.com.au
Daniel Veasey - Research Assistant	Phone: (+61 8) 9225 2818	Email: dveasey@psl.com.au

Strategy & Economics

Tony Farnham - Economic Strategist / Analyst	Phone: (+61 2) 9258 8973	Email: tfarnham@psl.com.au
Greg Galton - Private Wealth, Analyst	Phone: (+61 8) 9263 1612	Email: ggalton@psl.com.au

Commodities

Cam Hardie - Analyst	Phone: (+61 3) 9242 4153	Email: chardie@psl.com.au
Simon Tonkin - Senior Analyst	Phone: (+61 8) 9225 2816	Email: stonkin@psl.com.au
Xavier Braud - Analyst	Phone: (+61 8) 9225 2813	Email: xbraud@psl.com.au
Nic Matich - Analyst	Phone: (+61 8) 9225 2819	Email: nmatich@psl.com.au

Industrials

Martyn Jacobs - Analyst	Phone: (+61 3) 9242 4153	Email: mjacobs@psl.com.au
Jon Scholtz - Analyst	Phone: (+61 8) 9225 2836	Email: jscholtz@psl.com.au
Nic Matich - Analyst	Phone: (+61 8) 9225 2819	Email: nmatich@psl.com.au

Institutional Dealing

Dan Bahen	Phone: (+61 8) 9263 1274	Email: dbahen@psl.com.au
Michael Brindal	Phone: (+61 8) 9263 1186	Email: mbrindal@psl.com.au
Artie Damaa	Phone: (+61 2) 8238 6215	Email: adamaa@psl.com.au
Paul Doherty	Phone: (+61 3) 8803 0108	Email: pdoherty@psl.com.au
Chris Kelly	Phone: (+61 3) 9242 4078	Email: ckelly@psl.com.au
Jeremy Nugara	Phone: (+61 3) 8803 0166	Email: jnugara@psl.com.au
Phil Schofield	Phone: (+61 2) 8238 6223	Email: pschofield@psl.com.au
Sandy Wylie	Phone: (+61 8) 9263 1232	Email: swylie@psl.com.au

Important Notice: Copyright 2017. The Contents contained in this report are owned by Patersons Securities Limited ('Patersons') and are protected by the Copyright Act 1968 and the copyright laws of other countries. The material contained in this report may not be copied, reproduced, republished, posted, transmitted or distributed in any way without prior written permission from Patersons. Modification of the materials for any other purpose is a violation of the copyrights and other proprietary rights of Patersons.

Disclaimer: Patersons believes that the information or advice (including any financial product advice) contained in this report has been obtained from sources that are accurate at the time of issue, but it has not independently checked or verified that information and as such does not warrant its accuracy or reliability. Except to the extent that liability cannot be excluded, Patersons accepts no liability or responsibility for any indirect loss or damage caused by any error in or omission from this report. You should make and rely on your own independent inquiries. If not specifically disclosed otherwise, investors should assume that Patersons is seeking or will seek corporate finance business from the companies disclosed in this report.

Warning: This report is intended to provide general securities advice, and does not purport to make any recommendation that any securities transaction is appropriate to your particular investment objectives, financial situation or particular needs. Prior to making any investment decision, you should assess, or seek advice from your adviser, on whether any relevant part of this report is appropriate to your financial circumstances and investment objectives.

Disclosure: Patersons, its directors and/or employees may earn brokerage, fees, commissions and other benefits as a result of a transaction arising from any advice mentioned in this report. Patersons as principal, its directors and/or employees and their associates may hold securities in the companies the subject of this report, as at the date of publication. These interests do not influence Patersons in giving the advice contained in this report. Details of any interests may be obtained from your adviser. Patersons as principal, its directors and/or employees and their associates may trade in these securities in a manner which may be contrary to recommendations given by an authorised representative of Patersons to clients. They may sell shares the subject of a general 'Buy' recommendation, or buy shares the subject of a general 'Sell' recommendation.

Stock recommendations: Investment ratings are a function of Patersons expectation of total return (forecast price appreciation plus dividend yield) within the next 12 months. The investment ratings are Buy (expected total return of 10% or more), Hold (-10% to +10% total return) and Sell (> 10% negative total return). In addition we have a Speculative Buy rating covering higher risk stocks that may not be of investment grade due to low market capitalisation, high debt levels, or significant risks in the business model. Investment ratings are determined at the time of initiation of coverage, or a change in target price. At other times the expected total return may fall outside these ranges because of price movements and/or volatility. Such interim deviations from specified ratings will be permitted but will become subject to review by Research Management. This Document is not to be passed to any third party without prior written consent.