



High impact drilling in a low oil price world

Your attention is drawn to the disclaimer and footnotes
at the end of this presentation

Highlights and summary

- Drilled two transformative wells in East Texas
- Both wells are geological successes
- Well 1 (VOBM#1) West AA Discovery, Polk County:
 - Flow tested at c.1,500 boepd – commercial success
- Well 2 (VOS#1) LP2 Offset Discovery, Tyler County:
 - Positive log result, net pay potential significantly exceeding original LP2 Well
 - Secondary Austin Chalk target confirmed
 - Third potential reservoir encountered. Flowed gas and oil
 - Flow testing planned for week commencing 14th December
- Compelling economics: not shale, no fracking, easy access to market⁽¹⁾
- Per well capex and opex estimated to be below \$5/boe⁽¹⁾
- Potential 150mmboe recoverable P₅₀ resource attributable to Pantheon from five identified prospects



- *Pantheon's acreage lies in East Texas: highlighted areas are existing industry Austin Chalk discoveries*
- *Pantheon Resources (ticker: PANR) has been listed on AIM since 2006*

Corporate Overview

Corporate

Shares in Issue	196,356,396
Share options (£0.30)	10,000,000
Share Price	£1.19
Market Cap	£232m
2015 G&A	£0.78m

Highlights

- Pantheon is a 50-50 partner in the Joint Venture with Vision Gas Resources LLC
- Vision is jointly owned by Bobby Gray and George Kaiser, President and CEO of Kaiser Francis Oil
- The JV agreement covers five areas in Tyler and Polk Counties, East Texas

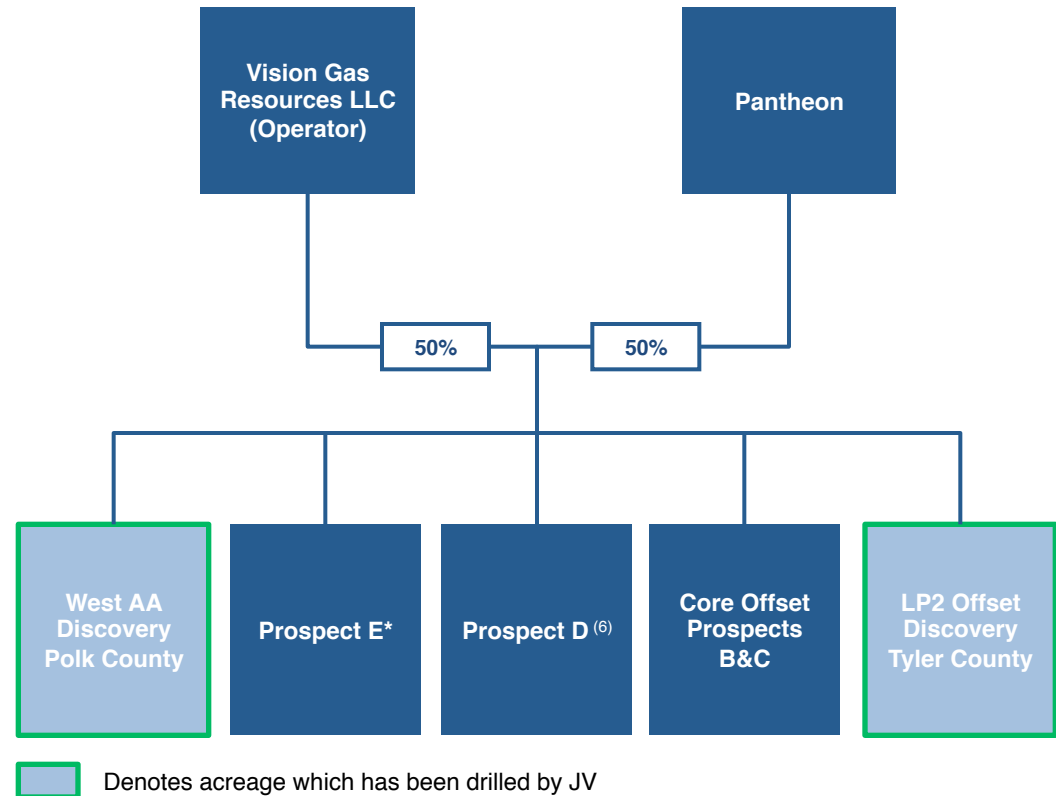
JV Partners

Bobby Gray – Managing Partner of Vision. Forty years as an oil and gas independent in Texas and Louisiana. Operated in Tyler and Polk Counties for more than 25 years.

George Kaiser – President and CEO of Kaiser Francis Oil Company. Number 118 on the Forbes Rich List. Majority owner Bank of Oklahoma. Active in the Gulf Coast E&P for 40+ years. Majority owner Cactus Drilling Company.

- the JV has a 25% working interest in Prospect E
- ⁽⁶⁾ refer to footnotes on slide 18

JV Structure



Overview of joint venture acreage*

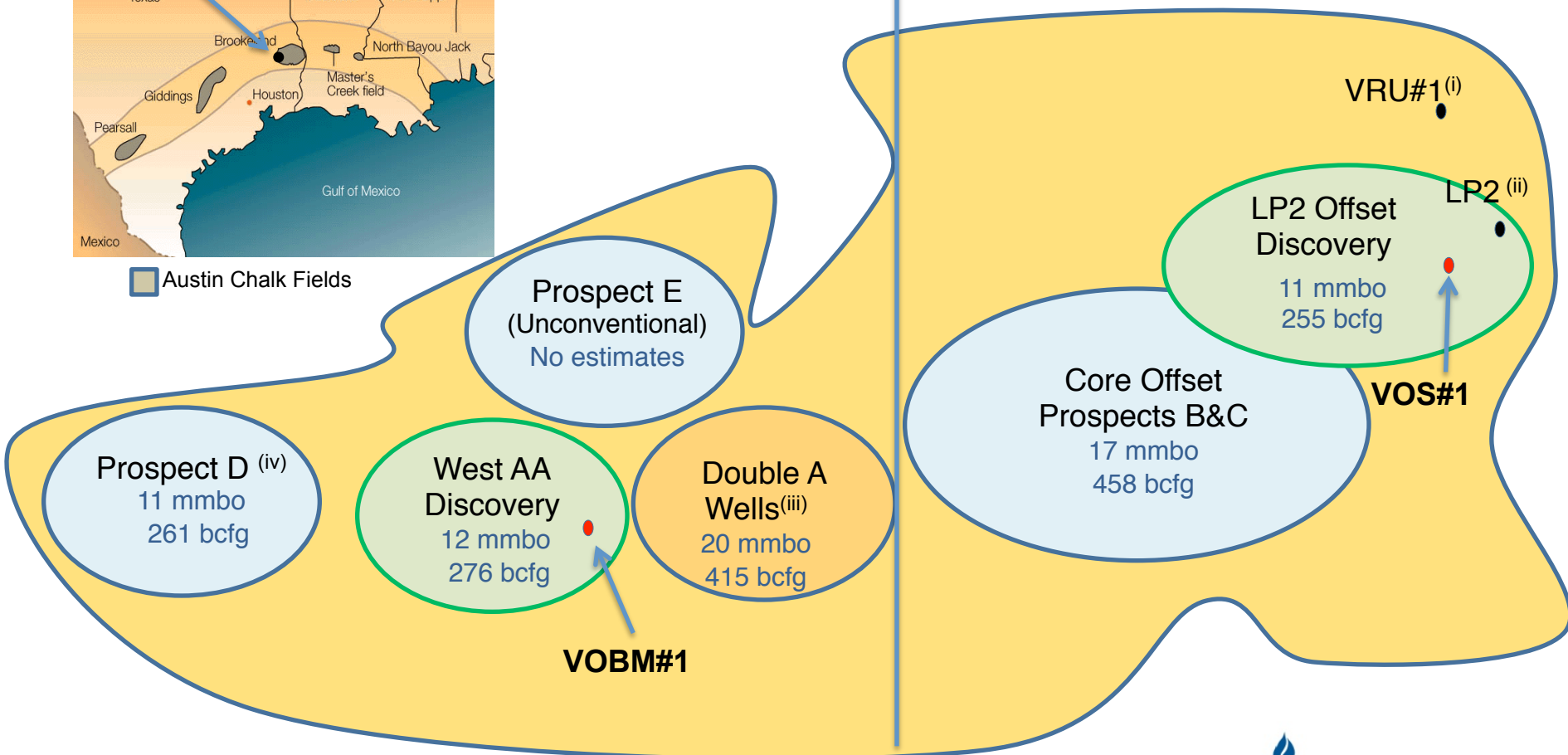
JV Acreage



■ Austin Chalk Fields

Polk County

Tyler County



*For illustrative purposes only NOT to scale or direction

(i) Geologic success well. P&A for mechanical reasons

(iii) Well drilled by Vision pre JV not included in current JV

(ii) JV has no interest in Double A wells field

(iv) Refer to footnote 6 on slide 18



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Primary target: Woodbine Eagle Ford sandstone

Unique understanding of the geology

- Three-year study with the independent State of Texas Bureau of Economic Geology at University of Texas, Austin
- Completed in 2014, and we believe the largest ever Woodbine/Eagle Ford study ⁽²⁾
- Analysed >2,500 individual wells, >2,600 miles of 2-D seismic, 119 sq miles of 3-D seismic
- Covered Double A Wells field, surrounding & regional acreage
- LP2 well has produced +US\$30m revenue to date ⁽³⁾
- Two wells confirm understanding of the geological model

Study conclusions

- JV acreage has five lookalike prospects with very similar seismic signatures to on-trend Double A Wells field
- JV acreage has the potential to equal 3+ Double A Wells fields (recoverable) on P50 estimates⁽⁵⁾



Independent petroleum geologist Art Berman: “Excluding a project in offshore Gulf of Mexico, this [Eagle Ford/Woodbine play] is possibly the most exciting project I have seen in a decade!”

17 April 2012

Secondary target: Austin Chalk

A history of success

- Potential for up to 42 Austin Chalk wells on the JV acreage
- Considered a development play by the operator
- Low geological risk. 93% of wells drilled on neighbouring acreage have produced commercially ⁽²⁾
- Austin Chalk production heavily front end loaded
- Potential material value to Pantheon even in today's depressed Natural Gas environment
- Presence confirmed by VOS#1 well in LP2 Offset Discovery

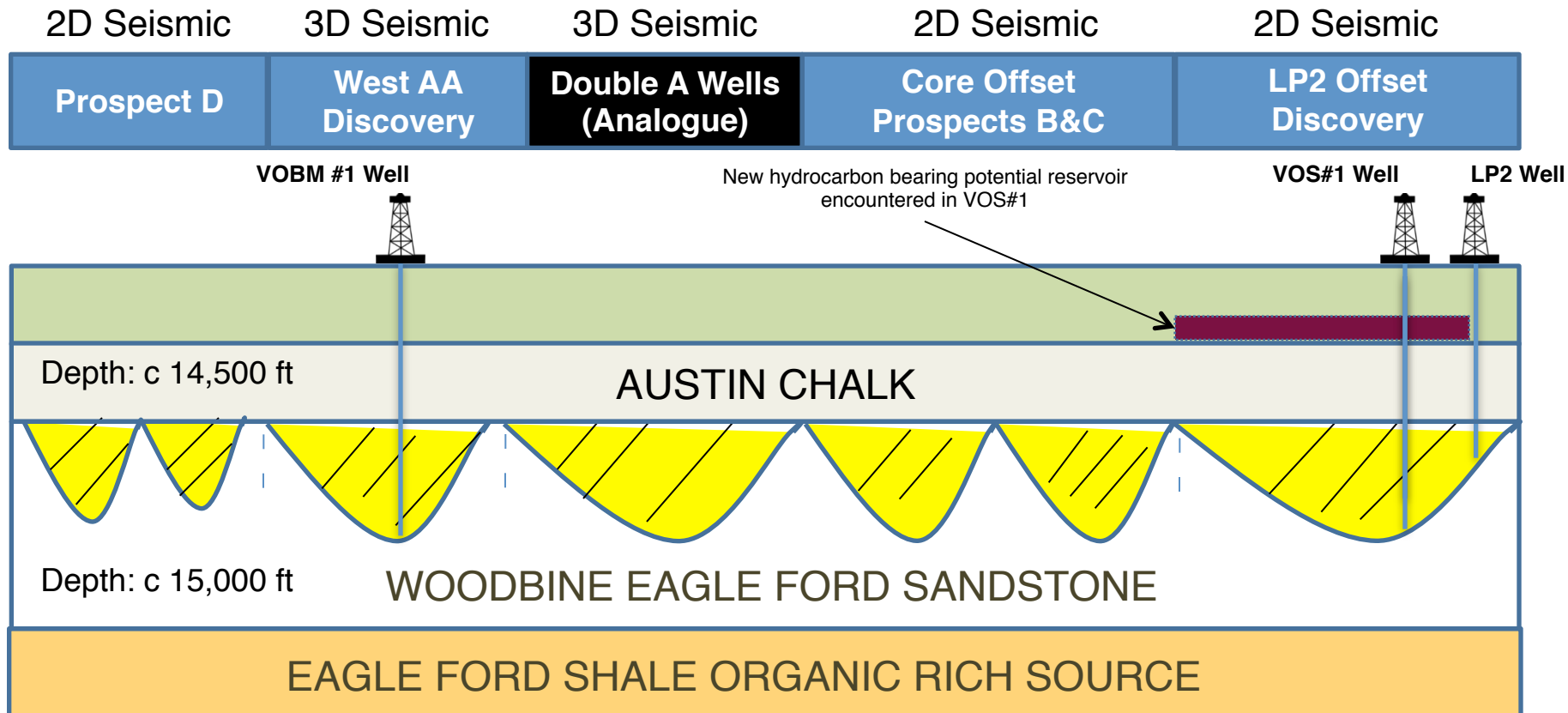
Per well potential economics (management estimate)

Gross revenue ⁽¹⁾	\$21.1 million
Net revenue ⁽²⁾	\$12.7 million
Drilling costs	<u>\$ 5.0 million</u>
Net cash flow	\$ 7.7 million

Notes to estimates

- Assumes \$40/bbl oil and \$2.50/ mcf dry gas. Modelled per well recoveries: 190,000 bbl & 5 Bcfg
- Net revenue is after deducting royalties, production tax and operating costs.
- Royalty and other costs approximated at 40%

Geology schematic*



Notes

- Schematic is for illustrative purposes only
- Not representative of geologic proximity or direction

Double A Wells field

- 20 million barrels of condensate & 415 bcf natural gas produced to date
- JV has 0% interest in the Double A Wells field

Prospective recoverable P50 resource estimates

	Oil Mmbo	Gas Bcf	Combined Mmboe	Potential vertical wells
LP2 Offset Discovery	11	255	53	Up to 34
West AA Discovery	12	276	58	Up to 37
Core Offset Prospects B&C	17	458	93	Up to 61
Prospect D ⁽⁶⁾	11	261	54	Up to 35
Austin Chalk ⁽¹⁾	8	210	43	Up to 42
TOTALS	59	1,460	301	Up to 209

Notes to table

- These are estimates of the gross P50 prospective resource (100% working interest)
- Pantheon has a 50% working interest = half the prospective reserves
- Natural gas converted to boe on ratio of 6mcf: 1boe

Source

Resource estimates by Art Berman, an independent petroleum geologist with more than 30 years of experience

2015 Drilling to date

Polk County

- VOBM#1, West AA Discovery completed as a commercial discovery
- Flow tested unstimulated at +1,500 boepd through 12/64 inch choke (4.76mm)

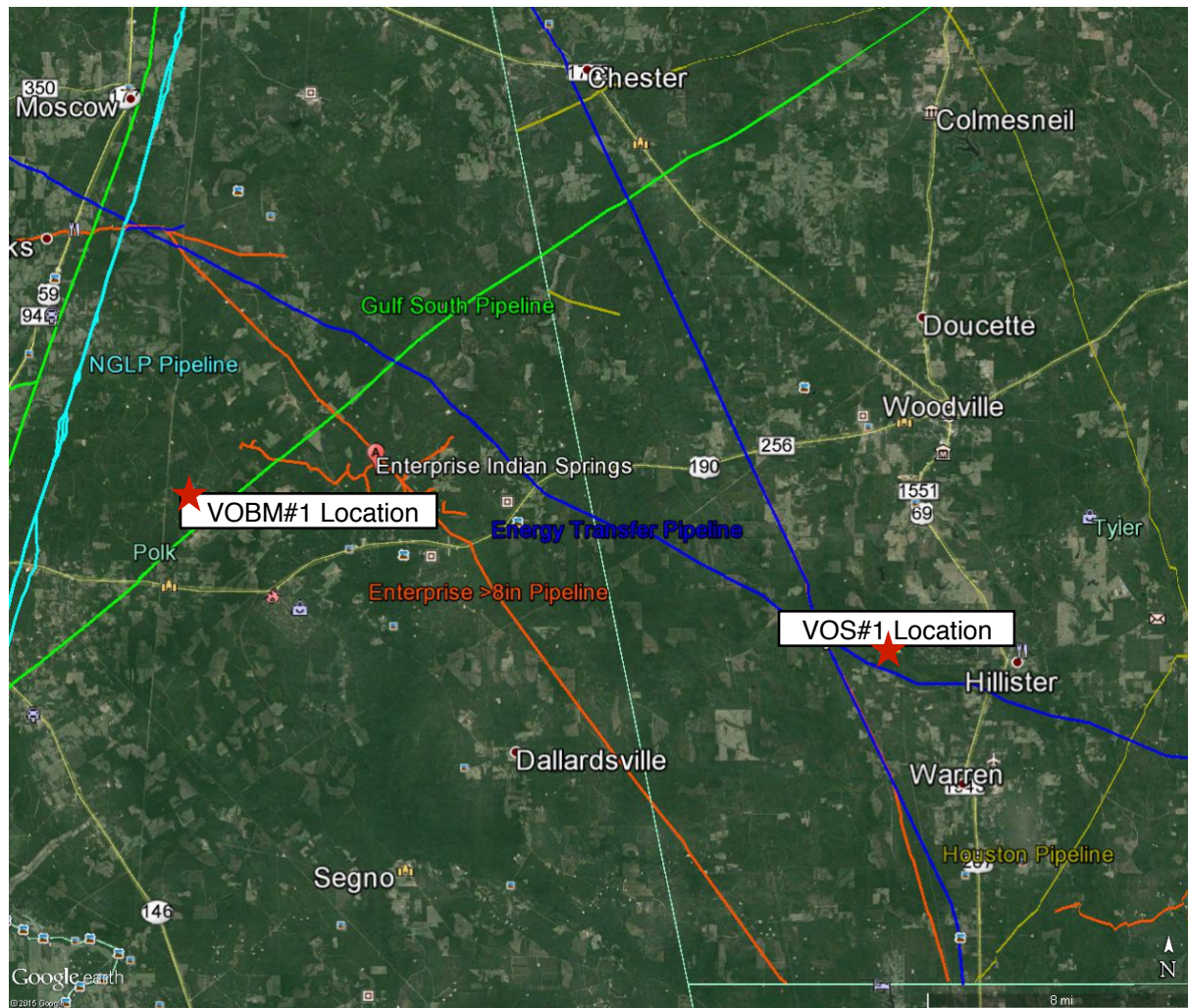
Tyler County

- VOS#1, LP2 Offset Discovery, well has returned encouraging log test results
- Flow testing expected to commence week of 14 December
- Austin Chalk (secondary target) - also confirmed to be present in well
- Encountered additional potential reservoirs above Austin Chalk

Conclusion

- Two positive well results from two *different* mini basins in two *different* counties on two *different* seismic programmes
- Confirms JV understanding of geological model
- Potential for c.160 Eagle Ford wells on JV acreage

INFRASTRUCTURE MAP



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Logistics and infrastructure: easy to develop

Future development

- Production profile is front end loaded
- Individual P_{50} well payback period = 5-6 months⁽¹⁾
- Potential to self-fund entire development in success case ⁽⁴⁾
- Possibility of multi well drilling programme
- Horizontal drilling could significantly increase per well NPV⁽¹⁾

Route to market

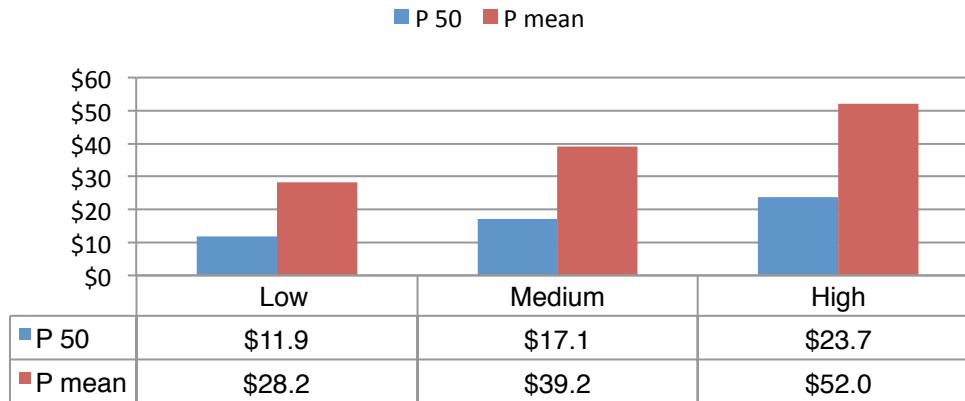
- Acreage is ideally located in close proximity to abundant infrastructure
- Oil can be trucked to local pipeline or refinery
- Gas can be piped to three nearby gas plants, tied into major U.S. trunk lines to North East USA
- Revenues receivable within 60 days of hookup

Assumptions

- Well cost US\$4.5 million
- Oil price US\$40/bbl, gas price US\$2.50/mmbtu
- Modelled P50 well

Per well NPV scenarios

Per well NPVs (\$m)



Source

Internal company projections, unaudited, illustrative only, drilling success case

Note re NPVs

NPVs are for 100% working interest: Pantheon has 50% working interest. Modelled well cost = \$4.5m

Potential no of wells (best case = maximum)

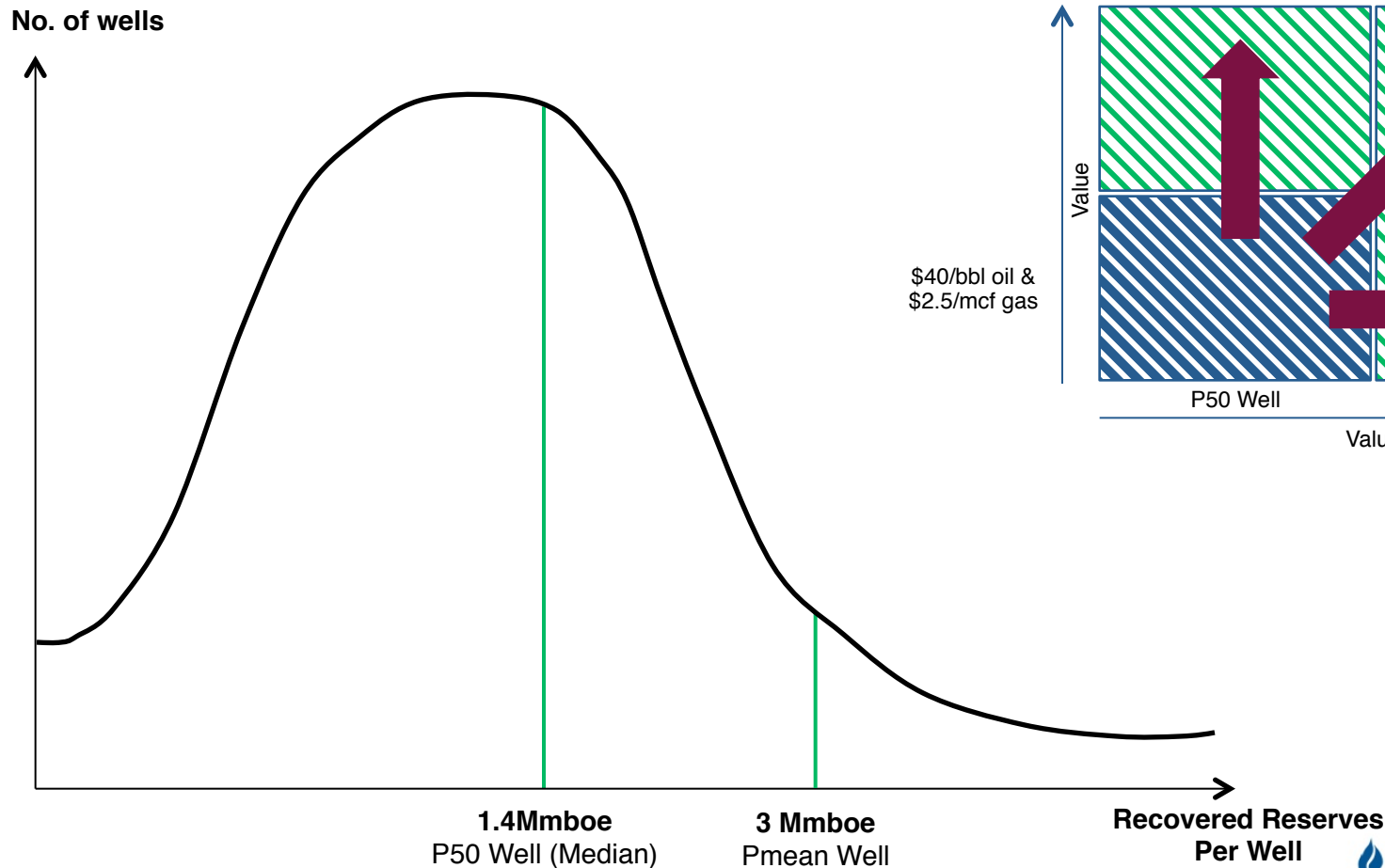
West AA	37
LP2 offset	34
Core offset	61
Prospect D	35
Other	42
TOTAL	209

Price and cost assumptions

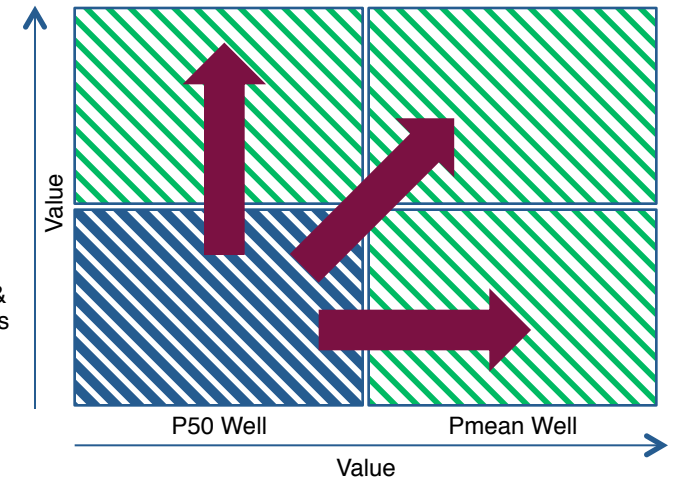
- Low case: \$40 oil + \$2.50 gas
- Medium case: \$60 oil + \$3.00 gas
- High case: \$75 oil + \$4.00 gas
- Operating costs < \$1/boe (management estimate)

P50 vs Pmean Upside

Illustrative Per Well Recovery Distribution



Potential Value Upside



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Summary

- Successful drilling programme
 - two out of two discoveries
 - potential to beat expectations with VOS#1 test and unexpected zone
- Significant progress towards de-risking of the acreage portfolio
- Potential for substantial further growth and value
 - even in a depressed oil and gas market
 - geared to geological and market upside

Appendices

Further information

- Management biographies
- Eagle Ford Sandstone Potential
- Footnotes
- Disclaimer

Management

Jay Cheatham (CEO)

Chemical/petroleum engineer. 40 + years of experience in E&P. Family business (independents) prior to joining ARCO. At time of BP's US\$26.8bn acquisition of ARCO Jay was a senior executive, heading up ARCO International (responsible for all operations outside USA). Prior to that he led all ARCO exploration and production for USA (Gulf Coast)

Justin Hondris (Finance Director)

Banking & financial background. Prior to Pantheon Justin was a London based partner in a private equity firm. Before that institutional equities adviser for Cazenove & Co., London, with a general focus on natural resources

John Walmsley (Chairman)

30+ years of experience in E&P sector. Previously MD of Hardy Oil & Gas, FD of Enterprise Oil and before that a partner at Arthur Andersen & Co. Presently Chairman of Consilience Energy Advisory Group

Eagle Ford sandstone potential

Outstanding geological features

- Conventional cretaceous channel sandstone reservoirs, analogous to Gulf of Mexico
- Existing sandstone reservoir discoveries have extremely high flow and recovery rates
- Prospects are in direct communication with the Eagle Ford shale source rock
- Previous discoveries have demonstrated outstanding porosity (< 25%) and permeability (< 550mD)
- LP2 well on JV acreage has produced >US\$30million revenue from Woodbine/Eagle Ford sandstone since 2004 ⁽³⁾

Footnotes to slides

- (1) Management estimate based on a modelled successful P50 well type
- (2) Operator estimate
- (3) Pantheon has no interest in the LP2 well as it was discovered in 2004, prior to Pantheon's participation in the JV
- (4) Directors opinion based on a number of factors including, but not limited to, commodity prices, per well recoveries and number of wells drilled
- (5) Estimates of recoverable resource prepared by Art Berman an independent petroleum geologist with more than 30 years experience in the sector
- (6) In respect of this prospect, the grantor of the underlying leases retains an option to participate on a ground floor basis in wells drilled on the underlying land or lands pooled with that land for up to a 25% working interest (proportionately reduced to the mineral interest of the grantor in the relevant well or unit)

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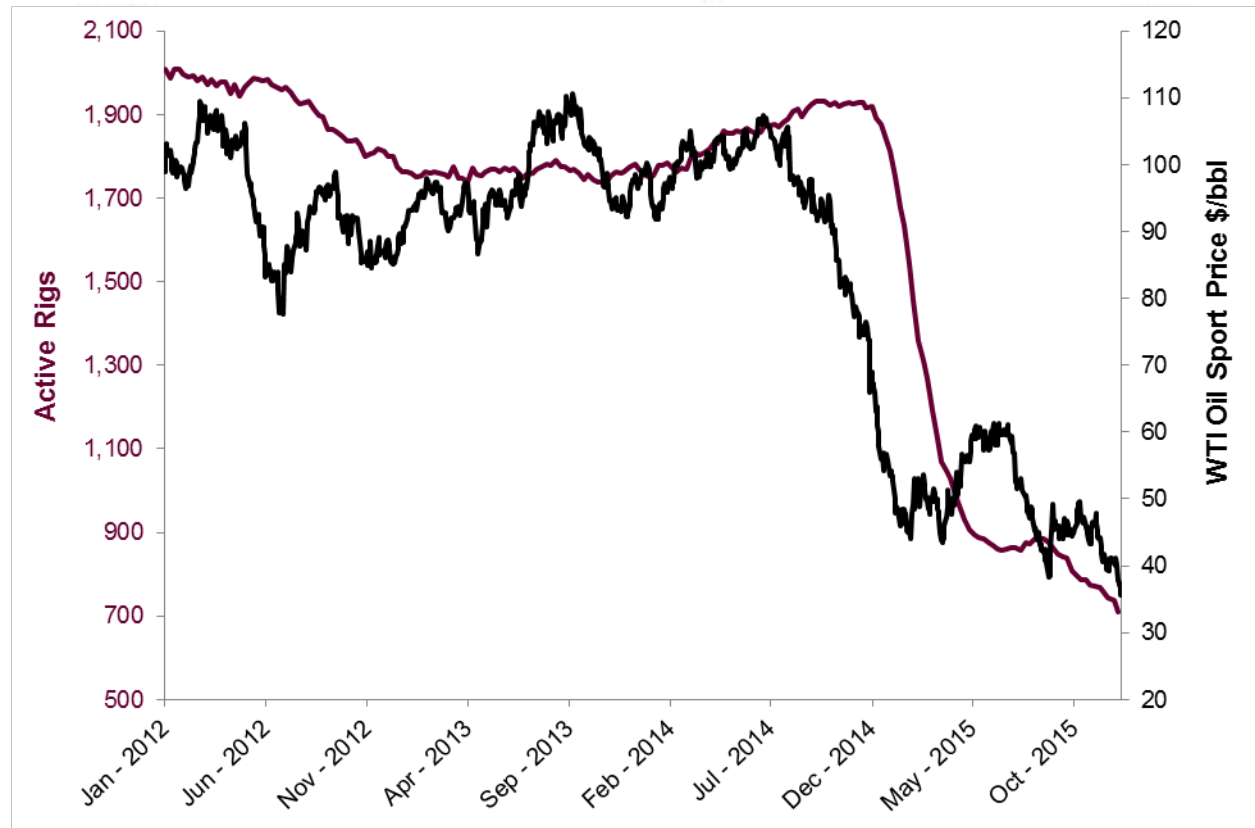
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US oil market

- Rig count has fallen by more than 60% since mid 2014
- Pressure on shale and other high costs producers intensifying
- US oil output now close to peak and turning

U. S. Rotary Rig Count
Total Active Rigs



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Sources: Baker-Hughes, Energy
Information Administration (DOE),
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