# **EMPIRE OIL & GAS NL**







# Empire's Red Gully North-1 discovery exceeds pre-drill expectations

- A new gas discovery was made at Red Gully North-1 with 53m net gas pay exceeding pre-drill expectations and strengthening the value proposition and future prospectivity of the northern parts of EP 398.
- Quarterly average gas production up 13% with flow rates of 9.4TJ/day set to continue for the foreseeable future.
- A review of the Black Swan geophysical survey post quarter end has identified areas containing large interpreted structural leads and trends in EP 389 and EP 432.
- A new RGPF operations and maintenance contract was implemented during the December quarter. As a result, operational expenditure was reduced by 13%.
- Strong cash flow receipts of A\$5.4m (September quarter:A\$1.6m)
   were underpinned by a fixed price gas contract with Alcoa.
- Revenue for the quarter was maintained at A\$5.2m despite an approximate 20% decline in oil prices during the period.
- Revenue for FY16 is now forecast at A\$20.3m against previous budget of A\$23.0m. Revenue gained from increased production and additional gas sales to Alcoa has been offset by decreased condensate revenue as a result of the declining oil price. Approximately 16% of the forecast revenue relates to condensate sales.
- A 1:100 share consolidation was approved by Empire shareholders at the November AGM and was implemented prior to quarter end. Empire shares are now trading on a post consolidation basis.

About Empire Oil & Gas NL

ASX Code: EGO
Cash on hand (quarter end):
A\$6.8m

Market capitalisation (quarter end): A\$49m Share price range in quarter

(post consolidation basis): A\$0.40 to A\$0.60

Empire Oil & Gas is an Australian energy company focussed on exploration and production opportunities in the onshore Perth Basin.

Empire owns and operates the Red Gully field which has been in production since mid-2013.

Empire holds around half of the highly prospective onshore Perth Basin. The Perth Basin has excellent infrastructure and a strong gas market.

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# **PRODUCTION**

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Quarterly Sales	December Quarter 2015	September Quarter 2015	FY15/16 YTD
Red Gully Facility (100%)			
Gas Sales (TJ)			
Gas Sales for the quarter	788.8	697.6	1,486.4
Cumulative Gas Sales to end of quarter	6,267		
Condensate Sales (BBL)			
Condensate Sales for the quarter	28,077	27,121	55,198
Cumulative Condensate Sales to end of quarter	268,238		
Plant Performance & Average Daily Rates			
Average Plant Run Time (% of total hours)	97.6%	88.4%	93.0%
Average Daily Rate - Gas Sales (TJ per day)	8.6	7.6	8.1
Average Daily Rate - Condensate sales (BBL per day)	305	295	300

# **Overall Production and Safety Performance**

The RGPF operated safely with no incidents during the December quarter.

Total gas delivered to Alcoa during the December quarter was 789TJ, 13.1% higher than the September quarter. This increase was due to Alcoa agreeing to purchase additional gas from Empire.

In the month of October, additional short term spot gas sales were supplied to Alcoa. RGPF export gas was increased to 9.4 TJ/day in December to derive additional revenue from uncontracted gas from the approximately 2PJ of uncontracted RG1 gas as determined from the July 2015 independent reserves upgrade.

This increase in gas production will occur for the foreseeable future. It will also help offset the reduction in condensate revenue caused by the significant decrease in crude oil prices during the quarter.

Average daily export gas production for the December quarter was 8.6 TJ/day. Gas production was temporarily impacted by the planned export gas compressor 2,000 hour service maintenance shutdown in December.

Total condensate delivered to BP during the December quarter was 28,077 bbl, 3.5% higher than the September quarter. The minor increase in condensate production was due to increased export gas production and helped to offset the forecast decline in Red Gully-1 condensate-to-gas ratio during the quarter. Average daily condensate production was 305 bbl/day for the quarter.

#### **RGPF Uptime**

The facility uptime for the December quarter was 98.0% (excluding planned downtime) compared with the annual average of 97.2%. The amount of unplanned downtime for the quarter was 51.9 hours, 33.5% less than the September quarter.

### **Operating Cost Reduction Activities**

Empire is continuously reviewing the costs required to operate the RGPF without compromising its outstanding safety performance. Empire is reviewing all operations service contracts and requested new service agreements from suppliers in response to the declining oil price.

A new RGPF operations and maintenance contract was implemented during the December quarter. The implementation of the new contract is already producing operational expenditure savings during the December quarter, which were reduced by 13% compared to the September quarter.

#### Other Activities

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Detailed engineering work on the intelligent pigging inspection of the RGPF export gas pipeline continued during the quarter. Spools required to mount the intelligent pig launcher/receiving facilities on the RGPF export gas pipeline were fabricated. The planned implementation date for this scope of work is on track for H2 FY16.

Preliminary engineering study work on the tie-back of Red Gully North -1 ("RGN-1") well to the RGPF is now waiting on RGN reservoir production test information (rate and composition) before it can be finalised. This data will be available after the completion of the RGN-1 production test scheduled for the June quarter 2016.

# **EXPLORATION**

#### **HIGHLIGHTS**

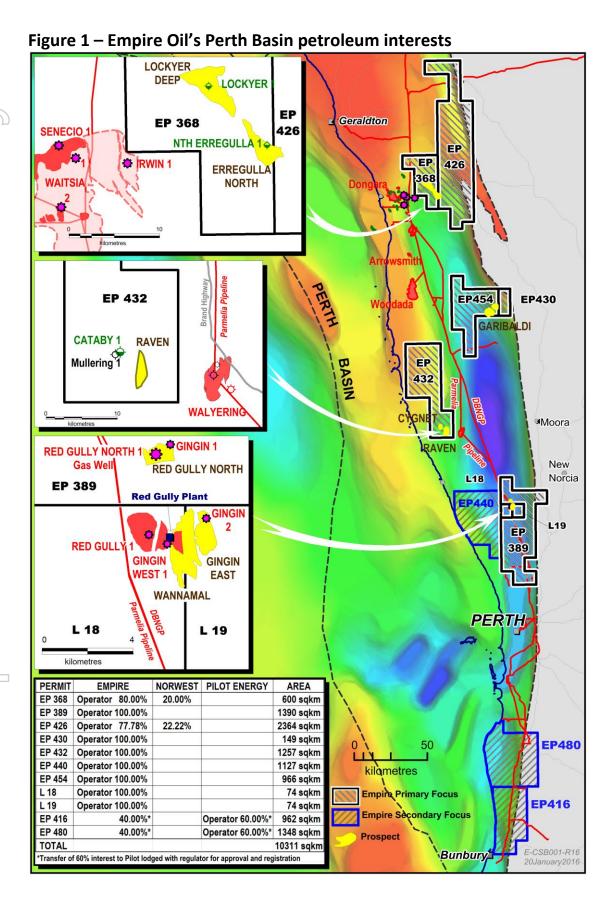
- New gas discovery at Empire's 100% owned RGN-1 well
  - o Intersected 53m of net gas pay as interpreted from logs in the primary objectives
- RGN-1 satisfies the EP 389 year 4 drilling commitment
- Assessment of hydrocarbon volumes discovered by RGN-1 commenced
- Preparation to test RGN-1 C and D sands underway
- Black Swan airborne geophysical survey processing and interpretation completed
  - The survey identified areas containing large interpreted structural leads and trends in EP 389 and EP 432 to target future gas exploration activities on, including infill 2D seismic acquisition
- North Erregulla Deep (in EP 368 and EP 426) was matured to prospect status
- Reprocessing of existing 2D seismic in EP368 and EP 426 completed and assisted in further assessing the Lockyer Deep and North Erregulla Deep prospects
- Farmout discussions continued in the quarter

#### Summary

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Exploration activities in the quarter focussed on the successful drilling and evaluation of the RGN-1 exploration well in EP 389 and the interpretation of the Black Swan airborne geophysical interpretation acquired across all of Empire's Perth Basin acreage.

Significant technical work including seismic reprocessing was also undertaken in EP 368 and EP 426. In addition to Lockyer Deep-1 located in EP 368, the North Erregulla Deep prospect has now also been matured. This prospect is located adjacent to Lockyer Deep and extends into EP 426.



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# **RGN-1 Gas Discovery, EP 389**

The RGN-1 well spudded on 17 November 2015 and reached a final total depth of 4,410m. The well encountered elevated gas shows while drilling in the primary C and D sand objectives of the Cattamarra Coal Measures. Gas pay of 53m was interpreted from logs for these two sands after logs were run on drill pipe once well reached its final total depth. The C and D pay intervals have porosity interpreted from logs of 10 % and 9% respectively.

Additional thinner zone interests were also observed in the secondary objective at RGN-1 within sands of the Lower Cattamarra Coal Measures. These sands contain minor intervals of log calculated net pay but are not included in the 53 net pay counts for the well at this stage. The well was cased with 7" casing to 4,392m and suspended. Enerdrill Rig 3 was released on 28 December 2015 after 41 days of operations. The drilling of RGN-1 was completed on time and in line with Empire's forecast programme and budget.

A production completion has been pre-ordered and is designed to allow zonal isolation for an enhanced testing program. The completion will be run with a smaller rig and less expensive workover rig. The work to contract this rig is underway and will be finalised in February. A comprehensive well testing program will now be planned to (1) determine gas deliverability, (2) determine gas condensate ratios, and (3) recover gas and condensate samples. The completion and testing operation is scheduled to commence in March or April 2016 subject to rig availability, completion equipment delivery and Government approval processes.

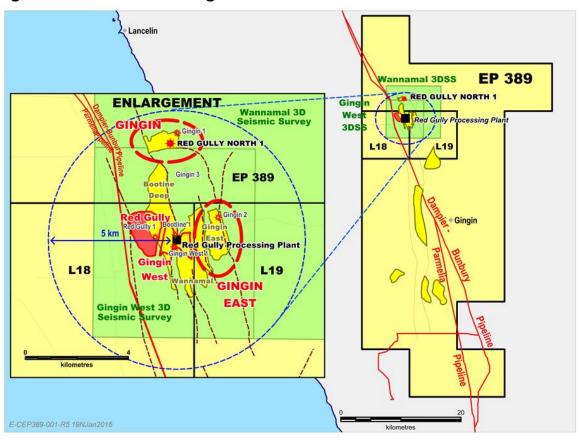
Subject to successful well testing, the RGN-1 well has the potential to significantly increase Empire's booked gas reserves, production and cash flow from the nearby Red Gully plant which is located approximately 4km away. A successful test will also provide a third producing well in the Red Gully production hub.

Prior to commencing the well test independent consultant firm RISC was engaged to estimate the total hydrocarbon volumes discovered by the drilling of RGN-1. This work will be completed in the March quarter 2016. Prior to drilling, RISC assessed the RGN prospect potentially containing Contingent (2C) and Prospective (best case) gas resources of 7.9PJ and 4.9PJ respectively, and condensate Contingent and Prospective resources of 90kbbls and 60kbbls respectively.

The photo below illustrates the Enerdrill Rig 3 drilling RGN-1.



Figure 2 – EP 389 containing RGN-1



# North Erregulla Deep, EP 368/EP 426

Reprocessing of previously acquired 2D seismic data within EP 368 and EP 426 was completed in the quarter and this has assisted in prospect mapping. An additional structure, North Erregulla Deep, located adjacent to Lockyer Deep was matured to prospect status at the Kinga/High Cliff sandstone level. North Erregulla Deep is located on a trend with Lockyer Deep (matured for drilling in the previous quarter) and extends from EP 368 into EP 426.

The Lockyer-North Erregulla trend was proved oil bearing at the Dongara sandstone level by the vintage North Erregulla-1 and Lockyer-1 wells. The deeper stratigraphic levels of the Kingia and High Cliff sandstones were not drilled and remain untested at both Lockyer Deep and North Erregulla. These deeper stratigraphic targets recently yielded a major gas discovery at Waitsia in the adjacent acreage operated by AWE Limited ("AWE", ASX: AWE) to the west.

Directly to the west of EP 368, a major gas find was announced at the Waitsia Field by operator AWE, in the Permian age Kingia/High Cliff sandstone. AWE also reported the presence of conventional reservoir quality sandstone as far east as the Irwin-1 well, which is close to the western boundary of EP 368. AWE has publicly reported that the Waitsia discovery not only opens a new play in the Perth Basin but represents the most significant gas discovery in the Basin since the large Dongara gas field was discovered in the 1960s.

AWE has achieved significant flow rates from the Kingia and High Cliff sandstone in the Senecio-3 well, which was flow tested in February 2015 and the Waitsia-1 well which has been flow tested from two zones at gas flow rates over 50 mmscf/d in October 2015.

At the level of the untested Kingia/High Cliff sandstone, Lockyer Deep has prospect resources estimated at 25bcf (low), 58bcf (best) and 134bcf (high). North Erregulla has estimated prospective resources of 15bcf (low), 55bcf (best) and 122bcf (high) and represents an immediate follow up prospect should Lockyer Deep-1 be successful.

Empire is anticipating the Lockyer Deep prospect will be drilled in the second half of 2016, subject to finalising funding alternatives, including potential farm-in partner(s). This was approved as the commitment well by the EP 368 Joint Venture in the quarter.









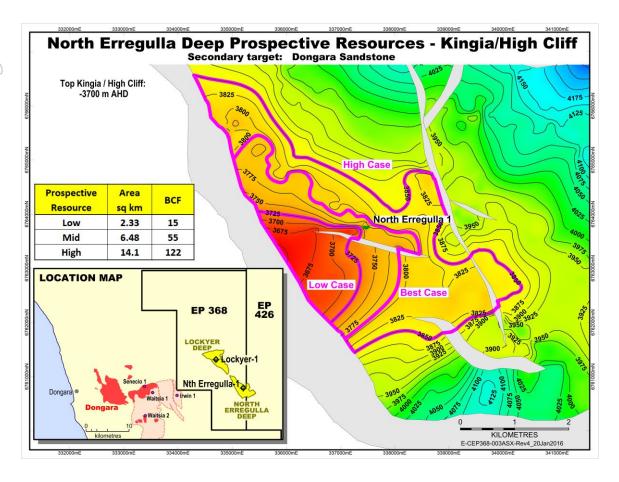


Figure 3 – North Erregulla Deep Prospect

#### Farm-out of North Perth Basin Acreage

Farm out discussions regarding Empire's North Perth Basin tenements are underway and have been held with a number of significant Energy companies. These discussions are ongoing.

#### Airborne Geophysical Survey Data Analysis

Empire conducted the Black Swan airborne geophysical survey during 2015. This survey was the largest survey of its type acquired in the basin to date, and acquired state of the art, gradiometric gravity and magnetic data over all of Empire's Perth Basin Permits on detailed 1km line spacing. The data from the survey has been processed and the final interpretation report for the survey was completed as planned late in the quarter.

Empire completed its review of the survey interpretation report subsequent to the December quarter end. Structural highs and leads have been interpreted in EP 389, EP 432 and EP 454. Empire now plans to proceed to acquire infill 2D seismic to mature the identified leads to prospect status for future drilling. The prospectivity of some of the identified leads has been significantly increased by the gas discovery at RGN-1. Refer to ASX announcement dated 21 January 2016 for more information of the Black Swan survey review.

# **FINANCE & CORPORATE**

#### **Cashflow**

As at 31 December 2015 Empire had A\$6.8m cash at bank. The major expenditure items for the December quarter were A\$3.3m for exploration and evaluation which included RGN-1 well drilling project planning and long lead items, seismic processing and interpretation, and other exploration costs. A further A\$1.8m was spent on production costs. This was slightly lower than the previous quarter due to cost reduction opportunities, process efficiencies and deferred maintenance activities without compromising the outstanding safety performance of the RGPF. Cash outflow for corporate costs was A\$992k for the December quarter. The increase on the previous quarter mainly relates to gas marketing and corporate expenditure in relation to annual reporting, AGM and the share consolidation.

Expected cash outflows for the March 2016 quarter will include costs related to drilling of the RGN-1 well. Cash inflows from gas and condensate sales are expected to offset the RGN-1 drilling costs.

# **Red Gully Revenue**

Revenue for the December quarter totalled A\$5.2m, holding constant on the September quarter. The increase in December quarter production volumes (gas up 13%, condensate up 2.6%) offset the fall in condensate revenue which was impacted by declining oil prices. Gas revenue has not been impacted by the current decline in the oil price due to the secure CPI-linked contracts in place.

Gas sales revenue increased 7% from A\$4.0m (September quarter) to A\$4.2m (December quarter), as a result of additional gas sales to Alcoa, as per ASX release on 23 December 2015. Condensate sales revenue decreased from A\$1.2m (September quarter) to A\$1.0m (December quarter).

As a result of the recent and significant drop in the Brent oil forward curve as published by Bloomberg, condensate revenue for H2 FY16 is forecast to be markedly lower than that received in H1 FY16. Estimated condensate revenue is based on variable inputs including the US\$ Brent oil price and the AUD/USD exchange rate.

Consequently, revenue for FY16 is now forecast at A\$20.3m against a budget of A\$23.0m as forecast revenue gained from increased production and additional gas sales to Alcoa has been offset by decreased condensate revenue as a result of the declining oil price. Any further changes (upwards or downwards) to the oil price will affect the earnings guidance accordingly. Empire continues to evaluate its existing production costs in order to mitigate against the declining oil price.

# **Debt Refinancing Process**

Empire is progressing multiple re-financing options for the \$15m debt to ERM Power Ltd ("ERM"). Empire is endeavouring to optimise favourable financial terms and conditions resulting from the recent successful RGN-1 drilling programme. The additional reserves from the RGN-1 discovery will significantly assist in attracting the most favourable refinancing alternative. Empire also recognises the financial benefits of the interest free terms of the ERM loan, which is not repayable until maturity on August 30th 2016. The A\$15m debt to ERM was the result of the purchase of ERM's interest in the RGPF and exploration tenements of which Empire now owns 100%.

#### Share consolidation

At the AGM held on 25 November 2015 77% of shareholders voted to support a resolution to consolidate all issued shares at a ratio of 100:1. The share consolidation was completed on 8 December 2015 and Empire's shares are now trading on a post consolidation basis.

Following the consolidation, the total number of Empire securities on issue is 102,051,052. The quantum and exercise price of options on issue over Empire securities have been adjusted accordingly. In summary, the post consolidation securities are:-

	Post-consolidation	ASX Code
	securities on issue	
Ordinary shares	102,051,052	EGO
Listed Options	7,853,059	EG00
Unlisted options	1,720,000	na

#### **Community engagement**

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Empire has partnered with the Shire of Gingin as the corporate sponsor of the Gingin Aquatic Centre for the next two years. Empire has an option to renew this sponsorship agreement on an ongoing basis.

Empire has committed A\$10,000 per annum in sponsorship funding towards asset renewal works at the Gingin Aquatic Centre pool. This funding coincides with a major upgrade of the Gingin Aquatic Centre pool which is scheduled for the end of 2015/16 aquatic centre season.





Empire CEO Ken Aitken (second from right) at the official 2015 summer season opening of the Gingin Aquatic Centre, along with (left to right: Gingin Shire CEO Jeremy Edwards, Cr John Elgin, Empire Oil & Gas CEO Ken Aitken and Drilling Superintendent Kenny Wapshaw)

#### Issued capital as at 31 December 2015

Ordinary shares 102,051,052 **Listed Options** 7,853,059 **Unlisted options** 1,720,000

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Ken Aitken CEO

**Empire Oil & Gas NL** 

# **Petroleum Tenements – Interests**

Permit	Joint Venture Parties	Interests at beginning of Quarter	Change during Quarter	Interests at end of Quarter	Notes on Interest Changes and Farm- ins/Farm-outs
Perth Basin					
L-18 Production Licence	Empire	100%	No change	100%	
L-19 Production Licence	Empire	100%	No change	100%	
PL-96 Pipeline Licence	Empire	100%	No change	100%	
EP 389	Empire	100%	No change	100%	
EP 426	*Empire Westranch	77.78% 22.22%	No change	77.78% 22.22%	
EP 368	*Empire Westranch	80% 20%	No change	80% 20%	
EP 432	Empire	100%	No change	100%	
EP 454	Empire	100%	No change	100%	
EP 430	Empire	100%	No change	100%	
EP 416	Empire *Pilot Energy	40% 60%	# Pilot F/out Agreement & Transfer lodged DMP	40% 60%	Transfers & F/out Agreement pending DMP approval
EP 440	Empire	100%	No change	100%	
EP 480	Empire *Pilot Energy	40% 60%	# Pilot F/out Agreement & Transfer lodged DMP	40% 60%	Transfers & F/out Agreement pending DMP approval

<sup>\*</sup> Denotes Operator of Joint Venture Permit

<sup>#</sup> Pilot Energy Limited new Operator & 60% JVP of EP 416 & EP 480. Transfer of title lodged with DMP