# Pantheon Resources Plc Presentation

June 2019



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### **EXPERIENCED BOARD & MANAGEMENT**



#### **BOARD & MANAGEMENT<sup>(1)</sup>**

#### Phillip Gobe - Chairman

+40 years' experience in the sector. Non-exec director of the S&P 500 Pioneer Natural Resources and Scientific Drilling International Inc, the 5th largest provider of directional drilling & measurement equipment and operational services in USA. Formerly head of Prudhoe Bay operations in Alaska for ARCO.

#### Jay Cheatham - Managing Director

Petroleum Engineer. +40 years' experience. Ran family E&P business prior to joining ARCO. At time of BP's \$30bn acquisition Jay headed up ARCO International (responsible for all operations outside USA). Prior to that he led ARCO exploration and production for USA (Gulf coast).

#### Robert Rosenthal - Technical Director

Geologist +40 years' experience. Founding Manager of Great Bear Petroleum. Ex BP (Global Consultant - Exploration worldwide). Expert in seismic stratigraphy and high tech geophysics

#### **Justin Hondris –** Director, Finance & Corp Development

Banking & financial background with over 20 years' experience including roles in institutional equities and private equity

# Patrick Galvin - Chief Commercial Officer & General Counsel Alaska

Former Alaska State Commissioner of Revenue, Former Petroleum Land Manager for the Alaska Dept of Natural Resources, overseeing the State's oil and gas leasing program. Former partner at K&L Gates.

#### Mario Traviati - Advisor to the Board

Previous head of Asia Energy research for Merrill Lynch. +35 years working, analysing & funding oil and gas projects, Founding Manager Great Bear Petroleum, previous Woodside Petroleum

#### **Thomas Michael Duncan - Vice President Operations**

Professional Engineer, licensed in Alaska with experience and expertise in conventional and unconventional reservoirs throughout North America

#### Ed Duncan - Senior Geoscience Consultant

Founder Great Bear Petroleum, Geologist +37 years experience

#### **TECHNICAL PARTNERS**

#### **Sierra Hamilton**

One of the world's largest providers of outsourced engineering and on-site supervision services to the oil and gas industry. Recently contracted to Pantheon as a technical team to enhance geological and operational capabilities

#### eSeis Inc.

A pioneer in the use of Seismic Petrophysics / High Tech Geophysics for the petroleum industry. Deep experience in Alaska

#### **Bureau of Economic Geology, University of Texas at Austin**

Research collaboration on East Texas Assets

# INTRODUCTION & OPPORTUNITY Investment Opportunity



- Appraisal of the large Alkaid/Phecda and Talitha discoveries<sup>(1)</sup>
  - Alkaid/Phecda 90-135 mmbbl recoverable resource potential (Brookian)
  - > Talitha Appraisal 90-135 mmbbl recoverable resource potential (Brookian), plus 373 mmbbl potential in Talitha Exploration
  - Aim to drill both wells in winter/spring 2019/2020, subject to successful farm out
- Farmout process to commence summer 2019
  - Seeking material up front payment and a carry on future drilling
  - Pantheon has already been approached by interested parties
- ➤ Alkaid/Phecda adjacent to infrastructure. Allows accelerated development options
  - Targeting first production 2020/2021<sup>(2)</sup>
- East Texas sidetrack to VOBM#1 well that tested at 6000mcf/d and 500bopd
  - Purchase 3D seismic to mature drilling locations
  - Abundant infrastructure discoveries can be brought on stream guickly
  - East Texas provides cash flow base for the Company with the potential to grow
- Alaska and Texas combined targeting 1.2-1.3 billion barrels recoverable resource of oil on current acreage<sup>(1)</sup>
- (1) Estimates of P50 Technically Recoverable Resource stated on a 100% basis, before royalties. (2) Subject to successful farm in.

# INTRODUCTION & OPPORTUNITY High level overview



- > Operator and major working interest holder in two onshore USA projects Alaska & East Texas
- ➤ Alaska<sup>(1)(2)</sup>
  - Discoveries and exploration potential over c.200,000 acres (gross) in close proximity to Trans Alaska Pipeline System (TAPS)<sup>(3)</sup>
  - > Recent Alkaid success significantly boosts discovered resources & increases confidence in understanding of subsurface geology
  - > Two discovered oil accumulations at Alkaid and Talitha
  - > 1.8 billion barrels of discovered Oil in Place at Alkaid/Phecda & Talitha Appraisal—subject to further appraisal & testing
  - > Recoverable resource potential estimated at 180 270 million barrels of oil ("mmbo") adjoining pipeline and highway<sup>(1)</sup>
  - Delineated Talitha Exploration potential from proprietary 3D seismic of 1.7 billion barrels oil in place
  - Farm out process to commence shortly; seeking material up front payment and promoted drilling terms
  - Alaska North Slope crude oil has recently sold at a significant premium to WTI, currently c.\$10/bbl
- ➤ East Texas<sup>(2)(4)(5)</sup>
  - ➤ Six wells drilled by Pantheon all discovering oil and gas
  - Project targeting 139 mmboe P50 Technically Recoverable Resources. Renewal of certain leases could increase this to 225mmboe.
  - Three wells on extended production test generating modest cashflow
  - Production infrastructure in place
  - > Detailed technical analysis underway to implement development plan
  - Additional 3D seismic analysis to better define subsurface
  - > Agreement reached with Bureau of Economic Geology to conduct detailed geological & production study
- (1) Subject to appraisal success (2) Estimates of P50 Technically Recoverable Resource stated on a 100% basis, before royalties (3) 175,000 acres in close proximity to TAPS (4) P50 Technically Recoverable Resource potential of acreage on a 100% basis. Unrenewed leases which remain available for renewal contain the potential to increase this to 225mmboe. Additional resource potential remains in other identified leases. Pantheon will continue to manage its leasehold interests strategically giving consideration to regional drilling activity and leasehold periods. There is no guarantee that unrenewed leases will be renewed or on what terms they may be renewed on. (5) Having paid 100% of all Vision costs for the past year, unless Vision can repay those costs *and* fund their pro-rata share of future drilling and operating costs, Pantheon may be entitled to default to an effective 100% working interest in the East Texas prospects.

# Alaska

Appraisal of Discoveries
High Impact Exploration



# PANTHEON RESOURCES PLC Alaska Overview



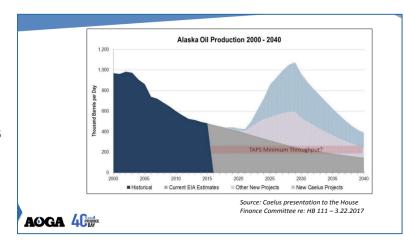
- Completed merger with Great Bear Ventures I and II (AKA "Great Bear Companies") in January 2019
- Great Bear Companies invested over \$200 million to date including drilling several wells and 3D seismic acquisition
- Current acreage c.200,000 gross acres
- Potential for 1.2-1.3 billion barrels of oil recoverable (1)
- > Acreage contains 2 discovery wells with 4 hydrocarbon bearing zones
  - > Alkaid (100% working interest) (2) Halliburton has a 25% back-in right
  - > Talitha (90% working interest) (2) drilled 1988 by ARCO
- Alkaid/Phecda discovery announced April 2019
  - Resource upgraded to 90-135mmbbl oil. Potential for further increases (3)
  - Seeking farm in partner for development. First production targeted 2020 / 2021
- ➤ Talitha appraisal well 90% working interest<sup>(2)</sup>. c.900 mmbo discovered oil in place<sup>(4)</sup>
- > Alaska North Slope crude oil has recently sold at a significant premium to WTI, currently c.\$10/bbl

(1) Estimates of P50 Technically Recoverable Resource state on a 100% basis, before royalties (2) Pantheon holds Great Bear leases which have royalty rates ranging from 12.50% to 16.6% and an overriding royalty interest of 1.61% on six of its leases. There is also a 1% ORRI royalty to eSeis. (3) Potential for improved recovery factors if secondary recovery techniques successfully used. (4) OIP Management estimate

### **ALASKA - WORLD CLASS OIL PROVINCE**



- Alaska North Slope ("ANS") offers offshore size oil discoveries located onshore USA<sup>(2)</sup>
- > ANS a proven a world class basin with 16.8 bn bbls produced & c.28 bn barrels remaining to be discovered<sup>(3)</sup>
- > AAPG describes ANS as "World class exploration play potential in newly proven stratigraphic play"
- Prospectivity recently upgraded by host of world class discoveries
- Recently recognised by IHS as "Super Basin" as defined by:
  - > basins that have multiple reservoirs and source rocks
  - > diverse play types across numerous geologic horizons
  - infrastructure with access to markets, and established service sector and supply chains
  - > Estimated 5 billion BOE in conventional remaining reserves and have already produced at least 5 billion BOE
- > Existing export infrastructure traverses Pantheon acreage enhancing commerciality
- > Favourable financing options for onshore, low sovereign risk oil projects in USA
- > Alaska North Slope crude oil sells at a significant premium to WTI of c.\$9.83/bbl(1)
- > Pantheon has host of discoveries & prospects with delineated drilling and testing locations
- Recent discoveries have dramatically changed forecast production profile<sup>(2)</sup>



## PANTHEON RESOURCES PLC: ALASKAN PORTFOLIO



### P50 Technically Recoverable Resource estimate (100% basis)

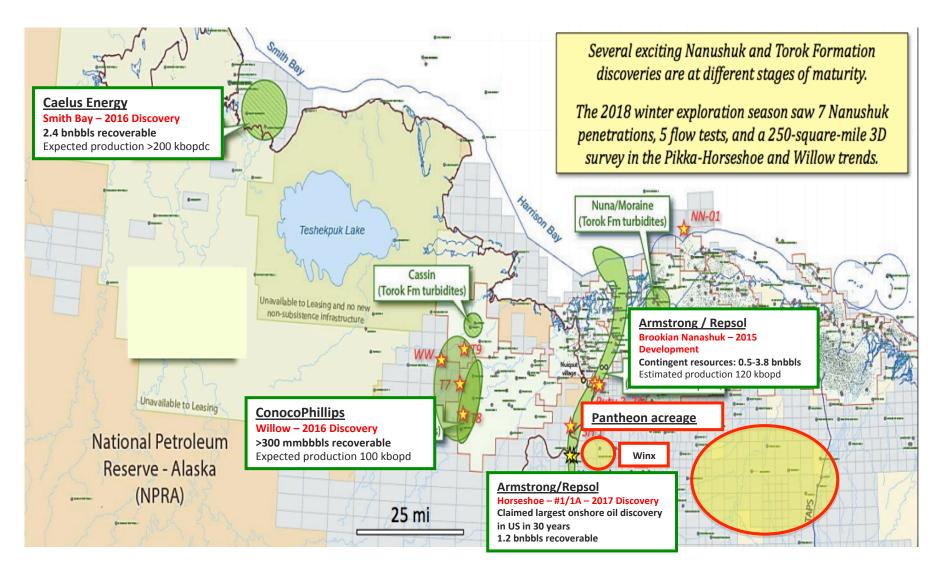
Anticipated Program <sup>(5)</sup>	Project		Oil in Place   Mmbl <sup>(7)</sup>	Recoverable Mmbl <sup>(7)</sup>	Possible Zones	GBP Interest <sup>(6)</sup>	
2020/2021 (1)	Alkaid & Phecda	Appraisal/Development	900	90-135	1		Confirmed Brookian discovery. Seeking farm in partner. First production possible 2020/2021
2019/2020	Talitha Appraisal	Appraisal	900	90-135	3	90%	Talitha's 3 Brookian zones contain 900 million bbls discovered OIP with estimated 10-15% recovery factor.
2021+	Talitha Exploration	Exploration	1743	373	2		1.7 billion bo (OIP) exploratory upside in 2 additional formations. (7)
2021+	Theta Exploration (Brookian Basin Floor Fan) <sup>(4)</sup>	Exploration	3790	600	2	90%	2 zones, Kuparuk & Brookian Basin Floor
2021+	Megrez Exploration <sup>(3)</sup> (Toe Thrust Anticline)	Exploration	396	59	1	40%	Toe Thrust Anticline prospect near pipeline & highway
Total barrels	(bn)		7.7	1.2-1.3	9		

Pantheon has over 1000 square miles of proprietary 3D seismic with a host of additional "leads" to be matured...

(1) Subject to successful farm out (2) Halliburton has a 25% back-in right, if exercised, Pantheon's working interest would reduce to 75% (3) The reduction in Megrez resource reflects acreage which has not been renewed (4) Refer to risk factors for detail on Theta (5) Anticipated drilling programme is for guidance only and subject to successful completion of a farm out and therefore subject to change (6) Pantheon holds Great Bear leases which have royalty rates ranging from 12.50% to 16.6% and an overriding royalty interest of 1.61% on six of its leases. There is also a 1% ORRI royalty to eSeis Inc (7) OIP Management estimate.

# PANTHEON RESOURCES PLC Recent activity in Alaska





"Repsol makes the largest U.S. onshore discovery in 30 years"
Repsol, 9 March 2017

1.2bnbbls recoverable

"Massive discovery breathes life into Alaska's North Slope" Wood Mackenzie, 21 March 2017

"Alaska North Slope a Super Basin ready for Oil Resurgence" IHS Markit, 21 Aug 2018

"The Nanushuk (Brookian) topset play provides Alaskan explorers with massive potential" Wood Mackenzie, July 2018

Pantheon acreage not to scale

# ALKAID CONFIRMS SIGNIFICANT OIL DISCOVERY (1) Resulting core business



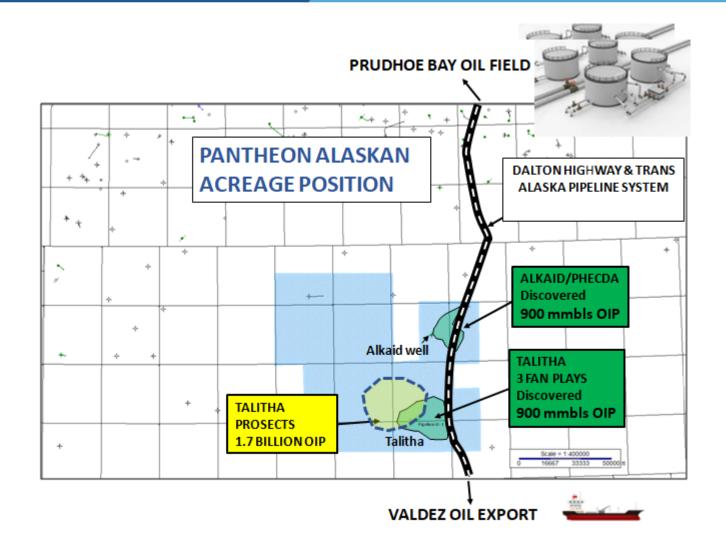
- Advantageous location located under and adjacent to the Dalton Highway and major pipeline (TAPS). Affords possibility of year round drilling
- > Upgrades adjoining Phecda prospect, now assumed to be part of one large structure with c.900 million barrels of oil in place (OIP) (1)
- ➤ High Tech Geophysics efficacy confirmed increases confidence in Brookian at nearby Talitha (1)
- > Alkaid encountered 240 feet of net oil pay in the Brookian section with no water contact and tested high quality oil (38-40 deg API)
- Vertical well tested averaged 100 bopd through small "through tubing" frac
- > Tested only 6ft from 240 ft net pay which is a fraction of ultimate well productivity
- ➤ Horizontal development wells estimated to produce +/- 1500 bopd with recoveries (EUR) of 1.5-2.5 million barrels oil per well (1)
- ▶ Primary recovery factors estimated at 10-15% could yield 90 -135 mmbls of recoverable oil (1)
- Secondary recovery (eg water flooding) where successfully used in analogous fields has 40% of OIP which adds major upside potential (2)
- High tech seismic clearly indicates better reservoir in heart of structure hence recoveries expected to increase
- Installation of Early production unit (EPU) with up to 5,000-10,000 bopd capacity is possible within 2 years to assist future development funding (3)
- Ultimately a Central Processing Unit with up to 50 production wells will be required for full development<sup>(1)</sup>
- Conceptual development plans indicate NPV's/bbl ranging from \$7-12/bbl (1)
- > The roadside location is ideal for year round "Phased Development" with minimal cost and early production potential (1)
- Close proximity to highway and pipeline significant advantages to other remote oil field developments on the ANS (1)
- First production possible Q3/Q4 2020 with a pilot production test (1)
- > Intention to farm out a working interest in Alkaid. Terms sought are for a significant up-front payment plus promoted drill costs

## PANTHEON'S OIL DISCOVERIES IDEALLY LOCATED FOR DEVELOPMENT



### Alkaid/Phecda & Talitha

Alaska North Slope crude oil has recently sold at a significant premium to WTI, currently c.\$10/bbl

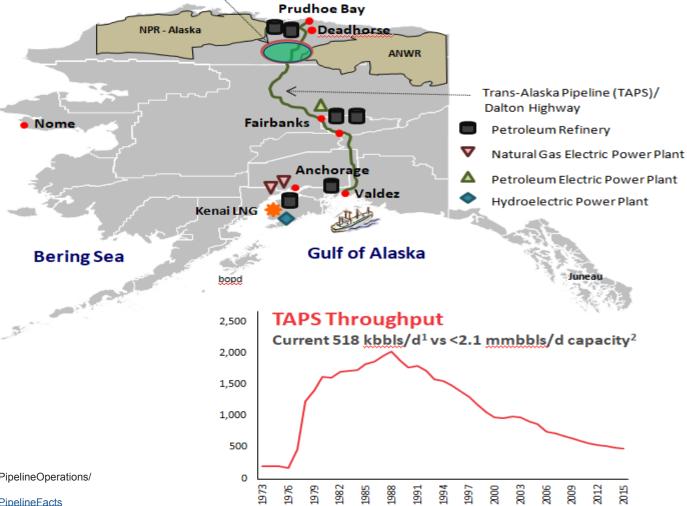


# PANTHEON RESOURCES PLC Alaska project ideally located for oil exploration/development & export

**Pantheon Focus Area** 



- Pantheon acreage location provides potential for rapid, low-cost development in event of a discovery
- Established vendor community in <u>Deadhorse</u>, Alaska, < 20 miles north
- Bisected by the Dalton
   Highway, simplifying logistics
   and lowering costs
- Bisected by the Trans Alaska Pipeline System, providing ease of access to existing underutilized infrastructure, and direct access to markets
- Potential for discovery/appraisal on the existing road system with yearround access to certain sites
- Strategic location minimizes environmental or permitting issues

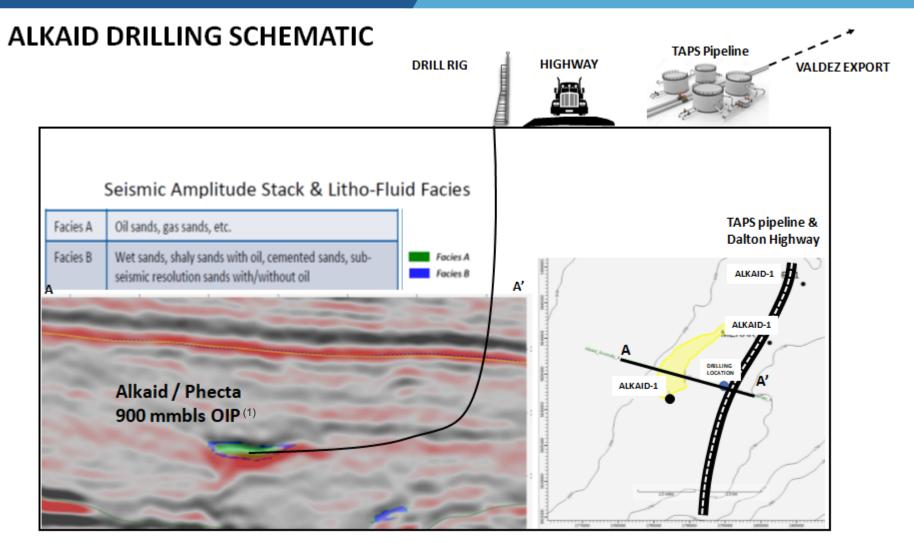


 $<sup>{\</sup>it 1.\ http://alyeska-pipeline.com/TAPS/PipelineOperations/} \\ {\it Throughput}$ 

<sup>2.</sup> http://alyeska-pipeline.com/TAPS/PipelineFacts

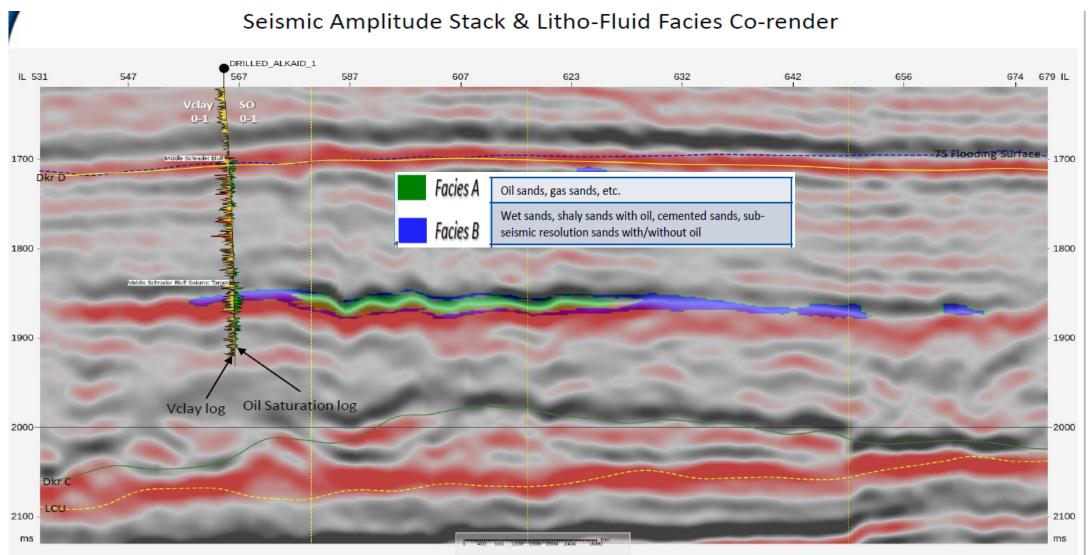
# ALKAID TARGETS OIL FROM HIGHWAY LOCATION Fast track production





# Alkaid test well location Drilled on edge of reservoir. Reservoir quality improves towards heart of reservoir (green)





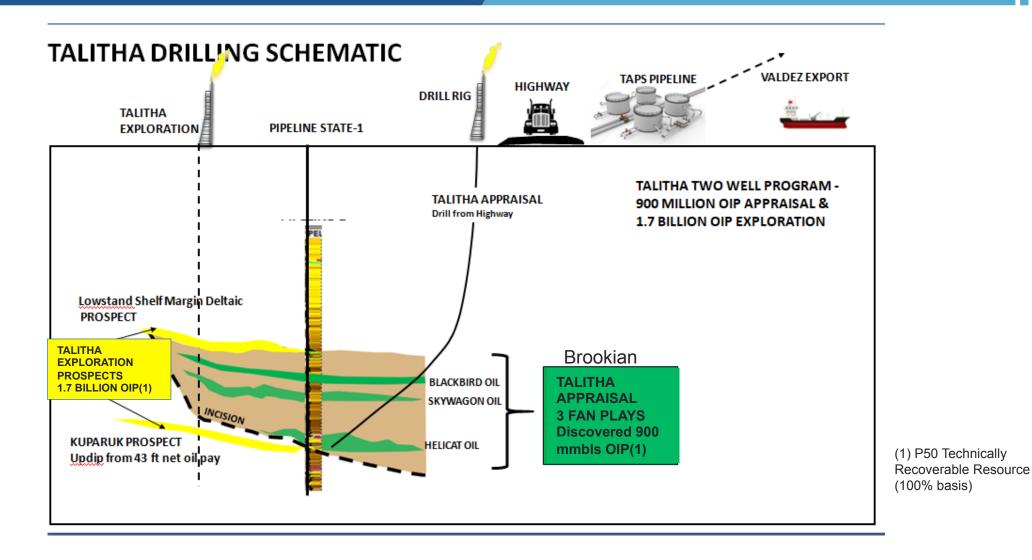
# TALITHA OIL ACCUMULATION Advanced technology and proximity to infrastructure enhances commercial potential



- Talitha discovery on Pantheon's acreage made by ARCO at Pipeline State #1 well drilled in 1988
- > Drilled in a depressed oil price environment
- ➤ Oil encountered in three main zones (all "Brookian Fan Systems") with c.900 million bbls of oil in place<sup>(1)</sup>
- Brookian stratigraphic oil is now the new major play AAPG
- > Drilling advances (for example horizontal drilling and fracking should enable economic development of these types of reservoirs)
- Two exploration objectives with 1.7 billion barrels of OIP (1) also located on Talitha structure
  - > Shallow shelf margin deltaic play analogous to Horseshoe discovery nearby
  - > A deeper updip Kuparuk play from 43 ft of net oil pay encountered in Pipeline State well
- High tech geophysics highlights the prospect as potentially oil bearing in certain formations
- Talitha oil in the fan systems can be accessed by roadside directional appraisal & development wells
- Ideal location for year round "Phased Development" close proximity to highway and pipeline
- Significant advantages over other remote oil field developments on the Alaska North Slope (ANS)
- Talitha exploration objectives of 1.7 billion barrels OIP would need vertical well from ice road location(1)(2)

# Talitha Appraisal of 3 Brookian oil zones from one deviated well on highway location Talitha Exploration vertical well from ice road location





# East Texas

Onshore conventional targets

Abundant infrastructure

Early cashflow potential



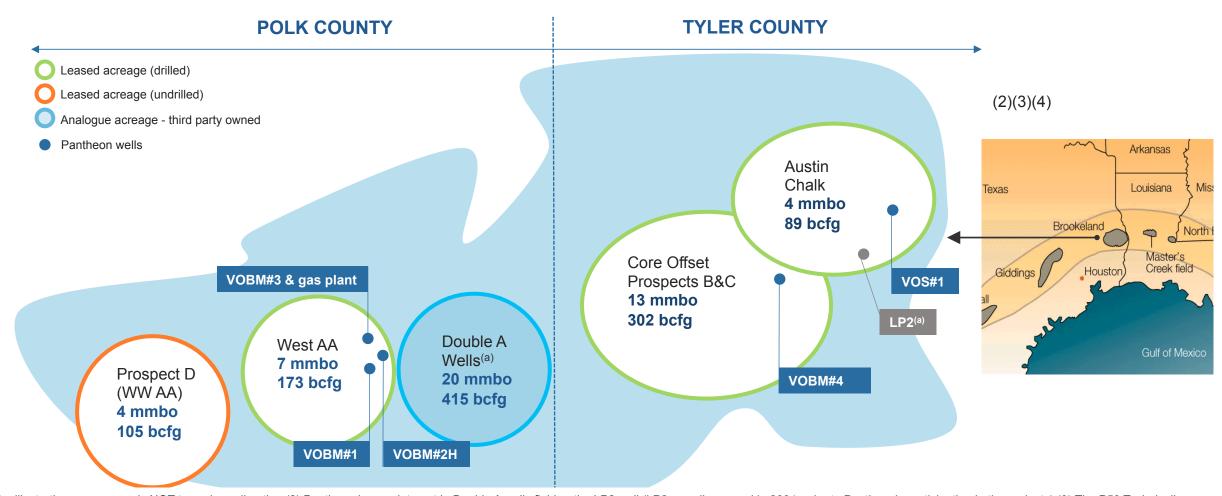
# PANTHEON RESOURCES PLC East Texas – 6 wells all encountering hydrocarbons



- Multiple play types discovered from the 6 wells drilled to date. All wells encountered hydrocarbons
- ➤ Modelled individual P50 well type = 1.4 mmboe. Potential for rapid paybacks (1)
- > 3 wells on intermittent long term production testing
- Potentially a large resource but geological understanding needs improvement before more drilling the unexpected death in 2018 of the previous operator has prompted a geological study and operational review
- > Re-engaged with experts at Bureau of Economic Geology, University of Texas, for technical study to enhance understanding
- Conventional targets with established infrastructure expediting development & cashflow
- > All discoveries with regional analogues nearby enhance development confidence
- Four main play types all flowing hydrocarbons
  - Eagleford Sandstone. The PANR discovery of West AA indicates the acreage contains potential multiple fields of Double A Wells size (415 bcf and 20 million bbls) (1)
  - Wilcox Formation flowed hydrocarbons during drilling VOBM#4 and VOBM#4 sidetrack wells. Is a prolific producer regionally. VOBM#4 log shows a significant Wilcox sand; if successful there is great potential relative to nearby fields
  - Austin Chalk Proven to exist on acreage and prolific regionally; primarily a natural gas play
  - Navarro Formation Potentially productive. Flowed hydrocarbons in VOBM#4
- East Texas has potential to provide an increasing cash flow base, initially through new drilling or a VOBM#1 sidetrack

# CORPORATE OVERVIEW OVERVIEW OF ACREAGE (1)



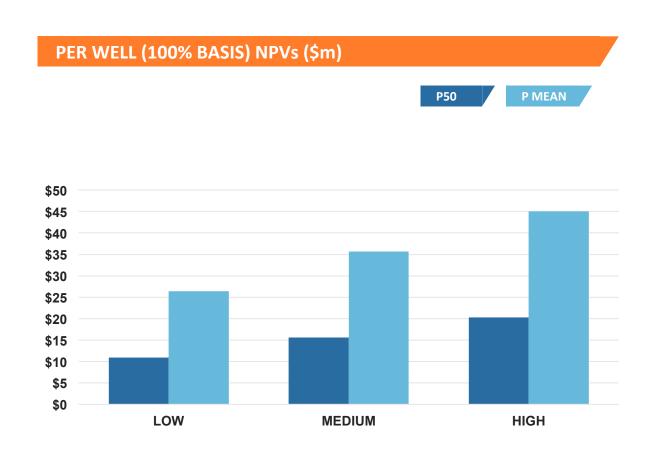


(1) For illustrative purposes only NOT to scale or direction (2) Pantheon has no interest in Double A wells field or the LP2 well (LP2 was discovered in 2004, prior to Pantheon's participation in the projects) (3) The P50 Technically Recoverable Resource currently under lease is 139mmboe. Having paid 100% of all Vision costs for the past year, unless Vision can repay those costs *and* fund their pro-rata share of future drilling and operating costs, Pantheon may be entitled to default to an effective 100% working interest in the East Texas prospects. Additional unrenewed leases which remain available for renewal contain the potential to increase this to 225mmboe. Additional resource potential remains in other identified leases. Pantheon will continue to manage its leasehold interests strategically giving consideration to regional drilling activity and leasehold periods. However there is no guarantee that these leases will be renewed or on what terms they may be available for renewal. (4) Estimates of P50 Technically Recoverable Resource stated on a 100% basis, before royalties.

# PANTHEON RESOURCES PLC MODELLED PER VERTICAL WELL EAGLE FORD ECONOMICS (ILLUSTRATIVE)(1)



Modelled P50 wells are extremely profitable with rapid paybacks Successful horizontal wells have the potential to be even better



# KEY DATA OUTPUT LOW MEDIUM HIGH P50 \$10.9 \$15.6 \$20.3 P MEAN \$26.4 \$35.7 \$45.0

Low Case \$40 oil + \$2.25 gas

Medium Case: \$50 oil + \$3.00 gas

High Case: \$60 oil + \$3.75 gas

CAPEX \$4.5m per Well

Medium Case P50 Well payback: 6 months
P50 Modelled Well: 1.4 Mmboe
P Mean Modelled Well: 3.0 Mmboe

(1) Management estimate based on modelled successful P50 well type, before corporate and land costs but after royalties and state production taxes. Natural gas is converted to oil equivalent on the basis of 6:1 (mcf:boe)

# **PANTHEON RESOURCES PLC East Texas Portfolio - Current Projects**



# P50 Technically Recoverable resource estimates

Project Area (1)	Includes	PANR Working Interest <sup>(2)</sup>	Oil Mmbo	Gas Bcf	Combined Mmboe	Potential vertical wells
West AA Discovery Polk County	VOBM#1 well	100%	7	173	36	Up to 23
Core Offset Prospects B&C Tyler County		100%	13	302	63	Up to 40
Prospect D Polk County		100%	4	105	22	Up to 14
Austin Chalk		100%	4	89	18	Up to 18
TOTALS			28	669	139	Up to 95

#### Notes to table

- These are estimates of the gross P50 Technically Recoverable resource
- Natural gas converted to boe at ratio of 6mcf:1boe
- Stated on the basis of a working interest of 100%, before royalties (2)

#### Source

Resource estimates prepared by Arthur Berman, a petroleum geologist with more than 30 years of experience. Estimates were prepared in September 2014 and updated in June 2019 and are based on modelled vertical drilling. The estimates provided including the estimated potential number of vertical wells is subject to change.

<sup>(1)</sup> Unrenewed leases which remain available for renewal contain the potential to increase this to 225mmboe. Additional resource potential remains in other identified leases. Pantheon will continue to manage its leasehold interests strategically giving consideration to regional drilling activity and leasehold periods, there is no guarantee that these leases will be renewed or on the terms on which they may be available for renewal. Excludes Wilcox and Navarro (2) Having paid 100% of all Vision costs for the past year, unless Vision can repay those costs *and* fund their pro-rata share of future drilling and operating costs, Pantheon may be entitled to default to an effective 100% working interest in the East Texas prospects.

# PANTHEON RESOURCES PLC Summary



- Substantial investment +\$260m in Alaskan and East Texas assets to date by Pantheon and Great Bear Companies
- > Targeting 1.2-1.3 billion<sup>(2)</sup> barrels P50 Technically Recoverable Resource
- ➤ A successful farm-out should lead to high impact drilling in 2019/2020 Alaskan winter
- First Alaskan production could be as early as 2020/2021 (subject to successful farm in) (1)
- Successful sidetrack well in Texas should substantially increase cashflow
- ➤ Objective to drill Alkaid/Phecda and Talitha 2019/2020 drilling season(1)
- ➤ High working interest positions in Alaska: 75% to 100%
- Strategy to continually manage acreage position

<sup>(1)</sup> Subject to a successful farmout to enable winter 2019/2020 drilling.

# Appendices



# WHY ALASKA? Alaska North Slope – Underexplored Proven World Class "Super Basin"

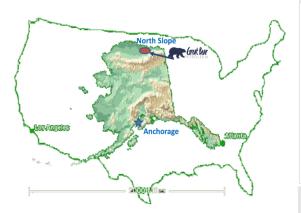


#### **Prolific Petroleum Province**

80bn discovered barrels<sup>1</sup> 17bn produced<sup>2</sup> 2 of top 10 producing US oil fields existing on North Slope<sup>3</sup> 10 fields over 100mmbbls<sup>4</sup>

- 2. http://alyeska-pipeline.com/TAPS/PipelineOperations/Throughput (1977-2016)





### 38 billion BOE in remaining recoverable resources

50 TCF gas and 28 billion barrels of oil<sup>6</sup>

1.IHS Markit: https://news.ihsmarkit.com/press-release/energy/ alaska-north-slope-super-basin-ready-oil-resurgence-oilproduction-expected-gro

### Ranked in 2013 as #1 in US for Conventional Oil Potential

56% of total estimated US conventional undiscovered resources are on North Slope<sup>7</sup>

7. https://certmapper.cr.usgs.gov/data/noga00/natl/graphic/2013/ mean conv oil 2013.pdf

### **Underexplored**

<500 exploration wells or 3/1000 sq mi **USGS &BOEM revising** undiscovered technically recoverable resources

### **Recent Discoveries Endorse Prospectivity**

3 World Class Discoveries in new play type

**Largest Conventional Discovery** in 30 years made in 2017

# OPERATIONAL OVERVIEW TYLER COUNTY – EAGLE FORD WELL COMPARISONS



An average Double A Wells Field well has **c.30ft net pay** and produces 2.9 MMBOE (1)

#### Compares to:

#### **VOBM#1 WELL**

West Double A discovery Polk County

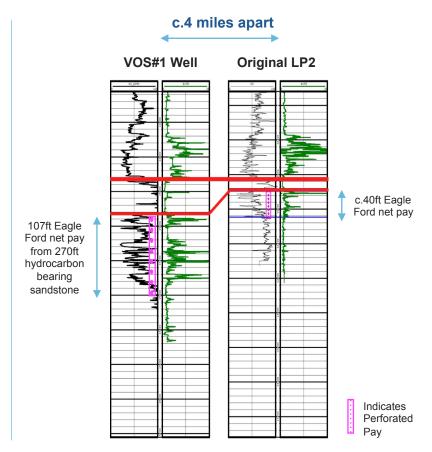
→62ft net pay

#### **VOS#1 WELL**

LP2 Offset discovery Tyler County

→107ft net pay

2D Seismic 2D Seismic LP2 Offset Core Offset Prospects B&C Discovery **Original LP2 Well** VOBM#4 VOS#1 Well Well New hydrocarbon bearing potential reservoir encountered in VOS#1



(1) Robert J. Bunge, "Woodbine Formation Sandstone Reservoir Prediction and Variability, Polk & Tyler Counties, Texas", June 25, 2011. Representative sample of 15 wells out of circa 40 wells in Double A wells field.

# OPERATIONAL OVERVIEW TYLER & POLK COUNTIES — WILCOX PRODUCTION



# Regionally the Wilcox has been a prolific producer...

- Wilcox on Pantheon acreage has significant resource potential<sup>(2)</sup>
- The VOBM#4 Well is immediately south of the Lower Wilcox shelf margin as is the Livingston Field. VOBM#4 logs indicate Wilcox potential

 With the exception of Jazz Deep Field, virtually all current Wilcox production

was discovered circa 1940<sup>(1)</sup>

		Pol
	*	* * * * * Bo (Eagle * *
(1) These fields are not owned by Pantheon (2) Exploration acreage management requires ongoing renewals and	grange a	** *
expirations as a continuing process to maintain core acreage and relinquish non core acreage. This is dependant upon	San Jacinto	Livingstor
agreeing renewals with mineral interest holders on commercial terms. This is ordinarily business in the oil and		Ace
gas business in USA. This process does not apply to the unit		Duke
acreage on Pantheon producing wells which are held by production and do not require renewal.		

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	*		Town &	) So.
	Polk	* * * * * * * * * * * * * * * * * * * *	Tyler **	5
*	* * * Bouble A W	(ells odbine)	Brookeland (Austin Chalk)	***** ****** *****
San Jacinto y	* * * * * * * * * * * * * * * * * * * *	Jack's	DBM#4 Hillister Droi	ich
<u> </u>	Ace N-Edity Schwab	Creek Pavey Kirby	Hicksbaugh- Theuvins Creek	Remers Istaril
,	Duke	ı.		F,EET

CUMULATIVE (1) since 1993	OIL	GAS	BOE 15
LIVINGSTON	21,158,354	12,931,848	22,020,477
JAZZ	3,715,333	162,878,042	14,573,869
SEGNO	4,164,137	28,696,352	6,007,227
THEUVENINS CREEK	3,930,716	1,180,644	4,009,426
SCHWAB	3,008,940	2,252,707	3,159,120
JACKS CREEK	2,288,143	11,302,224	3,041,625
PAVEY KIRBY	787,182	25,392,554	2,480,019
HIGHBAUGH	784,857	8,173,130	1,329,732
RAMERS ISLAND	1,242,548	901,694	1,302,661
HILLISTER E.	759,016	3,242,705	975,196
ACE	5,825,351	546,514	934,871
HICKSBAUGH	300,135	1,624,541	408,438
DRAKES BRANCH, N.	128,564	1,165,523	206,266
COPELAND CREEK	113,923	1,215,825	194,978
EDNY DUKE	44,820	1,746,879	161,279

# PANTHEON RESOURCES PLC Risk Factors



#### **Lease Obligations**

Risk: There are outstanding drilling and testing commitments on two blocks of acreage as follows. (1) Drill an exploration well in the Theta prospect area, and (2) drill an additional well on the same block as Alkaid/Phecda. The original deadline for the Theta well was 30 May 2019, however because that deadline was not met the State of Alaska can declare a default, although in such circumstances, the directors believe that a cure period of 1 year would be granted. The deadline for the additional well at Alkaid/Phecda is currently 30 May 2020. In the event that the Alkaid/Phecda well is not drilled before the deadline the State of Alaska can declare a default, although in such circumstances, the directors believe that a cure period of 1 year would be granted. Whilst the directors believe that the granting of a cure period is a likely outcome where there is a default, there can be no certainty that it will be granted and if it is, the terms on which it is granted. It is also believed that other pro-active strategies are available for negotiation with the State of Alaska in this situation.

Mitigation: If the options with the State of Alaska to extend the current leases become exhausted, the leases will be re-offered in a State lease sale the following year. Since Pantheon is the only company with proprietary seismic over the Theta area, it will be in a favoured position to participate in the State lease sale and re-acquire the leases at an appropriate value.

#### **Working Capital**

Risk: the Company's business plan makes certain assumptions as to the rate of production from the assets in East Texas and the price of Oil and Gas. If the assets do not produce at commercially economic rates or the price of Oil and Gas falls significantly it may give rise to a working capital shortfall. The Company's business plan also envisages farming out working interests in its Alaskan projects. The Company is confident the quality of the project should attract a partner and is expected to result in payments towards future drilling and towards historic back costs, however the outcome of these negotiations cannot be guaranteed.

Mitigation: The board believes the recent discovery at Alkaid/Phecda is of a high quality and is attractive enough to warrant interest from potential farminees. The Company has also contracted eSeis Inc who will assist them in data room and technical discussions with interested parties.