



EMPIRE ENERGY GROUP LIMITED

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## Announcement – Annual General Meeting 2015

**29 May 2015**

### **CHAIRMAN'S ADDRESS**

On behalf of the Board of Directors, I thank you for your attendance today and for your continued support of the Company.

2014 was a difficult year in the oil and gas industry with the significant decline in both oil and gas prices. This decline in prices has led to capital preservation programs and a halt on drilling for many companies.

But such sharp swings in the commodity cycles often present new opportunities. It is in these market conditions that companies reorganise asset priorities and growth opportunities become available. This is demonstrated by the Company's move into Northern Oklahoma where it is acquiring leases at a small percentage of the cost of what the same leases were valued at 2 to 3 years ago. Further, Empire is in a unique position in having a significant acquisition credit facility available, but the current share price makes it difficult to raise the necessary equity to combine with the debt financing to take advantage of opportunities presented.

In late 2014 Empire announced a joint venture to acquire and develop Mississippian Lime oil and gas leases in Northern Oklahoma. It is anticipated that drilling on these leases will commence in July 2015. Providing oil prices remain around current prices, a program of up to 10 wells is being planned.

Empire's disciplined hedging program means approximately 72% of production is hedged through to the end of 2017 averaging around \$75/BO and \$4.30/Mcf. This has positioned the Company to maintain flexibility in operations and continue to pay down debt.

In relation to the Company's Australian assets, earlier in the month the Wall Street Journal ran an article on the scale of shale petroleum resources in the McArthur Basin. More importantly, it reported that a group led by Mr Aubrey McClendon, the co-founder of the US based Chesapeake Energy is planning an investment in the Basin. This is a huge endorsement for the Basin as Mr McClendon, who grew Chesapeake from a start up to the

USA's second largest gas producer, has most likely reviewed targets all over the world for new large scale shale plays. This interest from international corporations along with the Northern Territory Government's very strong support for the development of the petroleum industry within the Territory augurs well for Empire Energy's significant holding in the shale core of the Basin.

With Empire Energy's current operations and as a result of market conditions, budgets and growth programs have been reviewed. This review has seen a halt to drilling in Kansas and New York State until oil and gas prices improve. However whilst drilling has been halted in the short term, should market prices spike there is immediate access to in-ground reserves which can be drilled inexpensively. As noted, drilling in Northern Oklahoma remains economic at current commodity prices.

The end of year accounts did show a small impairment in asset values due to the decline in oil prices. This was mainly due to the reduction in value of drilling locations, which made drilling in some areas marginal. The oil remains in the ground and any spike in price to the upside means those reserves and values are immediately written back.

Unfortunately the Company's share price has remained at a level that is very disappointing. Due to Empire Energy's disciplined hedging program the share price was not significantly affected by the downturn in the oil price. However, the announcement of the New York fracking ban saw a very sharp share price decline in December last year. Yet the cost of the New York shale acreage held was insignificant in relation to the Company's assets and much of the acreage is held by production. This ban, if or when put in place, may be overturned at some time in the future.

The Company continues to seek ways to reverse the negative sentiment towards its share price to ensure it can take advantage of any opportunities presented as this down turn in commodity prices stretches out over the medium term.

Bruce McLeod  
Chairman & CEO



# EMPIRE ENERGY GROUP LIMITED



Annual General Meeting – May 2015

# Disclaimer



## Important Notice and Disclaimer

The purpose of this document is to provide general information about Empire Energy Group Limited (“Empire Energy” or the “Company”) and potential scenarios relating to growth prospects. The document does contain certain statements which may constitute “forward-looking statements”. Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward-looking statements.

Users of this information should make their own independent evaluation of an investment in Empire. Nothing in this announcement should be construed as financial product advice, whether personal or general, for the purposes of section 766B of the Corporations Act 2001 (Cth). This announcement does not involve or imply a recommendation or a statement of opinion in respect of whether to buy, sell or hold a financial product. This announcement does not take into account the objectives, financial situation or needs of any person, and independent personal advice should be obtained.

All amounts in this presentation are US\$ unless otherwise stated. Empire’s presentation currency is \$US.

# Corporate Snap-Shot



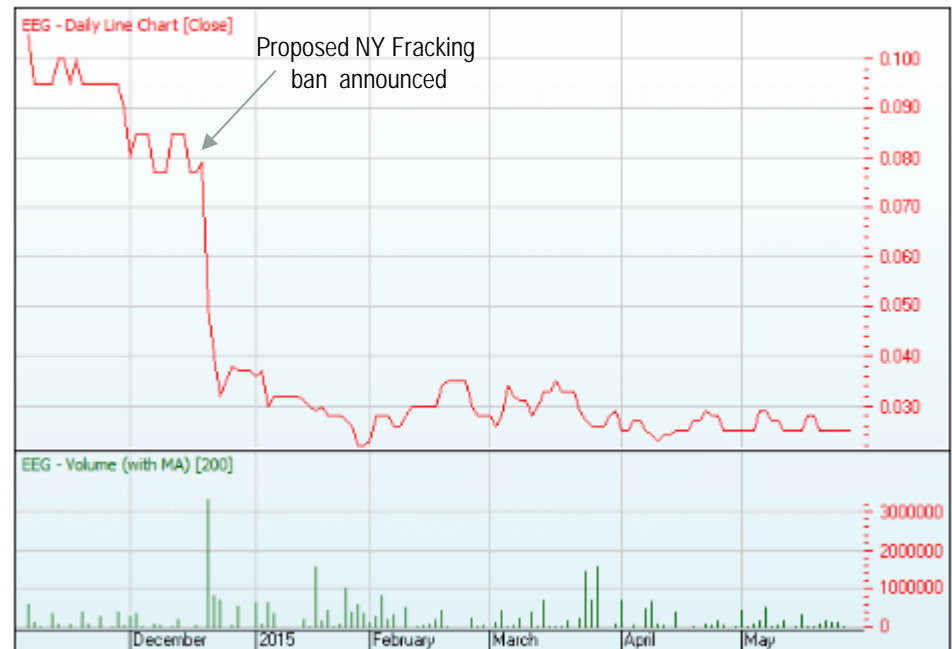
## ASX:EEG

## OTC-QX:EEGNY

- Share Price = US\$0.02
- Mkt Cap = US\$6.2mm
- Debt = US\$41.8mm at 3/2015
- Cash = US\$1.7mm at 3/2015
- Unrealised Hedges = US\$12.2mm at 3/2015
- EV = US\$46.3mm
- Net Debt/EBITDAX\* = 5.1x at YE 2014  
*\*adjusted for one-off expenses of \$2.2mm*
- EV/2P = \$3.23/Boe
- Interest coverage = 4.5x at 3/2015

- Shares issued = 308mm
- Options issued = 16.75mm
- Shareholders:
  - Macquarie Bank 17.4%
  - HSBC Custody Nominees 8.4%
  - Insiders 2.3%
  - Total Shareholders ~2,789
  - Av. Daily Volume (90 days) ~245,000

## Share price/volume over the past 6 months



# Operations -Snap Shot



- **USA – conventional oil & gas production**
  - NY, PA, KS, OK: 2P ~14.3MMBoe
  - Production ~1,300Boe/d
- **USA – unconventional development (>80% HBP)**
  - NY: 3P ~93MMBoe<sup>(1)</sup>
  - Prospective Resource P(50) (unrisked): 203 MMBoe <sup>(1)(2)</sup>
- **Australia – conv. & unconventional oil & gas exploration**
  - Prospective Resource P(50) (unrisked): 1,846 MMBoe, or ~11 Tcfe<sup>(2)</sup>

<sup>(1)</sup> Subject to NY fracking moratorium (a fracking ban was announced early December 2014, although not in place)

<sup>(2)</sup> The estimate of Prospective Resources must be read in conjunction with the cautionary statement on next slide.

# Reserves & Resources



## Empire Energy Group Reserves & Resources\*

Reserves NYMEX – As at Jan 1, 2015	Oil (Mbbbls)	Gas (MMcf)	MBoe	Gross Wells	Capex US\$M	PV0 US\$M	PV10 US\$M
Proved Developed Producing	1,792	26,716	6,245	2,108	\$0	\$107,097	\$45,549
Proved Developed Non-producing	324	26	328	45	\$2,334	\$12,733	\$5,471
Proved Behind Pipe	0	38	6	1	\$31	\$92	\$25
Proved Undeveloped	387	2,143	744	76	\$11,871	\$10,273	\$2,211
<b>Total 1P</b>	<b>2,503</b>	<b>28,923</b>	<b>7,323</b>	<b>2,230</b>	<b>\$14,236</b>	<b>\$130,195</b>	<b>\$53,256</b>
Probable	2,925	24,174	6,954	265	\$70,699	\$143,599	\$33,404
<b>Total 2P</b>	<b>5,428</b>	<b>53,097</b>	<b>14,277</b>	<b>2,495</b>	<b>\$84,935</b>	<b>\$273,794</b>	<b>\$86,660</b>
Possible	1,436	3,820	2,072	234	\$28,811	\$37,587	\$7,943
Possible - Shale (NY)	90,740	12,600	92,840				
<b>Total 3P</b>	<b>97,604</b>	<b>69,517</b>	<b>109,189</b>	<b>2,729</b>	<b>\$113,746</b>	<b>\$311,381</b>	<b>\$94,603</b>
Prospective Resource P(50) – Australia **	198,000	9,891,000	1,846,500				
Prospective Resource P(50) - Shale (NY)**	0	1,220,800	203,467				
<b>Total Reserves &amp; Resources</b>	<b>295,604</b>	<b>11,181,317</b>	<b>2,159,156</b>		<b>\$113,746</b>	<b>\$311,381</b>	<b>\$94,603</b>

\* Please refer to reserve disclosures at the end of this presentation

\*\* Prospective Resource P(50) - unrisks, is the estimated quantities of petroleum that may potentially be recovered by the application of future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

# USA - Asset Overview



## • FOCUS

- Conventional, long-lived, predictable assets
- Low risk development NOT exploration
- Reduction Lease Op Expenses (YE 2014):
  - LOE+Taxes (Appalachia) ~\$2.11/Mcf
  - LOE+Taxes (Kansas) ~\$28.20/Bbl
- Disciplined hedging
- Utilize \$160mm credit facility available

**EV/2P = \$3.23/Boe  
~1,300Boe/d (~60% oil by value)**

## • GROWTH - Conventional Drilling

- Mid-Con
  - ~150 net oil & gas locations
  - Av F&D cost ~ \$8.75/Boe
  - D&C cost ~ \$500,000(av)
- Appalachia
  - ~336 net NY oil & gas locations
  - Av F&D cost ~ \$6.00/Boe
  - D&C cost ~ \$110,000(av)



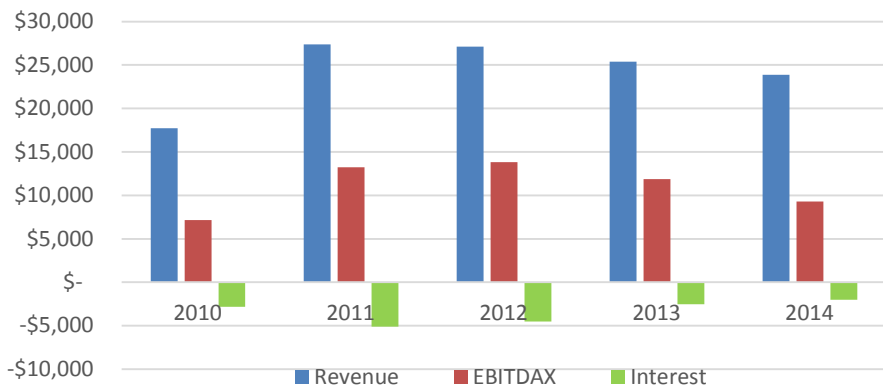
★ Corporate Office – Canonsburg, PA



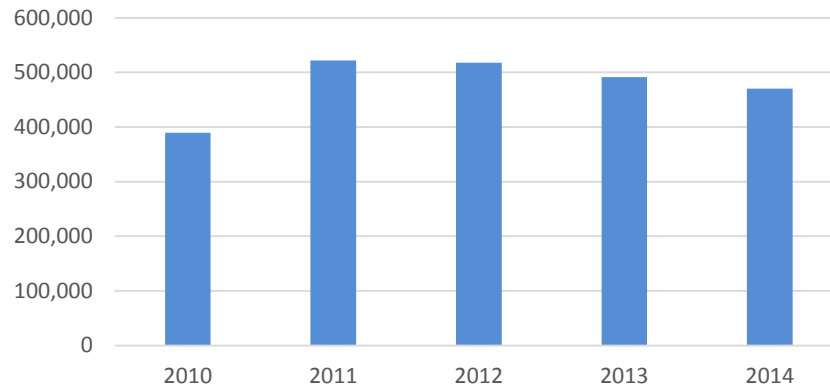


# Stability in Low Price Environment

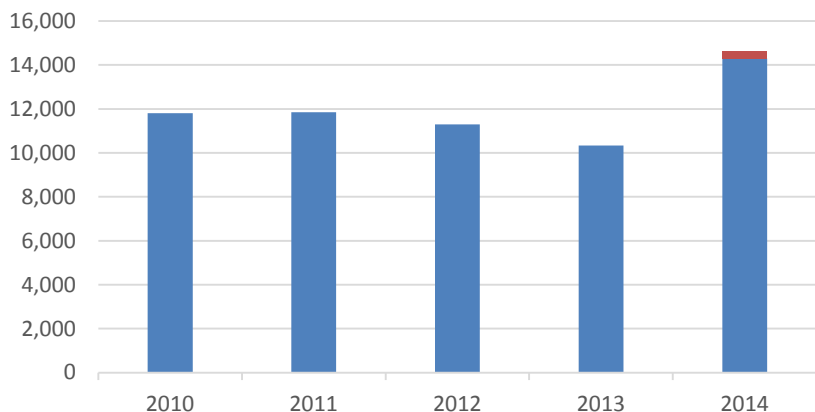
Annual Cash Flow - \$M



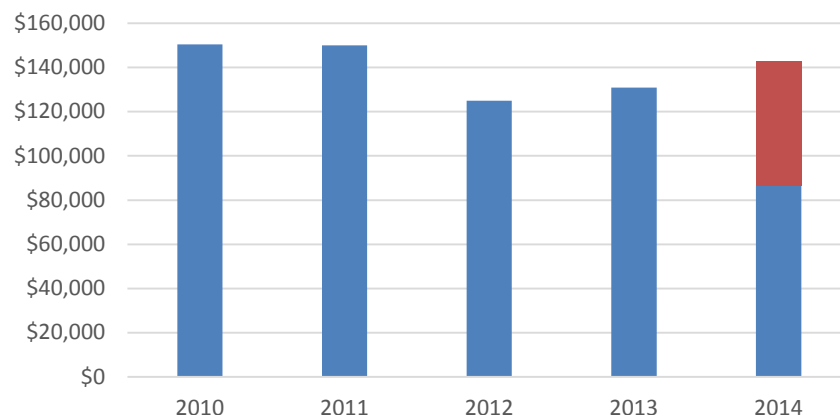
Annual Production - Boe



Reserves – 2P (Mboe)



PV10 – 2P (\$M)



2014 – 2P & PV10 calculated at NYMEX strip at Dec 31, 2015, NOT SEC pricing.

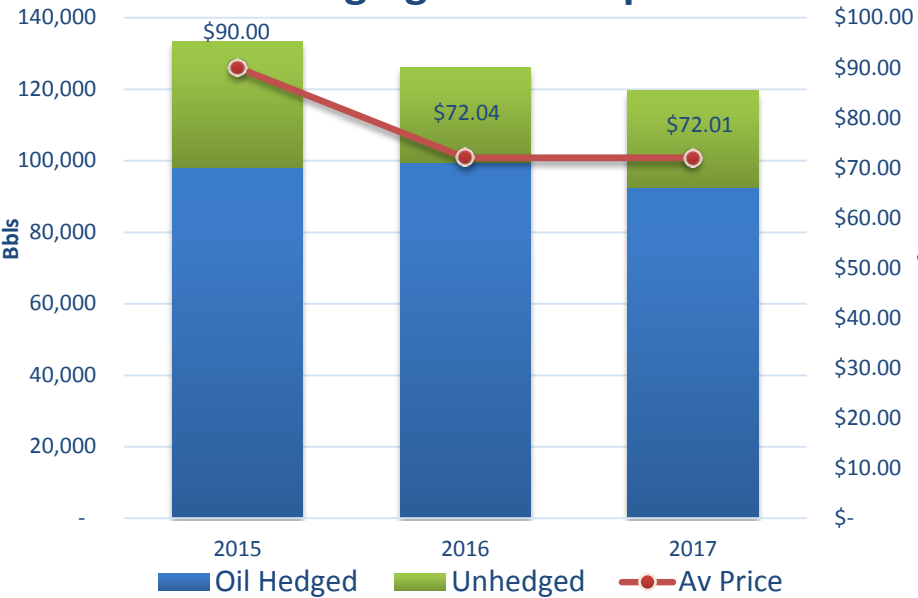
For comparative purposes, red blocks show additional reserves/value if using December 31, 2014 SEC pricing.

# Hedging - Existing PDP Reserves

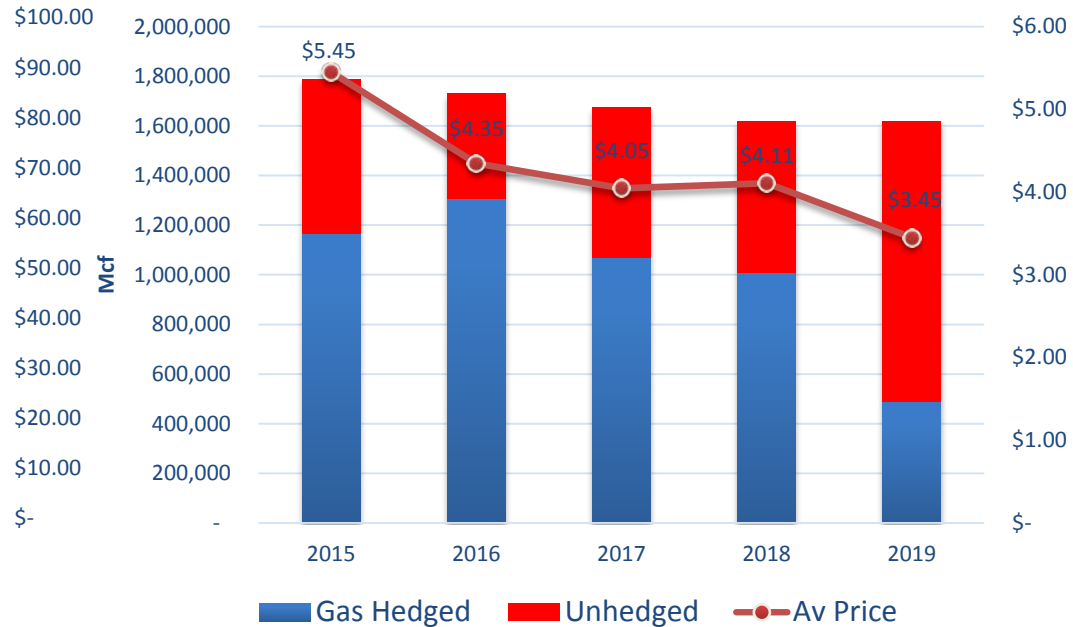


Disciplined Risk Reduction - approx 72% production hedged through 2017  
 Market-to-market gain of \$12.2mm at 3/2015

### Hedging - Oil Swaps



### Hedging - Natural Gas Swaps



Price upside exposure retained:  
 1.13MMBoe hedged compared to 2P = 14.3MMBoe



# DEVELOPMENT PROGRAM OKLAHOMA, USA



*Associated Press*

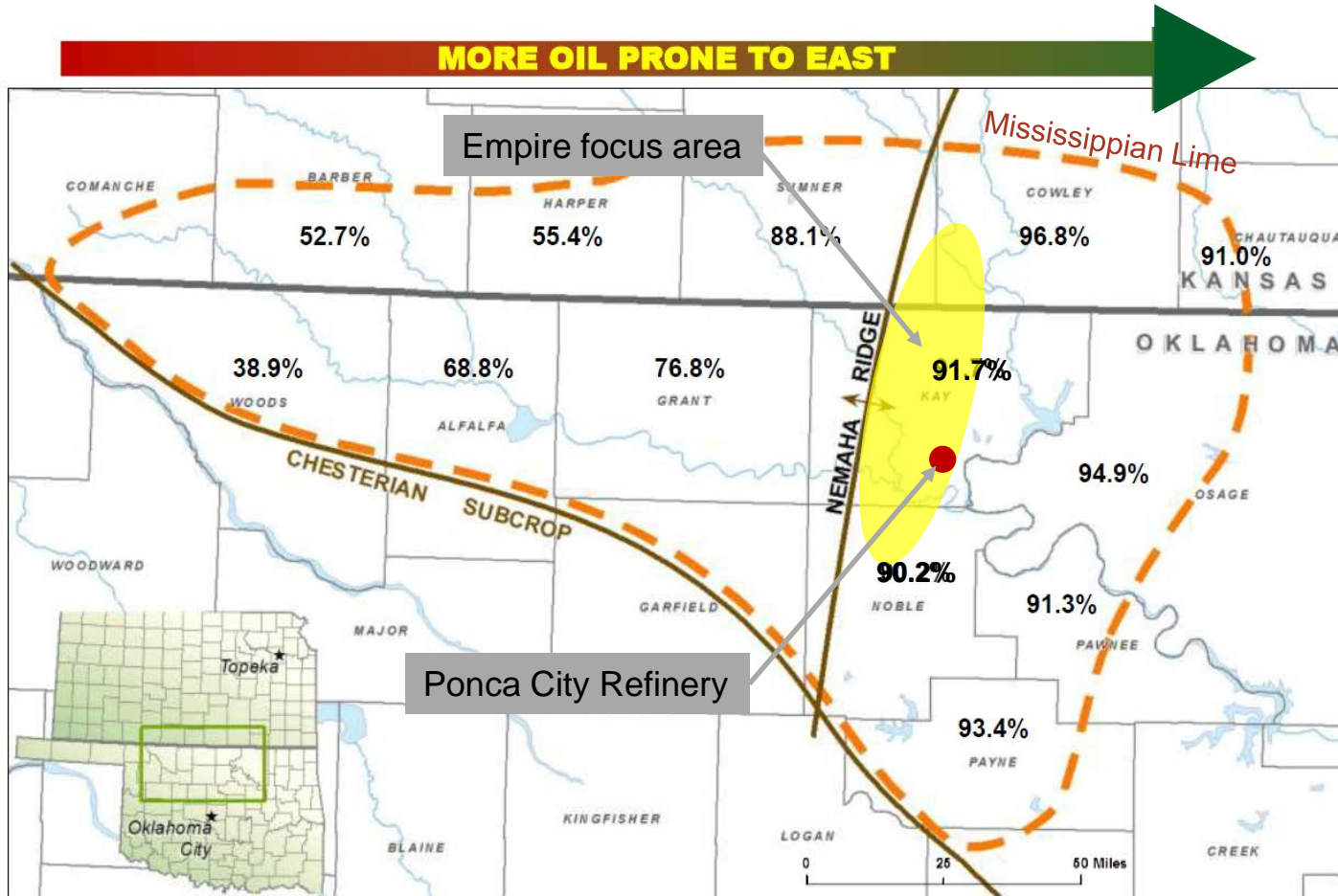
# Oklahoma Joint Venture (50%/50%)



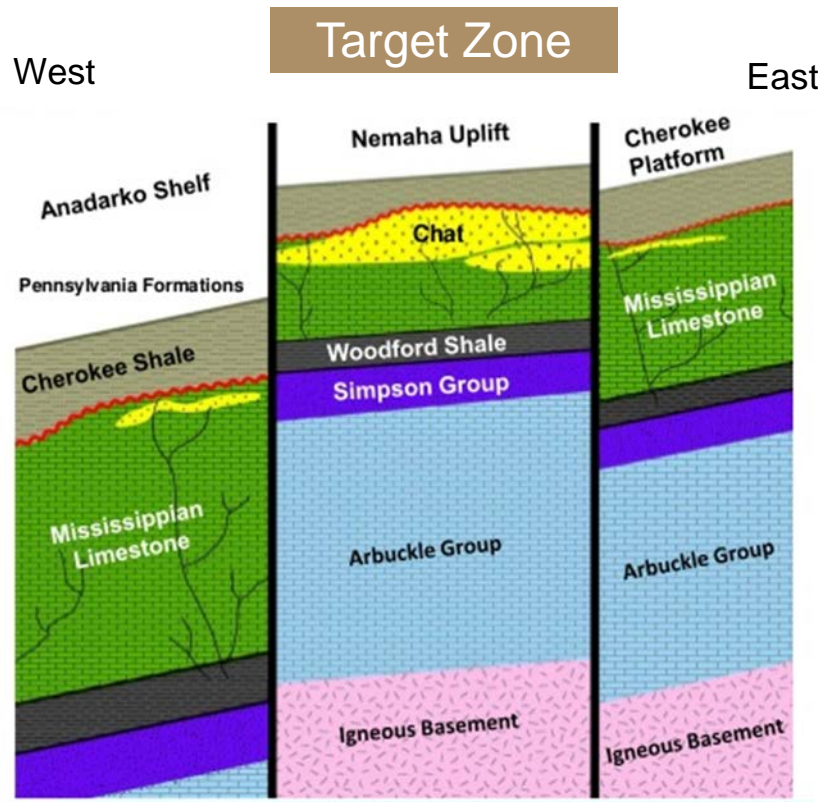
- Empire Operator
- Minimum net revenue interest = 81.25%
- Net 2P PV10 = US\$27mm at 12/2014
- ~8,000 acquired net acres
- Initial Target = Mississippian Lime
- Secondary = Wilcox Sands & Woodford Shale
- Multiple formations above Mississippian Lime
- Target - 5.0MMBoe net reserves to Empire

- **Drilling to start July 2015**
- **Vertical, fracked wells**
- **Severance tax reduce from 7% to 2%, July 1, 2015**
- **2015 - up to 10 wells**
- **Total ~100 net wells to drill**
- **Refinery ~ 10 miles away**

# Targets & JV Operations



# Nemaha Ridge



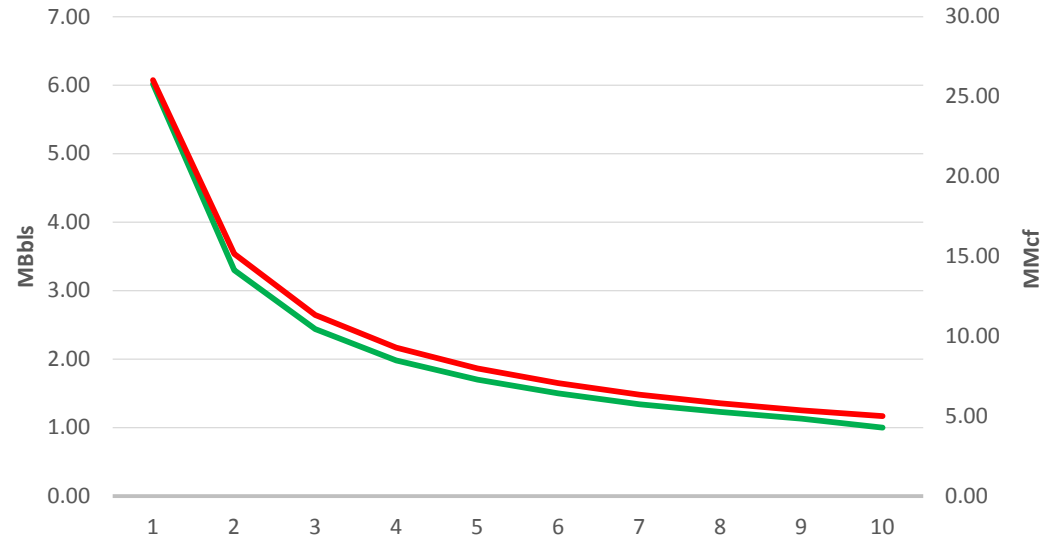
- Location along the Nemaha ridge is important
- Enhanced chert development of 30% to 40% porosity. Miss. Lime porosity falls to 3% to 5% range
- Higher structurally giving way to better oil cuts
- Reserves from adjacent wells indicate up to 80MBoe/well



# Expected Returns

- Av Gross EUR = ~64MBoe<sup>2</sup>
- D&C Cost = ~\$550,000/well
- Dry Well = ~\$190,000/well
- F&D Costs = ~\$11.60/Boe
- LOE ~\$6,000/month, or \$9.00/Boe over year 1
- ~70% liquids by volume
- Differential & transport <~\$2.00/Bbl

STANDARD TYPE CURVE FOR VERTICAL WELL - GROSS EUR 64MBOE



	NYMEX (flat) <sup>1</sup>	IRR	Payback	PV10
	\$40.00	-	-	-
	\$50.00	4.7%	4.2 yrs	-\$34M
	\$55.00	15.7%	2.9 yrs	\$38M
	\$60.00	25.8%	2.5 yrs	\$125M
	\$65.00	37.5%	1.9 yrs	\$192M

<sup>1</sup> Differential = -\$2.00/Bbl & Gas Constant = \$3.00/Mcf

<sup>2</sup> Av. net EUR ~52Mboe

# DEVELOPMENT PROGRAM

## McARTHUR BASIN, NT, AUSTRALIA





# Take-away



## Barney Creek Shale is Empire's primary target:

- it is the most abundant shale target in the McArthur Basin
- volumetrically the most significant
- the only formation in the McArthur Basin (including the Beetaloo sub-basin) that has delivered commercial quantities of gas in wells drilled
- ~80% of McArthur Basin Central Trough (Barney Creek Shale) secured by Empire
- seeking Partner to share early commercialisation opportunities

# Asset Overview



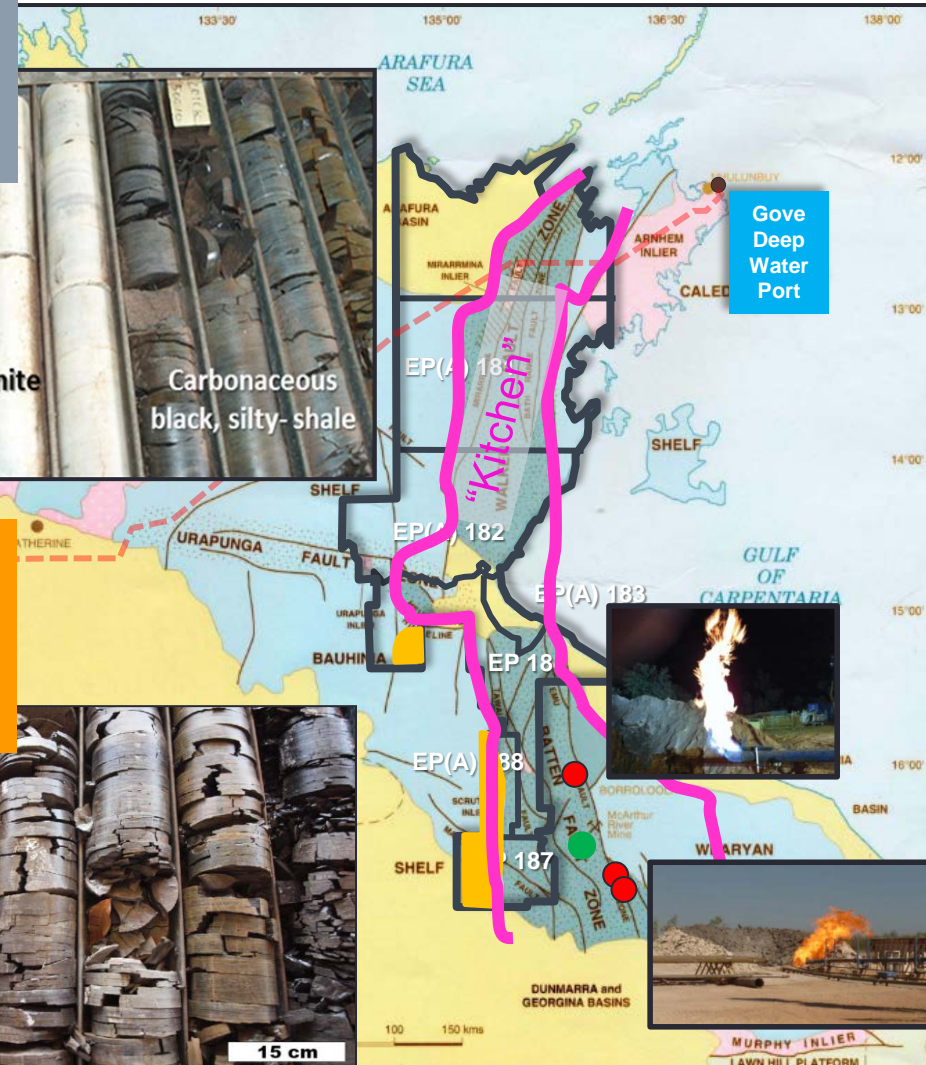
## MAJOR TARGET

- Barney Creek Shale
- 1.64 Billion years old
- Up to 1,500ft thick



## SECONDARY TARGET

- Velkerri Shale over Barney Creek
- 1.43 Billion years old
- Up to 250 ft thick




Gove Deep Water Port



# Value



- ~80% of the known McArthur Basin trough or '*hydrocarbon kitchen*' held by Empire. Shown between  on previous slide
- Leases = 14.6MM net acres
- Risk Segment Mapping has already identified ~6.5 million acres as prospective
- Empire WI = 100%
- Royalties = ~12%

- Significant hydrocarbons in the depositional shelf/trough proven
- Highest hydrocarbons predicted to be in central and deepest part of trough or '*kitchen*'



**Barney Creek Shale**  
~6.0mm acres  
P50 - 8.7 Tcf\*  
P50 - 174 MMBO\*

**Velkerri Shale**  
~0.6mm acres  
P50 - 1.2 Tcf\*  
P50 - 24 MMBO\*

\*The estimate of Prospective Resources must be read in conjunction with the cautionary statement on page 5.

# Prospective Resource



## Estimated Prospective Resources (Unrisked)

INDEPENDENTLY CERTIFIED ESTIMATED PROSPECTIVE RESOURCE (Unrisked)					
IDENTIFIED		AREA **	P90	P50	P10
Barney Creek Formation	Bcf	4,844,000	3,304	8,699	20,172
	MMBO		66	174	403
Velkerri Formation	Bcf	628,000	383	1,192	3,086
	MMBO		8	24	62
<b>TOTAL COMBINED</b>	<b>MMBOE</b>	<b>5,472,000</b>	<b>689</b>	<b>1,847</b>	<b>4,341</b>
** Based on P10 calculations					

### Independent Prospective Resource estimate considered to be conservative:

- Total av. thickness of Velkerri & Barney Creek Shale assumed ~350ft, but in some sections up to 1,500ft
- Geological discount factor of 50% to 75% to take account of variation in rock quality and lack of data
- No inclusion of conventional reservoirs in underlying or overlying formations

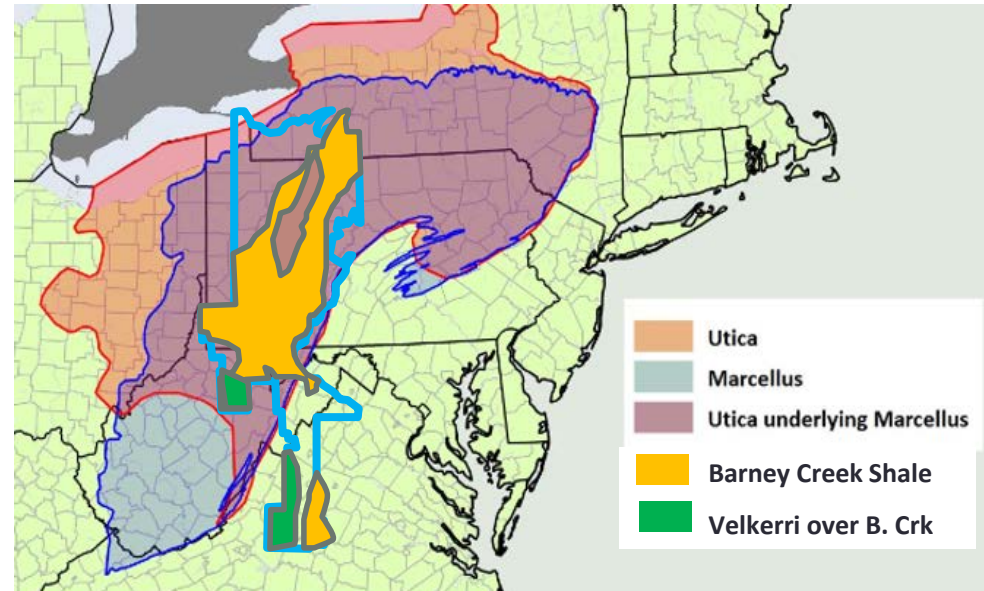
(Muir & Assoc. 2015 Resource Estimation – McArthur Basin Permits, Imperial Oil and Gas Pty Ltd, Feb 2015.)

A Prospective Resource - unrisked, is the estimated quantities of petroleum that may potentially be recovered by the application of future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

# World Class Scale



TARGET	MARCELLUS SHALE (Entire Basin)	BARNEY CREEK & VELKERRI SHALE (Empire Acreage)
LEASE AREA	60.5mm ac	14.6mm ac
RESOURCE AREA	60.5mm ac	~6.5mm ac <sup>(1)</sup>
SHALE DEPTH	Up to 8,000 ft	Up to 10,000 ft
THICKNESS	Av 200 ft	Up to 1,500 ft
AV TOC	3.00%	3.50%
GAS-IN -PLACE	2,000 Tcf	TBD
RECOVERABLE RESERVES & PROSPECTIVE RESOURCES	141 Tcf*	10 to 23 Tcf **
	*EIA US June 12	** IER Feb 15 P50 to P10
<sup>(1)</sup> Delineated to date On a volumetric basis the Basins are similar in size		



Gold & Green areas are where Velkerri & Barney Creek Shale are at optimal drilling depth

\* The estimate of Prospective Resources must be read in conjunction with the cautionary statement on page 5.



# Comparison with USA fields

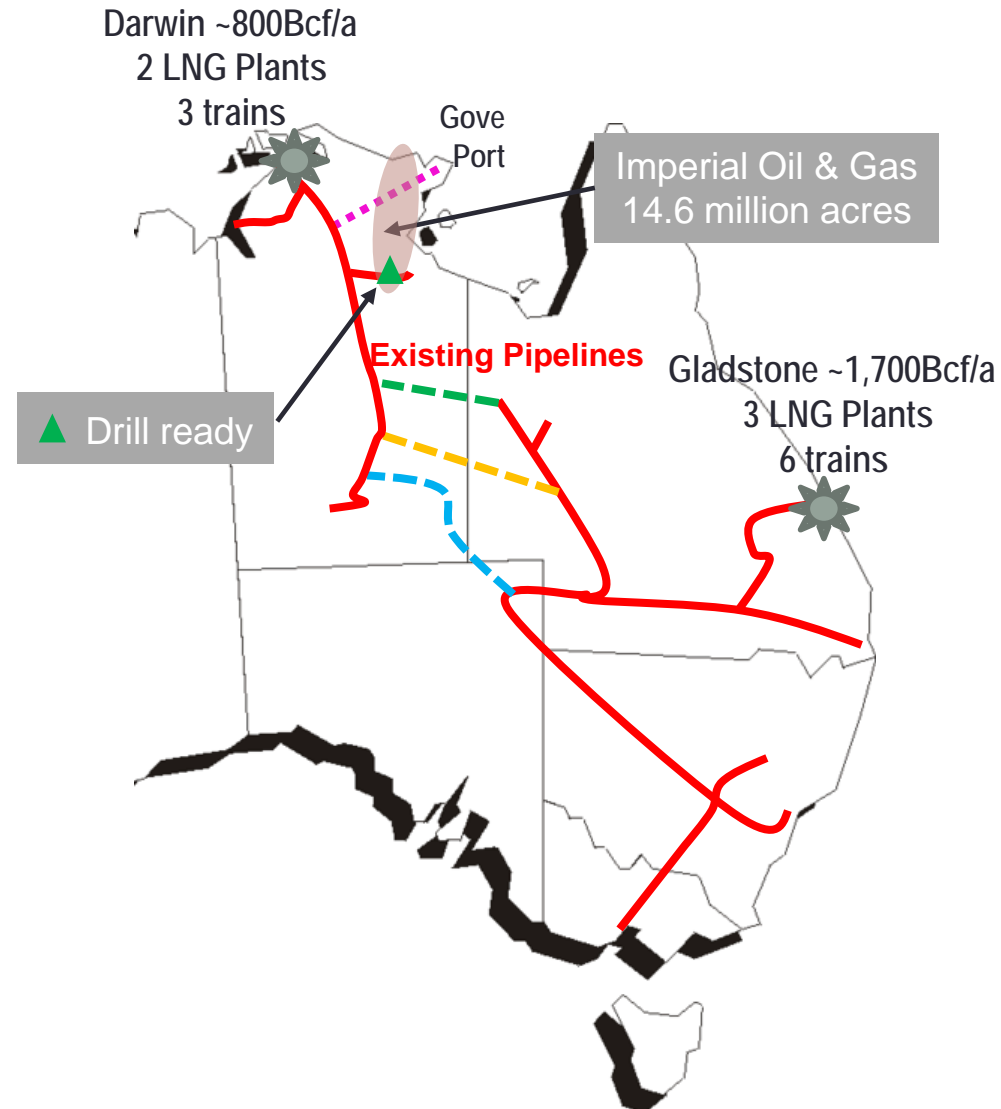


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# Early Commercialisation



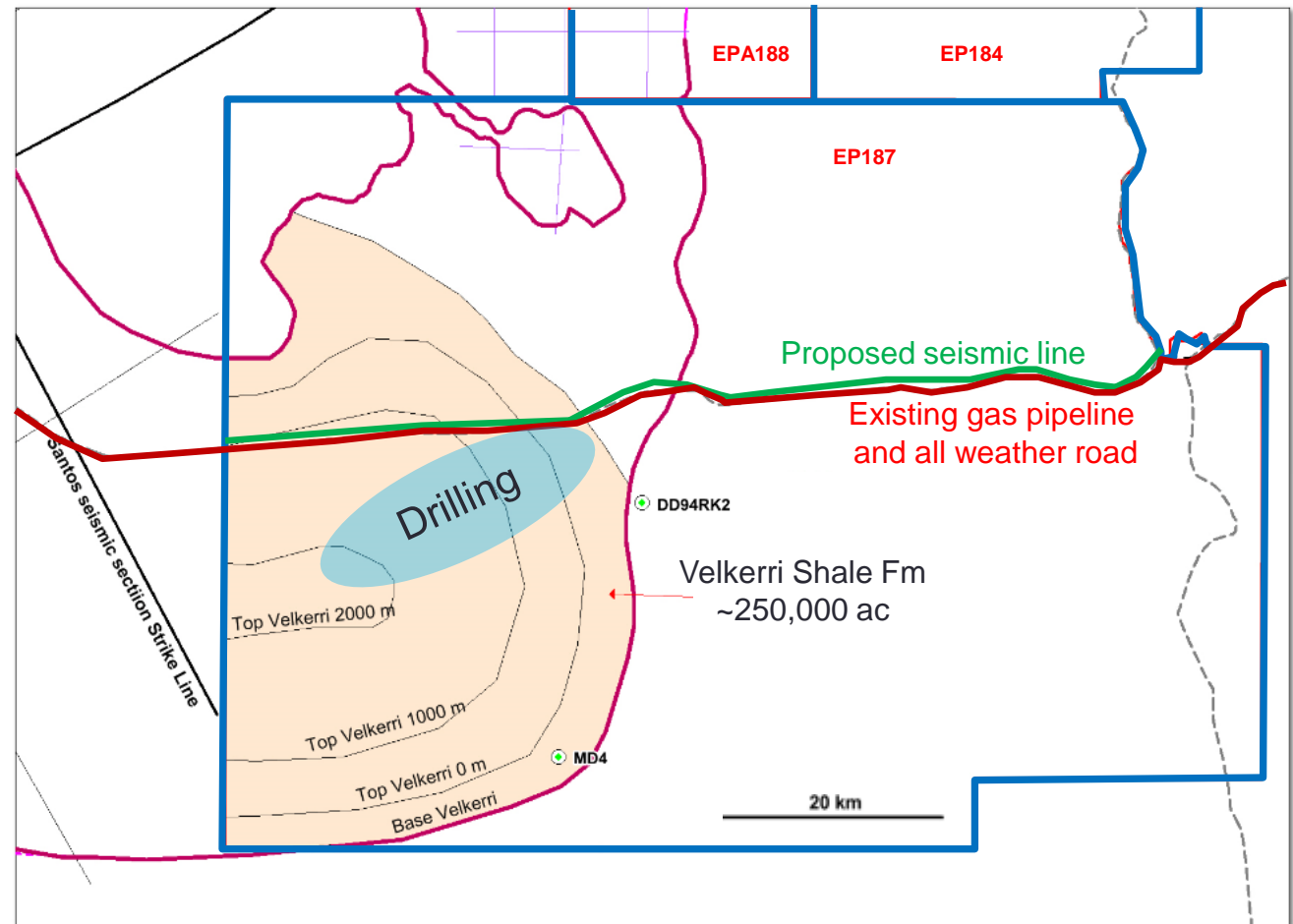
- Major project status by NT Government
- Australian Federal Government support with \$5bn in infrastructure loans offered (pipelines/roads etc)
- Abundant local infrastructure including major highways, pipelines and redevelopment of Gove Port
- Interconnector pipeline to East Coast LNG plants tendered in 3Q2015
- **LNG plants + Darwin + East Coast seeking natural gas supply from 2016?**



# Short Term Potential - Velkerri

Prospective Resource P(50) = 1.2Tcf + 174MMBO\*

- Seismic to confirm basin architecture
- Velkerri ~3,300ft thick, & Mid Velkerri carbonaceous unit ~250ft thick
- Stratigraphic wells to evaluate and then confirm source & design
- Appraisal and/or production wells in proximity to gas pipeline



\* The estimate of Prospective Resources must be read in conjunction with the cautionary statement on page 5.





# Lease Summary

	ACTION / TENEMENT	180, 181, 182	183	184	187	188
TO NEGOTIATIONS	Application granted			✓	✓	✓
	Exploration licence granted	✓	✓	✓	✓	
	Traditional owner negotiations completed	✓		✓	✓	✓
	Traditional owner approval	✓		✓	✓	✗ <sup>(1)</sup>
	NLC Approval or Expected Approval	2H15	2016	✓	✓	
TENEMENT ACTION	Risk Segment Mapping	✓	✓	✓	✓	✓
	Potential Petroleum Targets	✓	✓	✓	✓	✓
	3D Mapping	✓	✓	✓	✓	✓
	Geologic Control	✓	✓	✓	✓	✓
	Research Report	✓	✓	✓	✓	✓
	Annual Report - work program	n/a	n/a	✓	n/a	n/a
TO AGREEMENT	Landowner cost on defined work program (2)			✓	✓	
	Northern Territory Royalty	10%	10%	10%	10%	10%
	Landowner Royalties - oil production			✓	✓	
	Landowner Royalties - gas production			✓	✓	

## Notes to table:

- (1) Due to recent senior Tribal Owner death, tribal ownership arrangements being discussed at which time it is expected Imperial will finalise negotiations
- (2) Based on a notional 10% well head value and valorem type royalty with deductions for certain expenses including transportation costs. Typically this reduces the valorem royalty to ~7% to 8% of well head value



# Reserves Information



## Notes to Reserves

- The scope of the Reserve Studies reviewed basic information to prepare estimates of the reserves and contingent resources.
- The quantities presented are estimated reserves and resources of oil and natural gas that geologic and engineering data demonstrate are “In-Place”, and can be recovered from known reservoirs.
- Oil prices are based on NYMEX West Texas Intermediate (WTI).
- Gas prices are based on NYMEX Henry Hub (HH).
- Prices were adjusted for any pricing differential from field prices due to adjustments for location, quality and gravity, against the NYMEX price. This pricing differential was held constant to the economic limit of the properties.
- All costs are held constant throughout the lives of the properties.
- The probabilistic method was used to calculate P50 reserves.
- The deterministic method was used to calculate 1P, 2P & 3P reserves.
- The reference point used for the purpose of measuring and assessing the estimated petroleum reserves is the wellhead.
- “PV0” Net revenue is calculated net of royalties, production taxes, lease operating expenses, and capital expenditures but before Federal Income Taxes.
- “PV10” is defined as the discounted Net Revenues of the company’s reserves using a 10% discount factor.
- “1P Reserves” or “Proved Reserves” are defined as Reserves which have a 90% probability that the actual quantities recovered will equal or exceed the estimate.
- “Probable Reserves” are defined as Reserves that should have at least a 50% probability that the actual quantities recovered will equal or exceed the estimate.
- “Possible Reserves” are defined as Reserves that should have at least a 10% probability that the actual quantities recovered will equal or exceed the estimate.
- “Bbl” is defined as a barrel of oil.
- “Boe” is defined as a barrel of oil equivalent, using the ratio of 6 Mcf of Natural Gas to 1 Bbl of Crude Oil. This is based on energy conversion and does not reflect the current economic difference between the value of 1 Mcf of Natural Gas and 1 Bbl of Crude Oil.
- “M” is defined as a thousand.
- “MM” is defined as a million.
- “MMBoe” is defined as a million barrels of oil equivalent.
- “Mcf” is defined as a thousand cubic feet of gas.
- All volumes presented are net volumes and have had subtracted associated royalty burdens.
- Utica shale gas potential resources have only been calculated for the region where drill data is available. Very few wells have been drilled into the Utica in Western NY and NW Pennsylvania. Estimates for GIP have been made were the few existing wells have been drilled. Empire holds additional acreage outside the current potential resource region. It is expected that as with shale characteristics, the shale formations will continue within the remaining acreage. The potential GIP should increase if more data was available.

## Qualified petroleum reserves and resources evaluators

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

Name	Organisation	Qualifications	Professional Organisation
Allen Barron	Ralph E Davis Associates, Inc	BSc	Society of Petroleum Engineers
William Kazmann	LaRoche Petroleum Consultants, Ltd	MSc	Society of Petroleum Engineers
John P Dick	Pinnacle Energy Services, LLC	BPE	Society of Petroleum Engineers
Wal Muir	Muir and Associate P/L	BSc,MBA	Petroleum Exploration of Australia