

ACHIEVING SIGNIFICANCE IN THE OIL & GAS INDUSTRY PRESENTATION – EXCELLENCE IN OIL & GAS



EMPIRE ENERGY GROUP LIMITED

www.empireenergygroup.net

March 2013

Disclaimer



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Competent Person Report

For Empire Energy, the information in this presentation which relates to reserves is based on information compiled by Ralph E Davis Associates Inc, Houston, Texas and LaRoche Petroleum Consultants, Dallas, Texas who are certified professional engineers with over five years experience and are qualified in accordance with the requirements of ASX Listing Rule 5.11. Neither Ralph E Davis Associates Inc., LaRoche Petroleum Consultants nor any of the their employees have any interest in Empire Energy or the properties reported herein.

Empire Energy - Overview

1. Appalachian Basin – USA (97% sub¹)

- Producing conventional gas
- Significant unconventional opportunity in both the Marcellus and Utica Shale
- ~287,300 gross acres (~99% working interest)
- 2. Mid-Continental USA (97% sub¹)
 - Producing oil
 - Arbuckle / Lansing Kansas City / Mississippian
 - 21,000 gross acres (~96% working interest)

3. McArthur Basin – NT (100% sub – Imperial Oil & Gas)

- Unconventional & conventional opportunity
- Oil, condensate & gas
- 14.6mm gross acres (100% working interest)
- Negotiations with Traditional Land Owners progressing
- 4. Offices
 - USA Operations: Pittsburgh
 - Empire Energy Group: Sydney

(1 increasing to 100%, 10% warrants issued to Macquarie Bank in 2008)



Empire – Operations & Assets



1 Conventional E&P	2 Unconventional Shale	3 Unconventional Shale
Operations USA	Basins USA	Basin Australia
 Production ~ 310,000 acres Producing ~1,380 Boe/d Operating +2,200 oil & gas wells 2P = 11.3 MMBoe EV/2P = \$8.14 /Boe R/P = 22.3 years Long life, slow decline oil and gas Low production risk Op EBITDAX 2012¹ = US\$15.1 mm EV/EBITDAX 2012¹ = 7.2x EBITDAX/Interest 2013 = 6.0x 2P PV10 = \$139 mm Strategic hedging Low cash flow risk 	 Marcellus Shale ~231,000 acres Possible Reserve/Resource = +70 mmBoe (on 100,000 ac) Subject to New York fracking moratorium Development asset, not an exploration play Utica Shale ~142,000 acres Resource P50 = 4.6Tcf GIP (on 40,000 acres) Subject to New York fracking moratorium Development asset, not an exploration play 	 Barney Creek/Valkerri Shale 14.6m acres Targeting the organic rich black oil and gas shales Multiple stacked plays in both shales and reservoir formations Proven hydrocarbon system Objective – multi mmbbls / Tcfs Exploration asset with substantial potential upside Majors moving in on large scale unconventional plays in Australia

Conventional - key objectives



- Empire's conventional E&P operations:
 - Operator of all assets
 - Target 5,000 boepd
 - Incremental growth at marginal G&A cost
 - Reduce current lifting costs (excluding taxes):
 - > Oil: \$22.47 / Bbl
 - > Gas: \$1.73 / Mcf
- Growth:
 - Drill bit: +10 new wells over next 12 months
 - Acquisitions Retain Mid-Con focus KS,OK,TX Panhandle
 - Credit Facility US\$150mm, drawn to \$49mm

Conventional Assets



- Steady state performance from existing assets
- Production growth through drilling
- Assume 2x Mid-Con 'bolt on' acquisitions in 2Q and 4Q 2013



Six Monthly Cashflow

Conventional - Reserves



	Oil (Mbbls)	Gas (mcf)	Boe (Mbbls)	Cashflow	NPV at 10%
Resources and reserves				US\$	US\$
Proved Developed Producing	3,370	34,260	8,288	\$212,678	\$93,262
Proved Developed Non- producing	226	339	283	\$14,211	\$5,666
Proved Undeveloped	566	130	588	\$29,443	\$15,420
Total Proved	4,162	34,729	9,158	\$256,332	\$114,348
Probable	867	7,576	2,130	\$73,332	\$24,771
Total Proved and Probable	5,029	42,305	11,288	\$329,664	\$139,119

Significant and growing resource base

¹4.9 mmboe considered contingent reserve due to prevailing natural gas price at time of reserve estimate.



2P Reserve growth over the past five years (mboe)¹

Conventional - E&P operations



Long life, slow decline reserves

- Hedge up to 80% of production.
 - Gas to 2018, \$5.33 av
 - Oil to 2017, \$89.07 av
- ~80% of debt paid within 5 years.
- No cash calls against negative hedges.
- Interest rate hedging facility available.
- R/P = 22.4 years.
- > Leads to free long term cash flow.

600 500 **Kansas** 400 000 Boe pa 300 200 **New York** 100 PA 0 01/2008 01/2009 01/2010 01/2011 01/2012 01/2007 01/2013 📓 KS PA 📔 NY

E&P operations have very low production and cashflow risk

2 Unconventional – Marcellus Shale

- ~231,000 gross acres
- WI = 99%
- ~94.5% of acreage HBP
- Majority leases in oil/wet gas zone
- Possible Reserve / Resource = +70 mmBbls recoverable
 - Assumed 3% recovery factor
 - Based on 100,000 acres
- Fracking Moratorium currently in place in NY State



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Unconventional – Utica Shale

- Utica higher carbonate/less clay than Marcellus (similar to Eagle Ford)
- ~142,000 gross acres
- ~65.6% of leases HBP
- Leases across all maturation zones
- Thickness = 200-300ft
- Gas Resource P50 GIP = 4.6 Tcf
 - Based on 40,000 acres
 - Or, ~190 MMBoe recoverable
- Fracking Moratorium currently in place in NY State







3 Australian Shale Basins – Activity





McArthur Basin - Unconventional

- 14.6 mm acres (59,000km²)
- Held by 100% sub., Imperial Oil & Gas
- Proven hydrocarbon system in Basin
- Conventional & Unconventional targets
- At least 6 target formations
- Barney Creek up to 900m thick
- Economic fracking depths
- Traditional Owner agreements ~2Q13
- Seismic & drilling targeted for 2013





Why the McArthur Basin?



- Barney Creek & Valkerri Fms are proven oil & gas prone source shales
- Multiple stacked plays in both shales and reservoir formations
- Whole Basin Opportunity with three distinctive Troughs:
 - Walker Fault in North (100%)
 - Urapunga Fault in Centre (100%) Batten Fault in South (~50%)
- Well control through:
 - many mineral wells drilled
 - prior petrologic studies showing source quality & maturity
- Pipeline access
- Reservoir permeability proved by:
 - Amoco: GRNT -79-9 (1979)



5/03/2013





Unusual thickness in target formations

Parameter	Marcellus Basin USA	McArthur Basin Prospective NT			
Target	Marcellus Shale	Barney Creek only			
Area	60.5mm ac	6.5mm ac			
Shale Depth	Up to 3,000 m	Up to 3,500 m			
Thickness	10 – 110 m	10 – 900 m			
Average TOC	3 – 12 %	0.4 – 7.0 %			
Gas-in-Place	2,070 Tcf	TBD			
Recoverable Resources	415 Tcf	TBD			

On a volumetric basis the Basins may be similar in size

	0	ę					Oil & gas potential			al			
Age	Group	Absolu	Lithology	/ Stratigraphy		Thickness	Source	Source Gas		Unconventional reservoir	Conventiona reservoir		
				Char	mbers River Fm	<300 m							
-	Ь			Ę	Kvalla Mb	ca 250 m				11111111			
rozo	Ц		<u>5165</u> 23)	E E	Sherwin Mb	up to 100 m		•	•	///////////////////////////////////////			
rote				Ň	Moroak Mb	2.5-6 m			•				
P-P	ř				Velkerri Fm	330->600 m				///////			
Mes	Ц		<u>100-000</u>	Bessie	Creek Sandstone	20-367 m		-		///////////////////////////////////////			
	L				Corcoran Em	180-225 m							
					Abner Fm	80-500 m							
		1402 + 4 Ma		0	Crawford Fm	0-235 m							
		1492 ± 4 Ma 1493 ± 4 Ma			Mainoru Fm	ca 130->1000 m							
	-			Lim	nen Sandstone	20-100 m		-	-				
	-	1589 ± 3 Ma		Du		<240 m		-	-				
	atha	1609 ± 3 Ma 1613 ± 4 Ma	a farma	Sm	the Sandstone	<100-250 m		-	-				
	ž		7,77	Ka	rns Dolostone	100-250 m		-	-				
		1614 ± 4 Ma	TT		Amos and	20 -1440		-					
			111	Lool	king Glass Fms	30-<140 m							
		1625 ± 2 Ma		Stre	tton Sandstone	<5-270 m							
		1636 ± 4 Ma	1 D		Yalco Fm	<50-250 m		_	0				
				E.	Donnegan Mb	0-140 m					_		
			10	Ϋ́́Ε	Hot Spring Mb	50-350 m			-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	н				Caranbirini Mb	0-300 m		•		///////////////////////////////////////			
			10	Re	ward Dolomite	30-350 m	_	•	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	Ť	1640 ± 4 Ma		Bar	rney Creek Fm	10-900 m		•					
	ſ		111	Cox	co Dolomite Mb	15-70 m		٠					
	E	1641 + 4 Ma			Tere Dolemite	-5-270 m							
			TTO	Emm	erugga Dolomite	ca 620 m							
				1	Nyrtle Shale	40-60 m							
zoic			····	Le	ila Sandstone	<10-30 m							
eroz			<u></u>	To	oganinie Fm	ca 200 m							
Prof		1641 ± 4 Ma		lato	ola Sandstone	80-350 m		-	-				
-00			1	An	nella Dolomite	50-180 m		-	-				
Pala				Mact	anapunyan Fin	100-ca 450 m		-	-				
	-		~~	Fo	ho Sandstone	265-365 m		-	-				
				Bur	ash Sandstone	<370 m							
		1708 ± 5 Ma		N	Iyanantu Fm	ca 450 m		-					
		1713 ± 7 Ma	R. C.C.C.C.	Tanu	imbirini Rhyolite	ca 450 m							
				Warra	mana Sandstone	>250 m						1.11	
			a starter	Packsa	addle Microgranite								Sandstone-dominated unit
		1723 + 4 Ma	LANK W	Hobb	lechain Rhyolite	70-100 m							Black shale-dominated unit
	ah		F143	Gold	Creek Volcanics	15-230 m		-	_				
	Tawall	1723 I 4 Ma		Wo	ollogorang Fm	>350 m							Sandstone- and siltstone-dominated unit
			E.E.E.S	Settlem	ent Creek Dolerite	100-200 m						1.1	Sandstone- and dolomite-dominated unit
				Wumum	mantyala Sandstone	<800 m						1	Delomite-dominated unit
				A	quarium Fm	>200 m						1	
				Sly C	creek Sandstone	ca 320 m						0.0	Conglomerate- and sandstone-dominated unit
			1.1.1	Μ	cDermott Fm	ca 200 m							-
			L73	Se	igal Volcanics	225-1100 m						1 million	Igneous-dominated unit
				Yiyi	ntyi Sandstone	<4000 m						· ^ ·	Volcanic dominated unit
			0.000	vvestmor	reland Conglomerate	<1900 m						4	voicanto-dominated unit



3 Analogue – Lena-Tunguska Basin



- Proterozoic Basin
- Gas & Oil Shales (source rocks):
 - Black, bituminous, limy, silty carbonaceous
 - Average TOC = 0.2%, locally 5-10%
- Conventional dolomite reservoirs
- 25 hydrocarbon discoveries
- 12Bnbbl oil & 980Tcg gas discovered, plus remaining shale resources
- Predicted 2020 production 300mmBbl + 1.6Tcf

Empire Energy – Value Proposition



Appalachia (NY) McArthur Basin (NT) Appalachia (gas), **Unconventional Conventional/Unconventional** Mid Con (oil) Conventional Operator Operator Operator Proven hydrocarbon system Oil Poss/Res: +70mmBbls Production @1,380Boe/d drilling plus acquisitions Multi MMBbl / Tcf targets Gas Resource: +4.6Tcf 2P: 11.3mmBoe (TO Agreement phase) (Fracking Moratorium) **Development Production Exploration** 7x Field EBITDA = \$126.0 mm 250 mmBoe @ \$?/Boe, or Cheapest entry into Australian PV10 (2P) = \$139.0 mm 200.000+ac @ \$?/ac Shale Basin @ est. \$1.00 /ac EV = \$92mm Mkt Cap= \$49mm

Corporate Snapshot



•	Ticker	ASX:EEG OTCQX:EEGNY
	Shares Issued	305 million (Insiders 11.4mm)
•	Options Outstanding	13.9 million (Insiders 13.9mm)
•	52 week range	US\$0.10-\$0.33
•	Current Share Price	US\$0.16
•	Market Cap	US\$48 million
•	Debt	US\$49 million
	Enterprise Value	US\$92 million
•	Av. Daily Trades (90 days)	ASX: 470,000 shares
•	Available Credit Facility	+US\$100 million (Acquisition/development)
•	Major Shareholder	Macquarie Bank Limited 17.6%

Senior Management - USA



Bruce McLeod – Executive Chairman & CEO, Empire Energy Group - extensive experience in the Australian Corporate and Resource Capital markets. Over the past 25 years he has been involved in the acquisition and rationalisation of listed and unlisted companies, as well as raising debt and equity capital for projects and companies. Prior to this he spent six years with a major international bank where he was Executive Director, responsible for the financial and capital markets operations. Formed Empire Energy in late 2006 and is responsible for US operations.

Al Boyer – SVP & COO, Empire Energy E&P - involved in the natural gas business for +40 years. Operates over 40 privately owned wells. In early 2000's involved in a well drilling program (200 wells in 20 months) and the consolidation of field operations for Somerset Oil & Gas Inc until its takeover by EOG Resources. Has drilled 1,000's of wells in western PA, NY, OH and WV.

Rob Kramer – VP, Mid Continent Operations, Empire Energy E&P - responsible for the Company's Mid-Continent operations. Prior to joining Empire Energy Rob was a Completions and Production Engineer for Anshutz Exploration Corp, USA. Prior to that Rob played a key role in the establishment of Sanjel (USA) Inc in the Mid Continent where he was Lead Engineer for well design including cementing, fracturing, acidizing as well as coil tubing operations. Rob began his E&P engineering career with Schlumberger where he was a Field Engineer for Well Stimulation Services.

Tim Hull – VP, Appalachia Operations, Empire Energy E&P – responsible for Appalachian operations. Tim has been involved in all aspects of the oil and gas exploration, production and transportation sector in North Eastern USA for over 25 years. He is a director member of IOGA (New York) and is actively involved in working with Townships, Counties and the State to ensure the approval of fracking in Western New York State.

Tony Crisafio – Contract CFO, Empire Energy E&P - serves as an independent financial consultant, providing financial oversight to the Company. Tony is also a Director of PDC Energy Inc, an oil and gas company with operations in the Appalachians, Michigan and the Rocky Mountain Region. Prior he was a Partner with Ernst & Young.

Bob Gustafson – Financial Controller, Empire Energy E&P - responsible for the company's accounting activities. Bob has over 20 years of oil and gas industry experience. He began his career with Gulf Oil and was previously the Controller for Columbia Energy Services.

Management & Research - Australia



Bruce McLeod – Executive Chairman & CEO, Empire Energy Group - Formed Empire Energy in the USA in late 2006 and developed the company's Australian shale strategy over 2009/10.

Dr John Warburton –Director & CEO Imperial Oil & Gas Pty Ltd - 27 years of technical and leadership experience in International Petroleum E&P including 11 years with BP and 4 years as General Manager Exploration & New Business for LASMO-ENI in Pakistan. John's petroleum expertise covers the Middle East, Kazakhstan, Azerbaijan, North & West Africa, Pakistan, Europe, Australia, New Zealand, PNG, SE Asia, China, Korea and Japan. He has published 28 internationally recognised technical articles with particular focus on petroleum exploration in complex fold and thrust belts.

Geoff Hokin – **Exploration and Operations Manager, Imperial Oil & Gas Pty Ltd -** 9 years experience as a field geologist in the unconventional gas and coal sectors, with various senior geologist roles including Armour Energy Limited, Metgasco Limited and Arrow Energy Limited. Extensive geological and business experience in other operations.

<u>Australian Shale Research Group (ASCS)</u>, University of Adelaide, SA – Imperial Oil & Gas has entered into a Research Agreement with ASCS to provide geological and engineering services for Imperial's exploration leases in the McArthur Basin.

- Professor Martin Kennedy Heads up the ASCS. Professorships in geology & geochemistry, University of Adelaide and California. Expertise in carbonate systems & controls of organic rich source rocks. Previously 12 years at a research position at the Exxon-Mobil Upstream Research Company. Recent research on nano - scale processes that control porosity, TOC and frackability in unconventional reservoirs. Members of the ASCS group include:
- Dr Paolo Abballe Full time Imperial Oil & Gas Project Leader focused on geochemistry, sequence stratigraphy and field work
 interpretation. Extensive experience with a marine geology background with specific expertise in compound specific isotope
 values of organic carbon in sediments.
- Dr Rosalind King Structural styles & well log records
- Dr Simon Holford Basin scale computer hydrocarbon system models
- Dr Stefan Loehr Research Associate, micro-beam analysis of shale, clay, mineralogy/geochemistry
- Mr Tony Hall Laboratory Manager, Organic & isotope geochemistry
- Ms Elizabeth Baruch (PhD candidate) Unconventional exploration program specialist at Conoco-Phillips



Glossary



Abbreviated terms used in this presentation have the following meaning:

Term	Abbreviation
Barrel of oil equivalent per day	Boe/d
Barrel of oil per day	Bbl/d
Earnings represents net income (or loss) before interest expense, income taxes, depletion, amortisation, development and exploration expenses – detailed descriptions of Empire's policies with reporting earnings are provided in its 2011 Annual Report and 2012 Half Yearly Report.	EBITDAX
Revenue from oil and gas production less production, property and severance taxes and lease operating expenses, before field and corporate general administrative costs, non recurring expenses, delayed rental payments, land costs, interest expense, income taxes, depletion, amortisation, development and exploration expenses – detailed descriptions of Empire's policies with reporting earnings are provided in its 2011 Annual Report and 2012 Half Yearly Report.	Field EBITDAX
Exploration and production	E&P
Gas in place	GIP
Millions of barrels of oil	MMbbls
Millions of barrels of oil equivalent	MMboe
Net present value discounted at 10%	PV10
Millions of cubic feet of natural gas	MMcf
Oil in place	OIP
Proved and probable reserves	2P reserves
Proved and probable reserves Trillion cubic feet	2P reserves Tcf