

Petsec Energy Ltd

Extraordinary General Meeting

1 December 2016



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The reserves assessment follows guidelines set forth by the Society of Petroleum Engineers – Petroleum Resource Management System (SPE-PRMS). The USA and Yemen reserve estimates provided within this presentation are based on information contained within the following releases to the ASX: Announcements on 8 March 2016 and 15 March 2016; and the 2015 Annual Report.

The Company confirms that it is not aware of any new information or data that materially affects the information included within the above releases, and that all the material assumptions and technical parameters underpinning the estimates therein continue to apply and have not materially changed.

Contents

❖ **Petsec Energy: Corporate Profile**

- Corporate Objective and Strategy
- Board & Management
- Assets
- Value
- 2017 Development & Production
- Available Funding –Convertible Note Facility US\$15m.Rights Issue US\$8.25m.
- Capital Structure / Valuation – Pre & Post Rights Issue

❖ **Petsec Energy : Oil & Gas Assets**

- USA Production / Development – Onshore Louisiana & shallow waters of the Gulf of Mexico
- MENA / Yemen – Damis (Block S-1) Production, Block 7 (Al Barqa) Exploration

Petsec Energy Corporate Profile: Corporate Objective & Strategy

Corporate Objective

To increase shareholder value through successful oil and gas exploration, development and production, and by oil and gas reserve acquisitions, thereby building Petsec Energy into a significant mid-tier oil and gas exploration and production company.

Corporate Strategy

To drill high impact exploration prospects, predominately for oil and develop those discoveries, and to acquire oil and gas reserves, developed/producing or undeveloped, in onshore leases which hold significant development, low risk exploitation and high exploration potential, that make a major positive impact on the value of Petsec Energy.

The geographical focus is onshore and offshore Louisiana and Texas, USA , the Republic of Yemen, and the MENA region generally.

Petsec Energy Corporate Profile:

Board of Directors

Board of Directors



**Terry Fern,
Chairman &
Managing Director**

- ❖ Over 40 years experience in petroleum & minerals exploration, development and financing.
- ❖ Bachelor of Science Degree, University of Sydney.



**David Mortimer AO,
Non-Executive Director**

- ❖ Over 40 years experience in corporate finance.
- ❖ Bachelor of Economics Degree (First Class Honours), University of Sydney.
- ❖ Ex CEO of TNT Limited Group and Chairman of Leighton Holdings, Chairman of Australia Post.
- ❖ Current Chairman of Opera Australia, Crescent Capital Partners Limited, Buildcorp Advisory Board, and the Senate Investment and Commercialisation Committee.
- ❖ He is a director of MySale Group PLC, Clayton Utz Foundation, the Grant Samuel Advisory Board, and is on the CEDA's Board of Governors.



**Alan Baden,
Non-Executive Director**

- ❖ Over 35 years experience in the U.S. oil & gas industry.
- ❖ Juris Doctor Degree from Case Western Reserve University, and a Bachelor of Science (Economics) Degree from the University of Pennsylvania.
- ❖ Ex Partner at Vinson & Elkins.
- ❖ Current Senior Counsel with Thompson & Knight.

Corporate Management



Paul Gahdmar
**Company Secretary &
Group Financial Controller**

- ❖ Over 23 years of experience in the oil & gas industry.
- ❖ Master of Business and Technology Degree, University of New South Wales; Diploma in Investor Relations, Australasian Investor Relations Association.
- ❖ Fellow of Institute of Public Accountants and Member of Australian Institute of Company Directors.
- ❖ Ex Australian Oil and Gas Corporation.



Manny Anton
**Head of Investor Relations &
Corporate Development**

- ❖ Over 28 years experience in financial markets.
- ❖ Bachelor of Business, University of Technology, Sydney.
- ❖ Previously based in Europe and Asia, as well as Australia, in capital markets roles covering equities, equity-based products and derivatives.
- ❖ Ex Credit Suisse, UBS and RBC Capital Markets.

USA Management



Dick Smith
Chief Executive Officer of
Petsec Energy Inc.

- ❖ Over 35 years experience in the U.S. and international oil & gas industry.
- ❖ Master of Science (Geology) from the University of Tennessee, Knoxville, Tennessee and a Bachelor of Science (Geology) from SUNY at Brockport, Brockport, New York.
- ❖ Ex Amerada Hess Corporation, Amoco Production Company, Pedernales Production LLC, Houston Energy LLC, Prime Natural Resources (formerly F-W Oil Interests, Inc.), and F-W Oil Exploration LLC/F-W Oil Trinidad LLC.



Ross Keogh
President of Petsec Energy Inc. & Group
Chief Financial Officer

- ❖ Over 30 years of experience in the oil & gas industry.
- ❖ Bachelor of Economics Degree, Macquarie University.
- ❖ Ex Total Oil Company & Bridge Oil Limited.



Ron Krenzke
Executive Vice President Exploration of
Petsec Energy Inc.

- ❖ 40 years of experience in the oil & gas industry.
- ❖ Bachelor of Science Degree (Geophysics), Texas A&M University.
- ❖ Ex Mobil, Amerada Hess, VP Exploration Gryphon Exploration Company.

MENA Management



Maki Petkovski
Chief Executive Officer of Petsec
Energy (Middle Eastern) Limited

- ❖ Over 25 years' experience in the international oil and gas industry.
- ❖ Bachelor of Science (Geology) Degree from the University of Technology, Sydney.
- ❖ He has worked in the MENA Region since 2000.
- ❖ Ex BP, Ampolex Limited and most recently **20 years with Oil Search** where he was responsible for managing Oil Search's MENA portfolio.



Murray Hawkes
Chief Operating Officer & Yemen
General Manager
Petsec Energy (Middle Eastern)
Limited

- ❖ Over 35 year' experience in the international oil and gas industry.
- ❖ Bachelor and Master of Science (Geology) degrees from Canterbury University in Christchurch, New Zealand
- ❖ He has lived and worked in the MENA region since 2004.
- ❖ 12 years with Oil Search where he became Yemen General Manager based in Sana'a, Yemen. He has also held senior managerial roles in Tunisia, Iraqi Kurdistan, and worked for Pacific Tiger Energy, BHP Petroleum.



John Rees
VP Technical of Petsec Energy
(Middle Eastern) Limited

- ❖ Over 40 years' experience in international oil & gas.
- ❖ Bachelor of Science (Geology & Computing Science) degree from the University of Calgary, Canada.
- ❖ Has lived and worked in the MENA Region since 1991, lived in Aden, Yemen and worked on the prolific Masila basin project which peaked at 250,000 bopd.
- ❖ Lived 5 Years in Yemen with Nexen, Lasmo, British Gas, PetroKazakhstan.

Petsec Energy is an independent oil and gas exploration and production company listed on the Australian Stock Exchange with operations in the shallow waters of the Gulf of Mexico and onshore Louisiana, USA (offices Houston & Lafayette), and onshore in Yemen (offices Sanaa & Dubai-UAE).

Reserves/ Value

- ❖ **Reserves: 9.3MMboe**
- ❖ **NPV10 US\$188.1MM**
- ❖ **Petsec energy Value per share: A\$1.06**

USA

- ❖ Net 2p reserves 1 Jan 2016: 3.7MMboe/ NPV10 US\$32.7MM
- ❖ Mystic Bayou gas/ oil field

Yemen

- ❖ Net 2P reserves 1 Jan 2016: 5.6MMbbl/ NPV10 US\$155.4MM
- ❖ An Nagyah Oilfield

Petsec Energy:

Capital Structure / Valuation

Net Reserves – NPV10 US\$188.1MM (~ A\$1.06/share)

Oil Equivalent (MMBoe) ¹	Net Proved Reserves ²	Net Probable Reserves ²	Net Proved + Probable Reserves ²
USA Reserves			
Reserves as of 1 Jan 2015	0.3	0.1	0.4
Additions	2.0	1.6	3.6
Revisions	(0.1)	(0.1)	(0.2)
Production	(0.1)	-	(0.1)
USA reserves as of 1 Jan 2016 ³	2.1	1.6	3.7
Yemen Reserves			
Reserves as of 1 Jan 2015	-	-	-
Acquisitions – An Nagyah Oilfield	4.5	1.1	5.6
Yemen reserves as of 1 Jan 2016	4.5	1.1	5.6
Total Petsec Group Reserves as of 1 Jan 2016	6.6	2.7	9.3
NPV₁₀ Petsec Group Reserves as of 1 Jan 2016 Pre Rights Issue value per share			US\$188.1MM ~ A\$1.06/share

1 Million barrels of oil equivalent (using a ratio of approximately six thousand cubic feet of natural gas to one barrel of oil).

2 Net reserves means those reserves representing the Company's net revenue interest (or net economic interest) which is the Company's working interest less royalties payable in the USA, and in Yemen net of all costs including all Yemen government costs including taxes.

3 Does not Hammer reserve additions following recent production test.

USA

Net 2P reserves 1 January 2016 ¹ : 3.7 MMboe / NPV10 US\$32.7MM

- ❖ 2015 discoveries: Mystic Bayou & Hummer (Main Pass 270/273/274).
- ❖ Mystic net 2P reserves 1.1.2016 ² : 14.1 Bcf + 877.1Mbbl (equiv. 3.2MMboe), NPV10 US\$31 million.
- ❖ Hummer: Potential reserves in the target reservoir (“D”) appears to exceed pre-drill mapped upper target of 183 Bcf & 3.7MMbbl. Net to Petsec 19 Bcf & 385 Mbbl.
- ❖ Hummer 2016 Development: Installation of jacket, tie-back/completion of well, & well testing completed mid-Nov 2016. Results of 48 hour production test on 16/64” choke: > 20 MMcfpd + 400 bcpd, high pressure maintenance, no apparent boundaries - exceeds expectations.
- ❖ 2017 Hummer Development: Design, fabrication & installation of topsides, laying of oil and a gas pipelines, production (net capex ~ US\$1.5MM). Drilling of an appraisal/development well.

¹ Calculated using deterministic method and conversion to BOE was calculated using ratio of six thousand cubic feet of natural gas to one barrel of oil

² Source: Cawley, Gillespie & Associates.

Yemen

Net 2P Reserves 1 January 2016 ¹ : An Nagyah Oilfield 5.6 MMbbl net, NPV10 US\$155.4 MM.

- ❖ Damis (BlockS-1) Production Licence (100% W.I.) acquired February 2016:
 - Holds five oil & gas discoveries – An Nagyah (developed/productive) / Osaylan, Harmel, An Naeem & Wadi Bayhan (undeveloped).
 - An Nagyah Oilfield reserves at 1 January 2016: 12MMbbl oil gross / 5.6MMbbl net (NPV10 US\$155.4MM).
 - The four undeveloped oil & gas fields hold resource potential ² : > 34MMbbl oil & 550Bcf gas gross.
- ❖ Block 7 (Al Barqa) 100% W.I. acquired 2014/2015/2016:
 - Al Meashar undeveloped oil discovery – 2 wells / target 11MMbbl oil gross (9.3MMbbl net) / > 50MMbbl potential
 - Eight prospects / leads: target sizes 2 to 900MMbbl oil gross.

¹ Source: DeGolyer and McNaughton Canada Limited

² Source: Wood Mackenzie Asia Pacific Pty Ltd

Hummer Project

Development

- ❖ Final design, fabrication & installation of deck & facilities, oil and gas pipelines, for Main Pass 270 # 3 platform
- ❖ Production commences - Main Pass 270 # 3 well in Q2 2017, > 20 MMcfpd & 400 bopd
- ❖ Drill one to two new development / appraisal wells in Q3 2017

An Nagyah Oilfield Restart.

Production Restart

- ❖ Testing of Central Processing Facility, maintenance and repairs
- ❖ Trucking contract, Shipping contract
- ❖ Design, construct, transport and install 2-truck loading bay and ancillary structures

Petsec Energy:

US\$15 MM Convertible Note Facility

Overview of Convertible Note Facility

Type of Funding	Secured Unlisted Convertible Notes
Facility Arranger	Republic Investment Management and associates in Singapore, managed through the registrar Sing Rim Pte Ltd of Singapore
Loan Amount	Total of US\$15 million in 3 tranches of US\$5 million each. Each tranche to be exercised at the discretion of the Company
Facility Term	31 December 2017
Coupon	10% p.a. compounded on a monthly basis. Interest to be capitalised for the duration of the term
Conversion	<p>Tranche 1: Interest convertible at A\$0.15/share and principal debt convertible at A\$0.20/share to a maximum of 50% of the outstanding principal</p> <p>Tranche 2: Principal and interest convertible at A\$0.30/share to a maximum of 50% of the principal debt and capitalised interest</p> <p>Tranche 3: Principal and interest convertible at A\$0.40/share to a maximum of 50% of the principal debt and capitalised interest</p>

Other terms and conditions are typical of a facility of this nature and include the granting of security, penalty interest rates and early repayment costs.

Petsec Energy:

US\$15 MM Convertible Note Facility

Funding and Use of Proceeds

Tranche No.	Amount	Purpose
1	US\$5 million	Development of the Hummer gas/oil discovery (Main Pass Block 270 #3 well), USA - four pile platform, well testing, production facilities; and preliminary start-up operations for the An Nagyah Oilfield in Yemen
2	US\$5 million	Ramp up of production at the An Nagyah Oilfield and potential acquisitions of other oil producing assets in the MENA region
3	US\$5 million	Expansion and optimisation of production from the An Nagyah Oilfield and potential acquisitions of other oil producing assets in the MENA region

Tranches can be exercised at the discretion of the Company.

Petsec Energy: Non-Renounceable Rights Issue

Fully Underwritten Rights Issue to Raise US\$8.25MM

Key Terms of Offer

- ❖ 1 new share for every 3.2 shares held by eligible shareholders
- ❖ Raising A\$11MM (US\$8.25MM)
- ❖ Issue new shares of up to 73.9 million shares
- ❖ Offer price of 15 cents per share – 17% discount to 3 month VWAP

Use of Proceeds

- ❖ Support participation in the development of the Hummer gas/oil discovery in the Gulf of Mexico, USA
- ❖ Restart of oil production from An Nagyah Oilfield (Damis Block S-1) in Yemen –trucking to South coast.

Timetable – Key Events	Date
Announcement of rights issue	24 November 2016
Record date	7pm on 29 November 2016
Closing date	5pm on 12 December 2016
New shares quoted on deferred settlement basis	13 December 2016
Allotment and issue of new shares	19 December 2016

Pre and Post Rights Issue

	Pre Rights Issue	Post Rights Issue
Shares on issue (ASX: PSA / OTC ADR: PSJEY)	236.5MM	310.4MM
Market capitalisation @ 17 cps (at 28/11/2016)	A\$40.2MM	A\$52.8MM
Cash ¹	US\$7.1MM	US\$15.4MM
Debt – US\$15 MM convertible note facility ²	US\$3.0MM	US\$3.0MM
Net oil & gas reserves (2P) at 1/1/2016	9.3MMboe	9.3MMboe
NPV10 reserves (2P) at 1/1/16 forward strip Value per Share	US\$188.1MM A\$1.06	US\$188.1MM A\$0.81

1. Assumes USD/AUD exchange rate of 0.7500

2. Represents amount currently drawn

Petsec Energy Valuation : Valuation vs. Peers

Petsec Energy (PSA) is undervalued

		Share Price	Shares on Issue	Capitalisation	EV	Reserves	MCap/2P	EV/2P
		29/11/16	mn	A\$mn	A\$mn	2P (Mboe)		
Oil Search	OSH	6.73	1522.7	10248	14668	492	20.84	29.83
Horizon	HZN	0.04	1302.0	49	217	9	5.75	25.26
Beach Energy	BPT	0.87	1860.7	1610	1557	67	24.05	23.27
Woodside	WPL	30.39	822.9	25009	30597	1437	17.41	21.29
Santos	STO	4.08	1766.2	7206	12776	898	8.02	14.22
Tap Oil	TAP	0.08	257.6	22	28	3	6.86	8.86
AWE Ltd	AWE	0.61	526.7	321	327	70	4.58	4.66
Cooper Energy	COE (Adj)	0.33	681.6	225	175	48	4.67	3.64
Elk Petroleum	ELK (Adj)	0.06	672.3	42	41	12	3.39	3.30
Petsec Energy	PSA (Adj)	0.17	308.6	50.9	31.6	13.0	3.92	2.44
Senex Energy	SXY	0.24	1152.7	277	183	83	3.33	2.20

Source: Taylor Collison estimates

Table data sourced from IRESS;

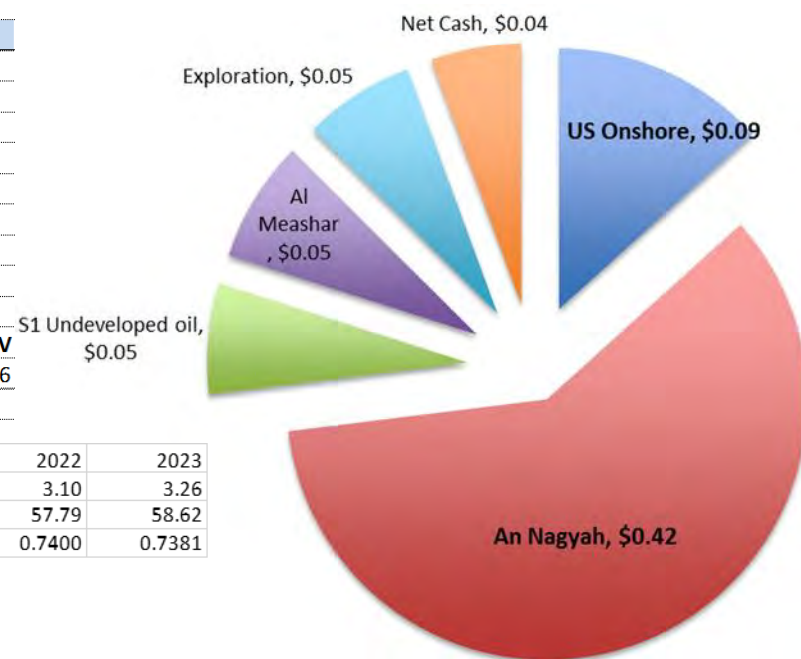
All stocks priced (rounded) as of close of trading 28 November 2016

Petsec Energy Broker Valuation

- ❖ Pre Rights Issue: 91 cents/share (September 2016).
- ❖ Post Rights Issue: 66 cents/share (December 2016).
- ❖ Valuation **does not** include any value for Hummer project, GoM

EQUITY VALUATION					
		Interest	Pr	A\$M	Acps
US Onshore		various	75%	\$29	\$0.09
Yemen	An Nagyah	100%	75%	\$130	\$0.42
	S1 Undeveloped oil	100%	10%	\$15	\$0.05
	Al Meashar	100%	10%	\$16	\$0.05
Exploration				\$15	\$0.05
TOTAL					\$0.67
Net Cash				\$12	\$0.04
Corporate costs				-\$10	-\$0.04
				\$207	\$0.66
Cash Producing Assets					\$0.09
Shares on Issue (mn)					308
					P/NAV 0.26

	2016	2017	2018	2019	2020	2021	2022	2023
Gas	2.51	3.10	2.93	2.83	2.85	2.95	3.10	3.26
WTI	42.75	50.60	52.91	54.27	55.48	56.57	57.79	58.62
AUD	0.7414	0.7580	0.7532	0.7464	0.7409	0.7363	0.7400	0.7381



Source: Taylor Collison estimates.

Adjusted for higher issued capital, projected cash balance (in A\$) and An Nagyah timing and ramp up

Petsec Energy

USA Oil and Gas Assets

Petsec Energy Oil & Gas Assets

USA Production / Development Projects

Onshore Louisiana & Shallow Waters Gulf of Mexico

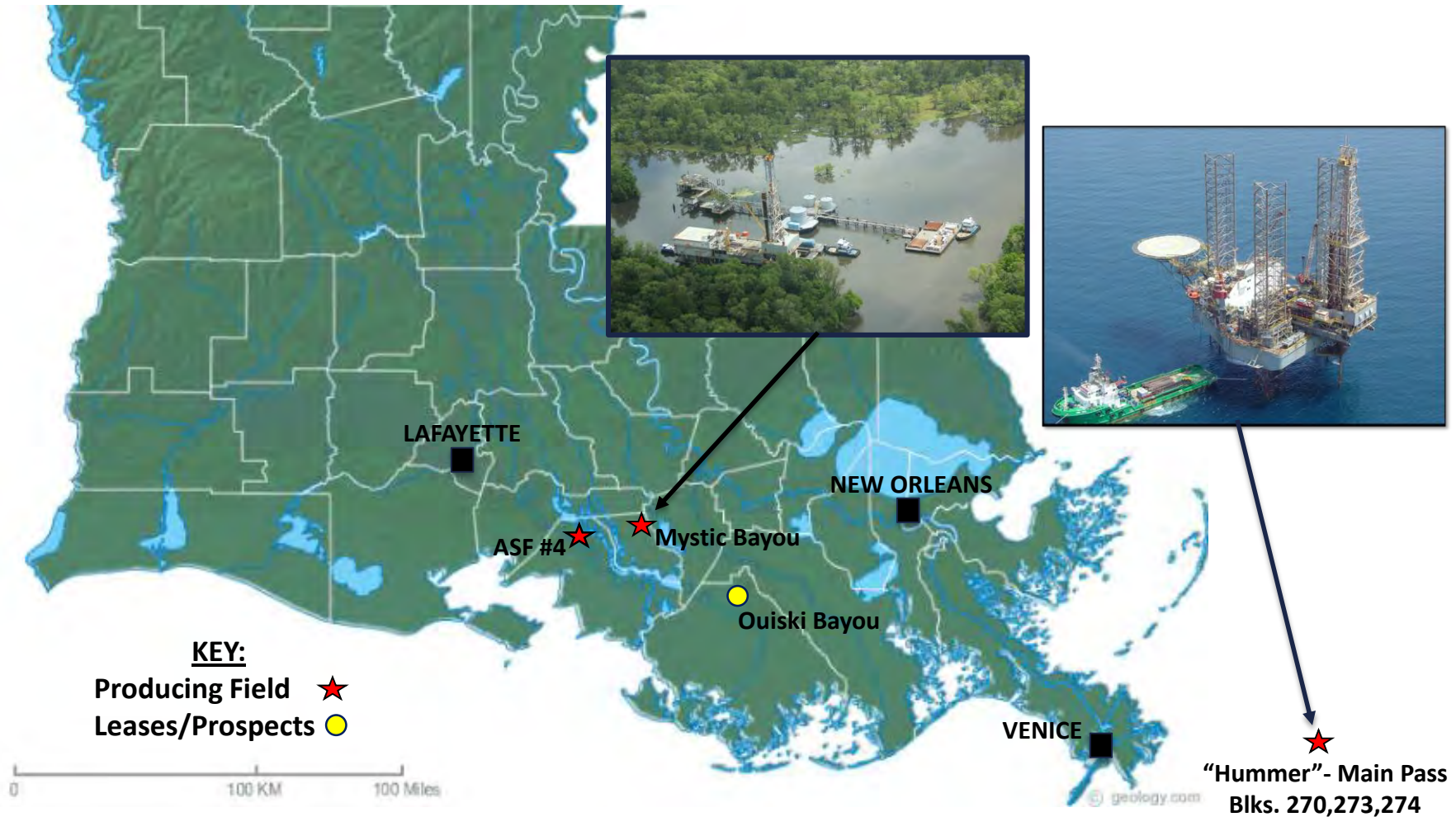


- ❖ **USA net 2P oil & gas reserves as of 1 January 2016 were 3.7MMboe with a NPV10 of US\$32.7MM (Cawley, Gillespie & Associates) mostly attributed to the Mystic Bayou Field (3.2MMboe / US\$31MM).**
- ❖ **Production:** Two fields – Jeanerette (ASF #4 well) and Mystic Bayou Williams # 2 Alt. well.
- ❖ **Development Projects:**
 - Mystic Bayou: Williams No.2 Alt. well brought into production on 31 August 2015. Three further development well locations.
 - Hummer Project: Main Pass 270 #3 well discovery in late 2015, completed for production in Nov 2016. Additional appraisal / development well locations planned for 2017 – 2019 drilling.



Petsec Energy Oil & Gas Assets

USA Production / Development Projects



2015 USA Discovered Reserves: 3.6MMboe

Mystic Bayou Gas/ Oil Field – Onshore Louisiana

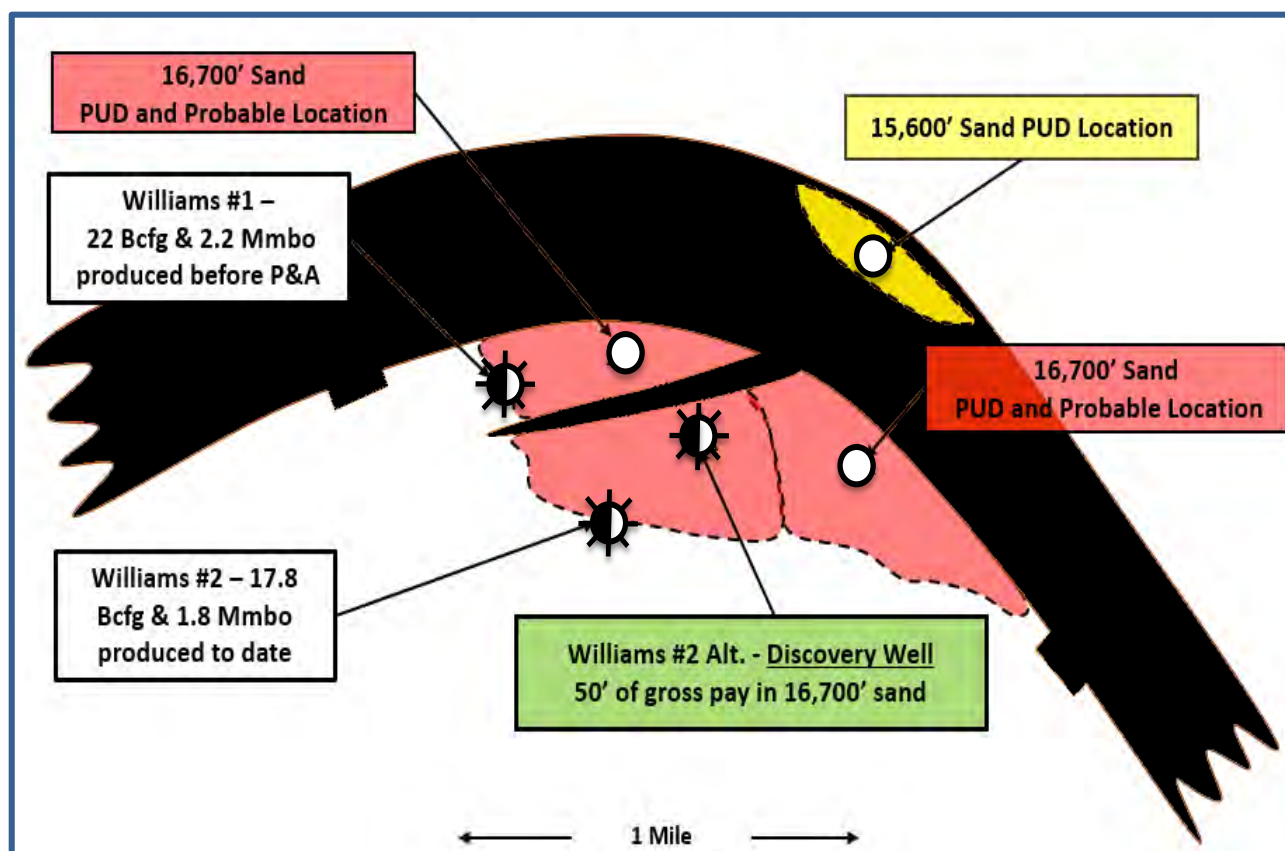
- ❖ Located 65 kilometres (40 miles) southeast of Lafayette in a low lying area of the Atchafalaya River Basin in St. Martin Parish, onshore Louisiana USA
- ❖ Petsec owns a 25% non operating working interest (18.5% net revenue interest).
- ❖ Net 2P reserves as of 1 Jan 2016: 14.1 Bcf of gas + 877.1 Mbbl (3.2 MMboe)
- ❖ NPV10: US\$31 million
- ❖ Currently producing at a gross rate of ~5.0 MMcfd and 150 bcpd.



Mystic Bayou Gas/ Oil Field – Onshore Louisiana

- ❖ The Mystic Bayou Field has produced in excess of 3.4MMbbl and 39 Bcf of gas in the target horizons.
- ❖ The Williams #2 Alt well was drilled to a total measured depth of 5,263 metres (17,266'), equivalent to 5,143 metres (16,873') true vertical depth.
- ❖ Future development drilling: Three well PUD locations of proved undeveloped reserves –white circles shown on the plan.

16,700' Sand Map with reservoir outlines



Hummer Field 2017 Offshore Production Start-up

- ❖ The Hummer gas-condensate field is located approximately 80 kilometers (50 miles) southeast of the Mississippi River delta, in ~65 metres (215 feet) of water in the Gulf of Mexico, Offshore USA.
- ❖ Petsec owns a 12.5% non-operating working interest (10.24% net revenue interest) in the three leases covering the field.
- ❖ The Main Pass 270 #3 exploration well was drilled in June-December 2015 to a total depth of 4,800 metres (15,748') TVD.
- ❖ The discovery well was cased and mud-line suspended December 2015. The well encountered 129 feet (~39 metres) of gross gas & oil pay.
- ❖ Potential reserves in the reservoir completed for production appears to exceed upper gross pre-drill mapped target of 183 Bcf gas & 3.7MMbbl oil (34MMboe).
- ❖ Installation of the jacket, tie-back/completion of well, and well testing was completed in mid – Nov 2016.
- ❖ Results from testing ($> 20 \text{ MMcf/gpd} + 400 \text{ bcpd}$), 16/64th inch choke with an average flowing WHP of 9753 psi (pounds per square inch) will facilitate design and engineering of platform topsides.
- ❖ The nearby analogue fields producing from age equivalent intervals have peak production rates exceeding 25 MMcf/gpd and 1,000 bcpd.
- ❖ First commercial production from the field is expected to commence in Q2 2017.
- ❖ Appraisal and development drilling is expected to begin in Q3 2017, testing both the currently completed reservoir and additional potential pay sands seen in the initial well.



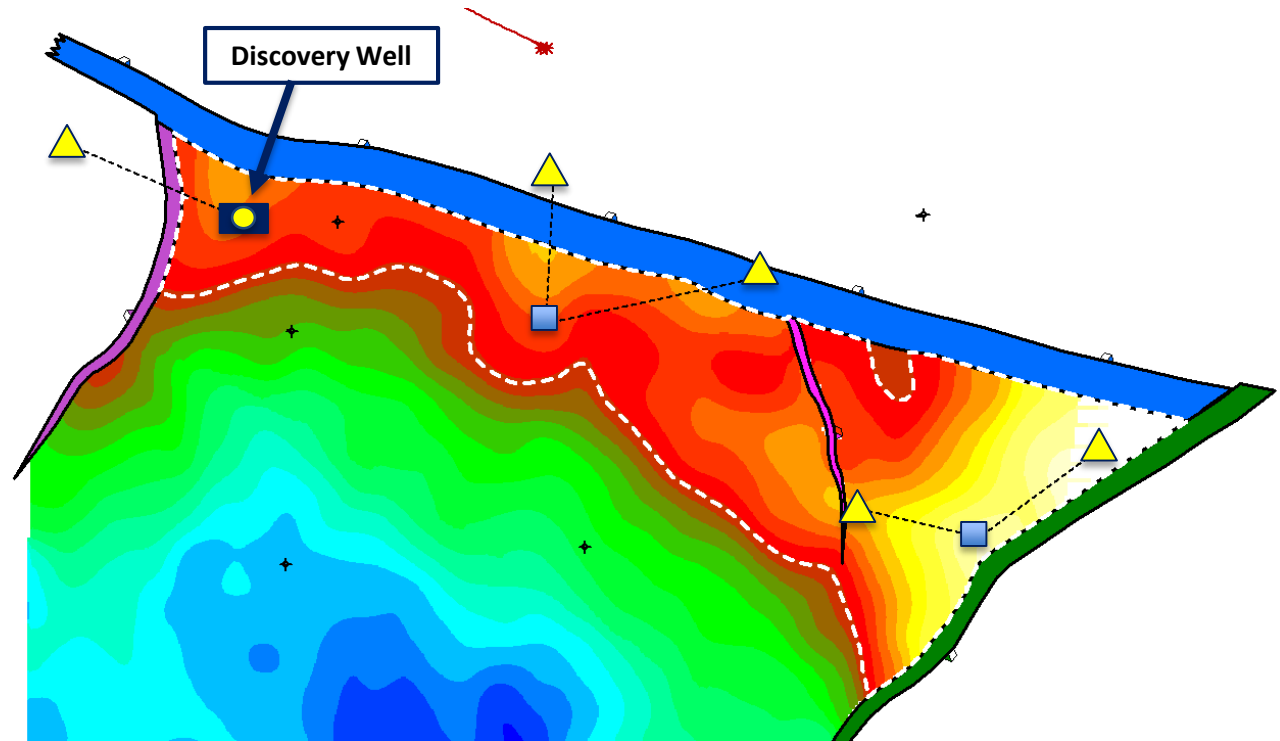
Main Pass 270 #3 Flow Test - November 18, 2016

Hummer Gas/ Oil Field Characteristics:

- ❖ Large hydrocarbon bearing structure covering portions of 3 offshore lease blocks confirmed on 3D seismic data.
- ❖ High Quality Reservoir – Excellent reservoir quality (porosity & permeability) based on well log response and production testing.
- ❖ Reservoir quality, thickness, and continuity better than pre-drill estimates.
- ❖ Well test performance better than anticipated.
- ❖ High Deliverability Reservoir – Production testing indicates high flowing tubing pressure (FTP) with minimal pressure draw down.
- ❖ No reservoir limits indicated on initial testing.
- ❖ Upside Potential – Additional potential hydrocarbon bearing reservoirs are indicated based on well logs.
- ❖ Delineation/Development Wells - Future drilling will test proven and potential reservoirs at structurally optimum locations.
- ❖ Overall potential reserves exceed pre-drill estimates.

Hummer Gas/ Oil Field – Structural Map

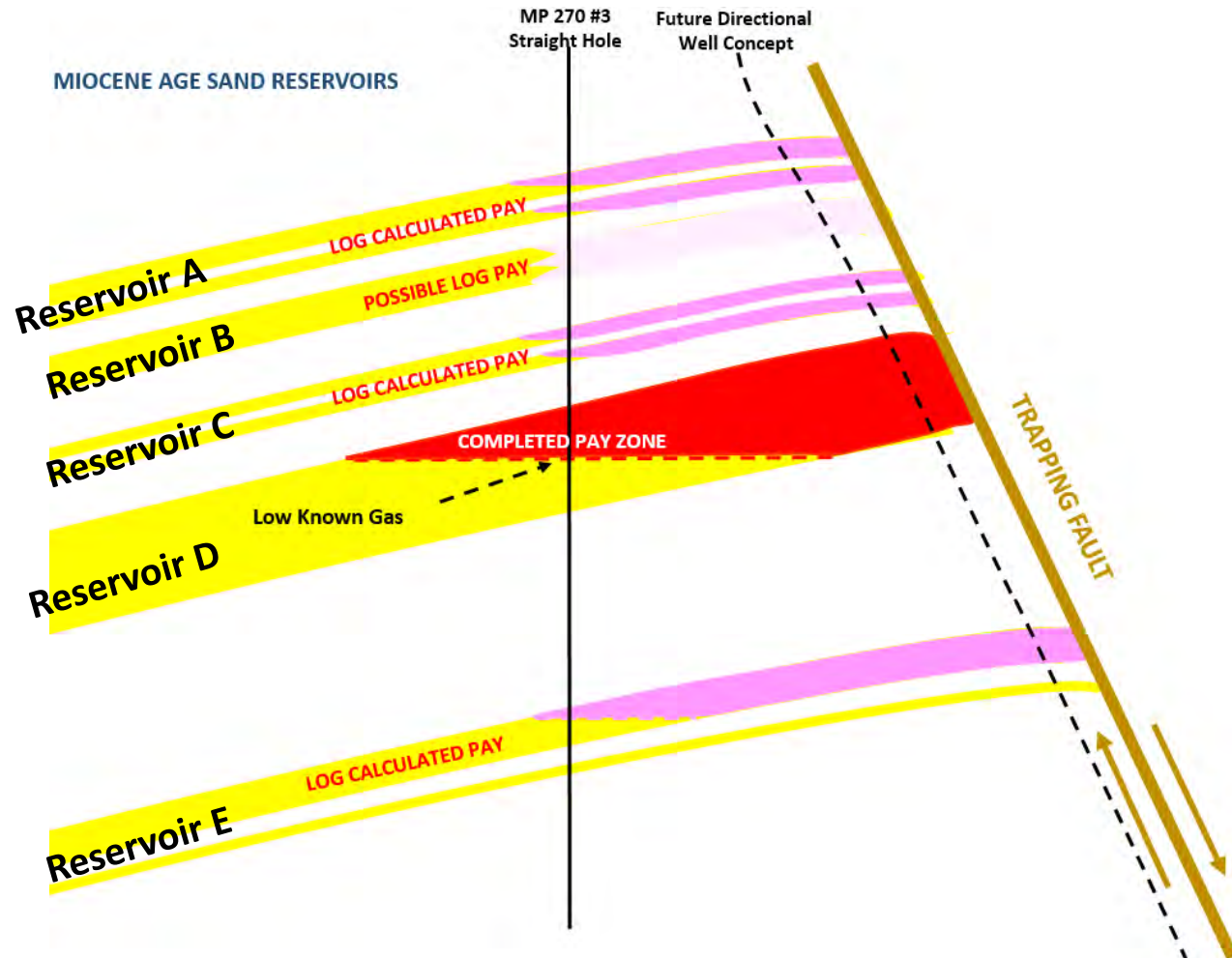
- ❖ Well results exceed pre-drill resource estimates
- ❖ Test results confirm high production rates: > 20 MMcf/gpd plus 400 b/d associated condensate
- ❖ Large structural closure with multiple development locations.
- ❖ Upside potential exists in additional untested reservoirs.



-  Main Pass 270 “B” Production Platform
-  Possible Wellhead Platform
-  Possible Development Well
-  DISCOVERY WELL

Hummer Gas/ Oil Field – Schematic Cross-Section

- ❖ The initial well was drilled as a straight hole and was not designed to test all potential reservoirs in the most advantageous structural positions
- ❖ One sand was tested and completed for production
- ❖ Reservoir D appears to exceed our pre-drill mapped upper target range of 183 Bcf & 3.7MMbbl (34 MMboe).
- ❖ Significant upside potential exists in additional reservoirs that have hydrocarbon shows and log calculated pay but were not tested
- ❖ Future development and delineation wells will test the reservoirs in more optimum locations



Petsec Energy Oil & Gas Assets

USA Production / Development Projects

Hummer Gas/ Oil Field – Preliminary Development Schedule

2016-2018 Programme - Preliminary Timing

Activity	2016		2017				2018			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Hummer Project - Main Pass 270/273/274	Hummer Development									
Main Pass 270/273 Lease Terms	Unit Area held by Suspension of Operations (SOP) until production commences.									
Main Pass 274 Lease Terms	Primary lease term until mid-2021. Can be included in unit following drilling of a well on the block.									
Testing/facilities										
Fabrication and Installation of Platform Jacket	Complete									
Tie-back, Completion and Production Test of Main Pass #3 well		★								
Topsides			Design, Fabricate, Install, Hook-up							
Pipelines - One Gas and One Oil				Install						
Seismic										
Reprocessing of Existing 3D Seismic Survey			Reprocessing							
Drilling										
Potential Hummer Well - Delineation/ Development					Hummer 2					
Additional Delineation/Development Wells						Additional Development Well Drilling				
First Commercial Oil					★					

- ❖ Discovery well cased and mud line suspended December 2015
- ❖ Platform Jacket fabrication and installation completed Sept 2016
- ❖ Well completion and production testing completed Nov 2016
- ❖ Top sides deck and facilities construction and installation along with pipeline hook-up estimated 6 – 8 months to complete
- ❖ First production expected late Q2 to early Q3 2017

Petsec Energy

MENA Oil and Gas Assets

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Yemen Assets

Shabwah Basin: Damis (Block S-1) & Block 7

Yemen – Exploration History

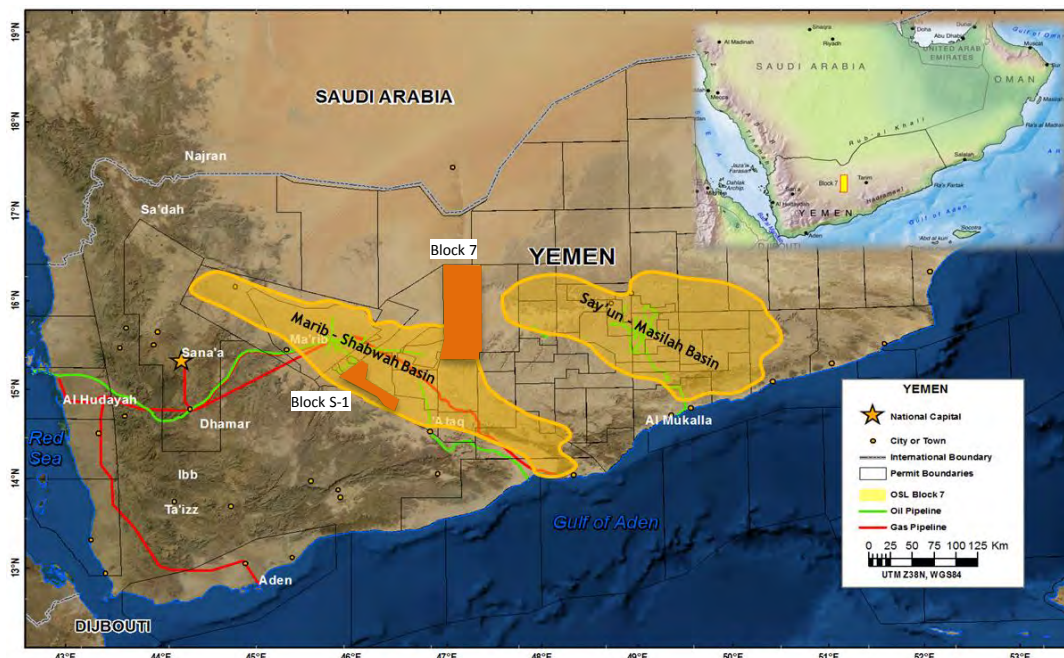
- ❖ Little exploration until early 1980's
- ❖ First commercial discovery made in 1984 – Hunt Oil in the Marib-Shabwah Basin Alif #1 well (Block 18) averaged 8,000 BOPD

Commercial reserves discovered in Marib-Shabwah Basin area > 2 billion BOE

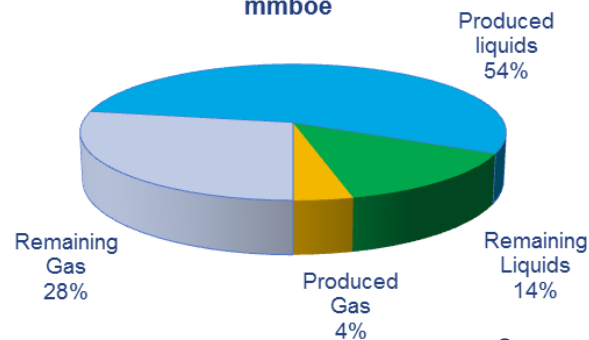
- ❖ Canadian Occidental (now Canadian Nexen) made a discovery in Say'un-Masilah Basin, Sounah #1 (Block 14) in 1991

Commercial reserves discovered in Say'un-Masilah Basin area > 1.5 billion BOE

- ❖ Commercial oil reserves in Yemen are concentrated in these two large basins – together the fields in these areas comprise 72% of Yemen's 2P reserves
- ❖ Yemen recoverable reserves 5.3 billion BOEs of which 2.2 billion BOEs remain to be produced
- ❖ Peak production reached ~ 440,000 BOPD 2001. In 2014 ~ 100,000 BOPD
- ❖ Oil and gas represent > 60% of Yemen government revenues



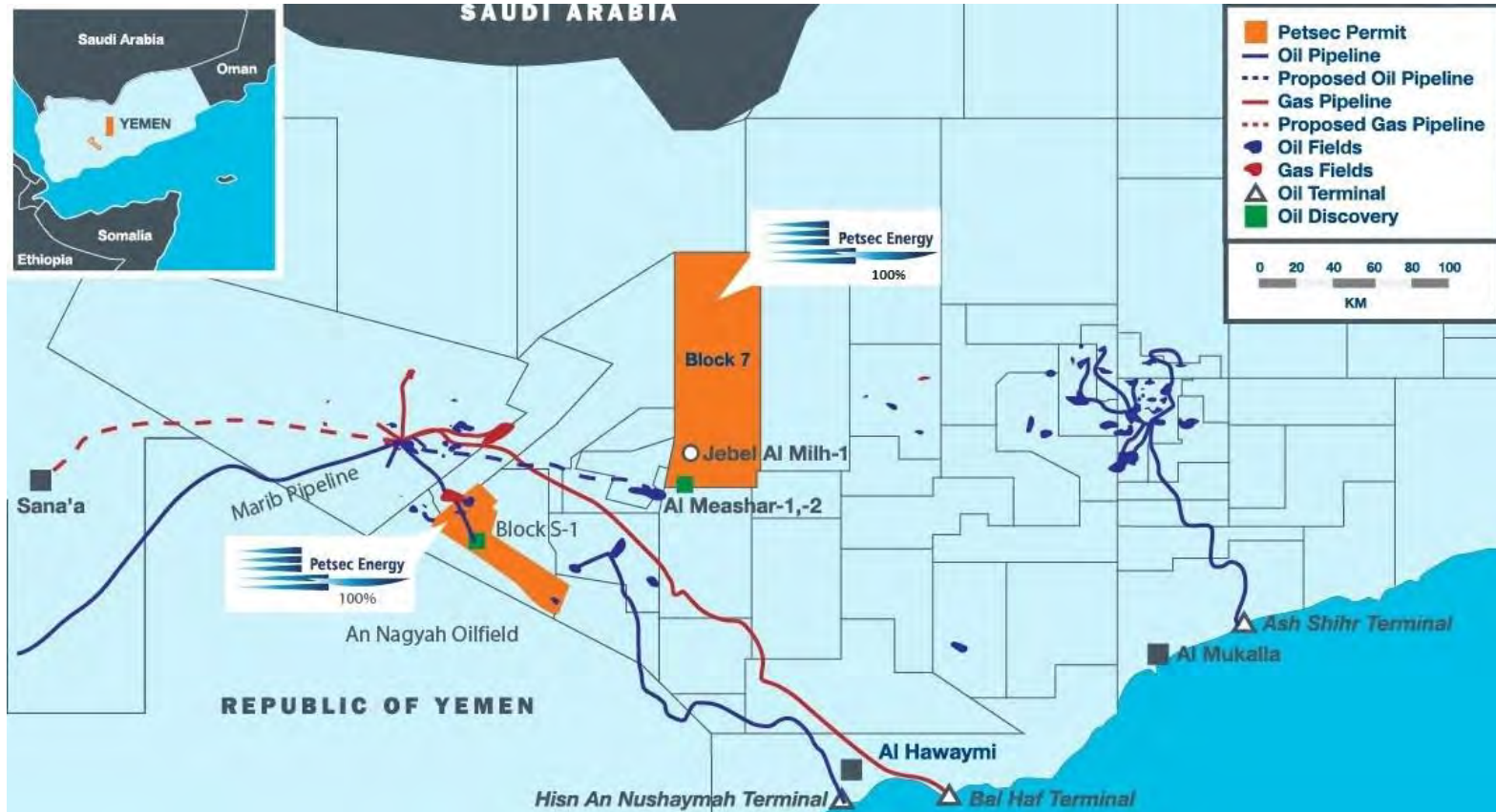
Total Initial Recoverable reserves = 5,297 mmboe



Source: (Wood Mackenzie)

Yemen Assets

Damis (Block S-1) & Block 7

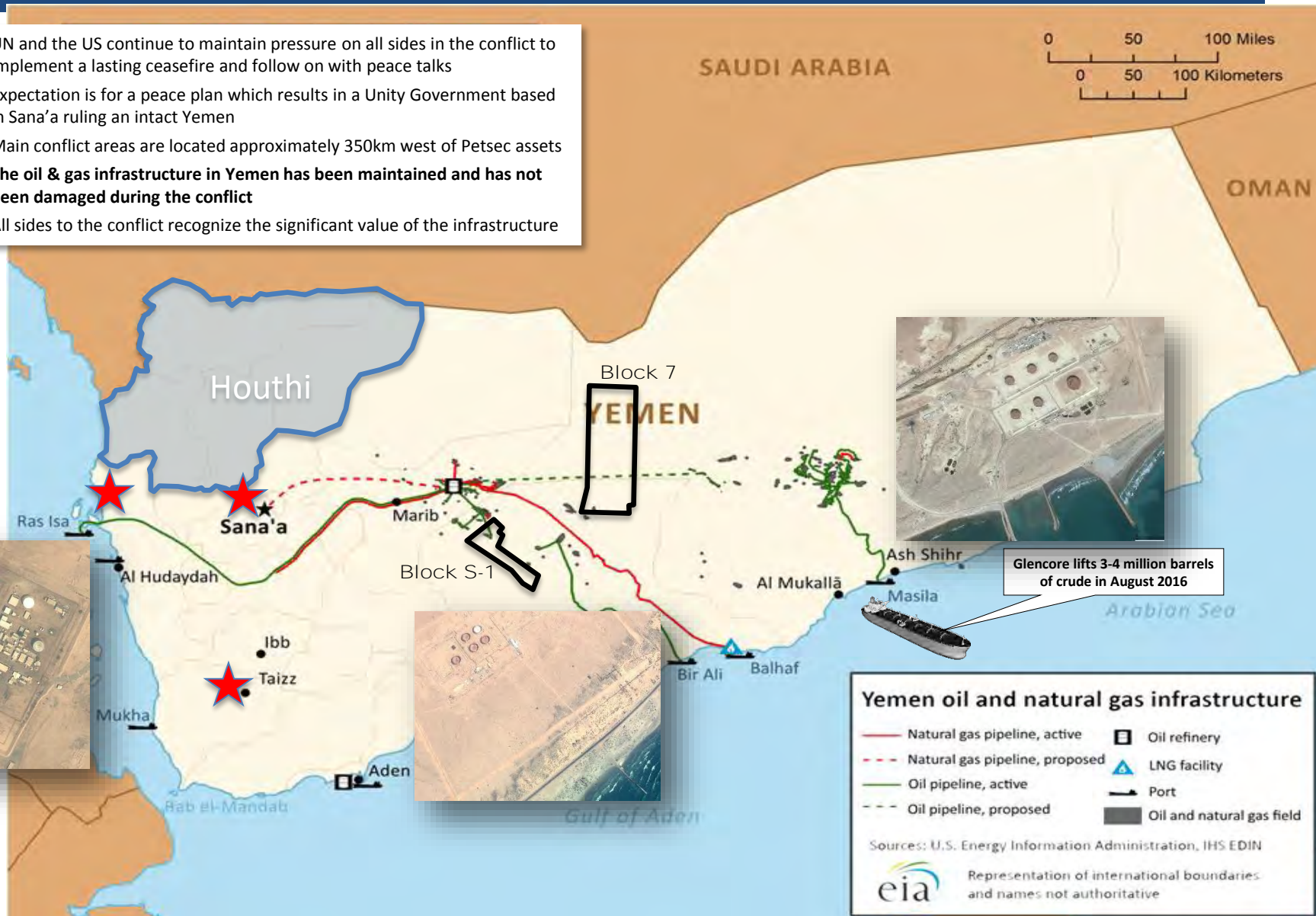


- ❖ The Shabwa Basin has exceptional petroleum source rocks and associated petroleum system, in excess of 2 billion barrels of oil have been discovered in the basin to date
- ❖ Damis (Block S-1) Production Licence and Block 7 Exploration Licence are located in the Shabwa Basin which has extensive oil production and pipeline transportation facilities
- ❖ Petsec's Yemen portfolio contains Low risk and material discovered oil and gas reserves that have been in production and are ready for the re-start of production
- ❖ Block S-1 has 5 oil & gas fields which together contain the 3rd largest remaining reserve base in Yemen
- ❖ Block 7 contains the Al Meashar oil field to be appraised and further developed, increasing the resource base

- ❖ During the conflict the country's oil and gas infrastructure was largely untouched.
- ❖ In August 2016, oil was shipped for the first time since March 2015, when 4 million barrels of oil were shipped from the Ash Shihr terminal near Mukalla on the Gulf of Aden which services Masila Basin oil production, and in turn the Masila oilfields have returned to production currently exceeding 40,000 bopd.
- ❖ The Aden Refinery, which has a 150,000 bopd processing capacity, has returned to production.
- ❖ With the recommencement of oil shipments from Ash Shihr there is an opportunity for Petsec Energy to transport An Nagyah oil production by truck either to the Masila hub to the East or South to the Bir Ali terminal until such time as the Ras Isa terminal on the Red Sea reopens for shipping oil, which allows production through the Marib pipeline.

Yemen Oil & Gas Infrastructure Situation Update

- ❖ UN and the US continue to maintain pressure on all sides in the conflict to implement a lasting ceasefire and follow on with peace talks
- ❖ Expectation is for a peace plan which results in a Unity Government based in Sana'a ruling an intact Yemen
- ❖ Main conflict areas are located approximately 350km west of Petsec assets
- ❖ **The oil & gas infrastructure in Yemen has been maintained and has not been damaged during the conflict**
- ❖ All sides to the conflict recognize the significant value of the infrastructure



Ash Shihr Oil Export Terminal Storage

Masila Basin Oil Shipments, Mukalla, Gulf of Aden

Terminal	No. of Tanks	Tank Capacity	Total Capacity
Ash Shihr	5	500,000	3,500,000
	1	1,000,000	
Bir Ali	5	126,000	630,000
Rass Issa	1	3,000,000	3,000,000



Petsec Energy Yemen Portfolio

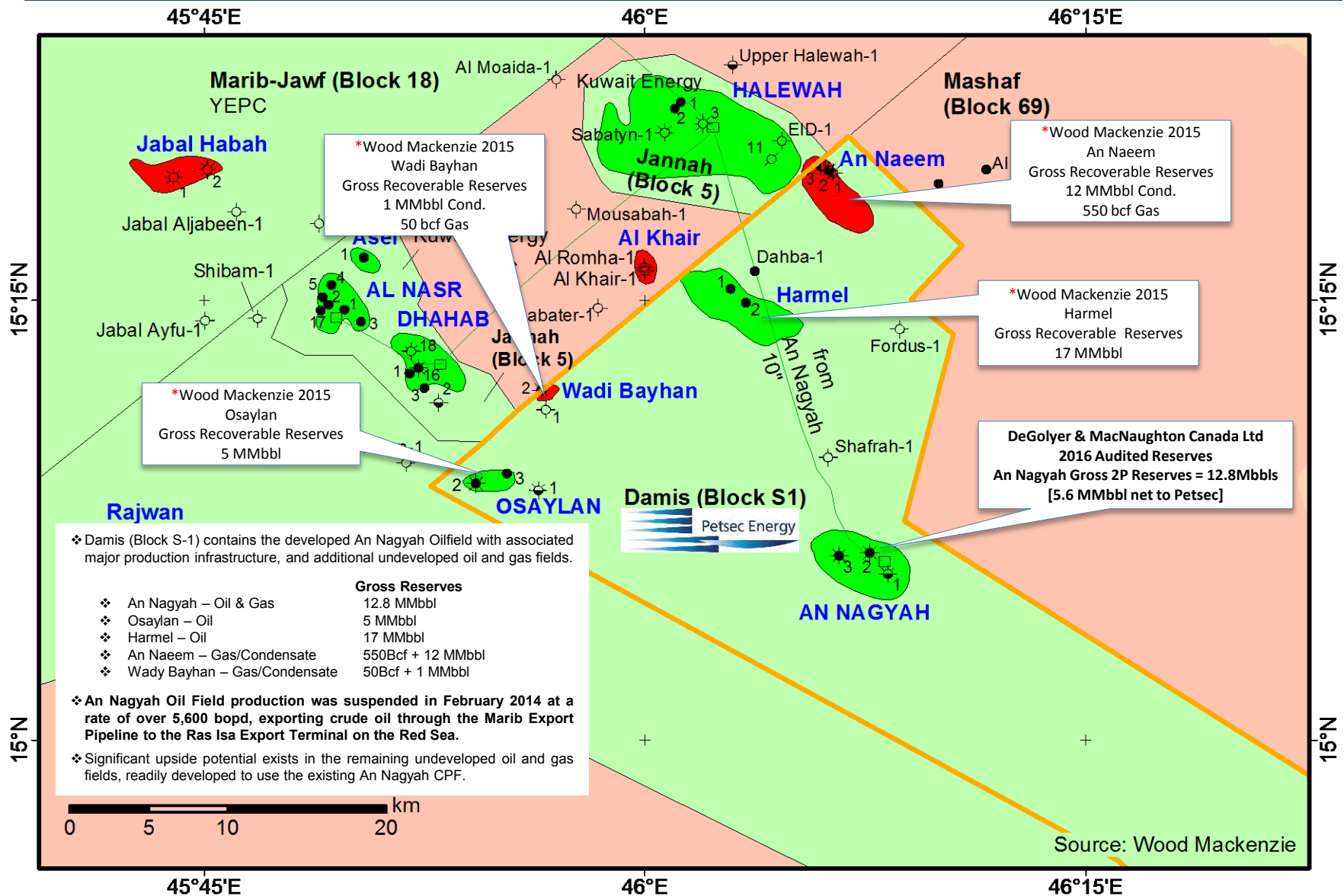
Damis (Block S-1), Yemen

Damis (Block S-1)

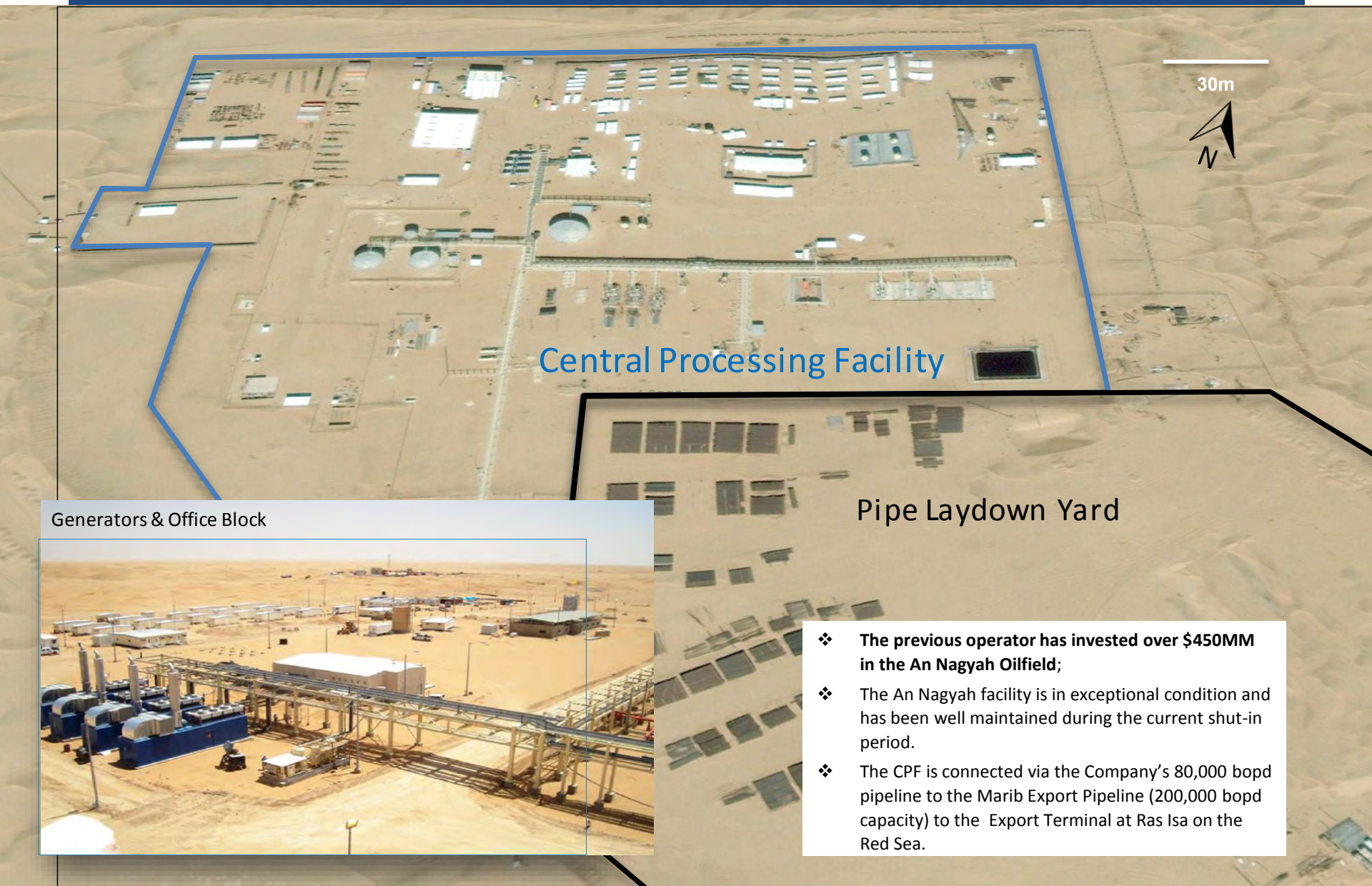
- ❖ 100% working interest in the Damis (Block S-1) Production Licence - acquired in early 2016.
- ❖ Damis (Block S-1) is located in the prolific Shabwa Basin approximately 80km to the Southwest of the Company's other lease in Yemen, Block 7.
- ❖ The block is connected via a 450km oil pipeline to the Ras Isa oil terminal on the Red Sea, and some 250km North by road of the Bir Ali oil export terminal on the Bay of Aden, and 450km West by road of the Masila Basin Production Hub.
- ❖ The Damis (Block S-1) Production Licence holds five sizeable oil and gas discoveries:
 - the developed and productive (until suspended in 2014) An Nagyah Oilfield, which holds 12.8MMbbl of oil gross to Petsec Energy as estimated by DeGolyer and McNaughton Canada Limited (5.6MMbbl net to Petsec with a PV10 in the order of US\$155MM), and
 - a further four undeveloped oil and gas fields – Osaylan, An Naeem, Wadi Bayhan, and Harmel which hold in excess of 34MMbbl of recoverable oil and 550 Bcf of gas which will be a source of future growth of reserves and production for the Company when conditions allow.
- ❖ The An Nagyah Oilfield has been shut-in since February 2014 following the declaration of Force Majeure by the previous operator due to political issues in Yemen. The field at the time of shut-in was producing at a restricted rate of over 5,600 bopd in and of the order of 10,000 bopd at an unrestricted rate two years earlier.

Damis (Block S-1) Production

Licence - 5 Oil & Gas Fields



An Nagyah Oilfield Central Processing Facility (CPF)



Central Processing Facility

Generators & Office Block



Pipe Laydown Yard

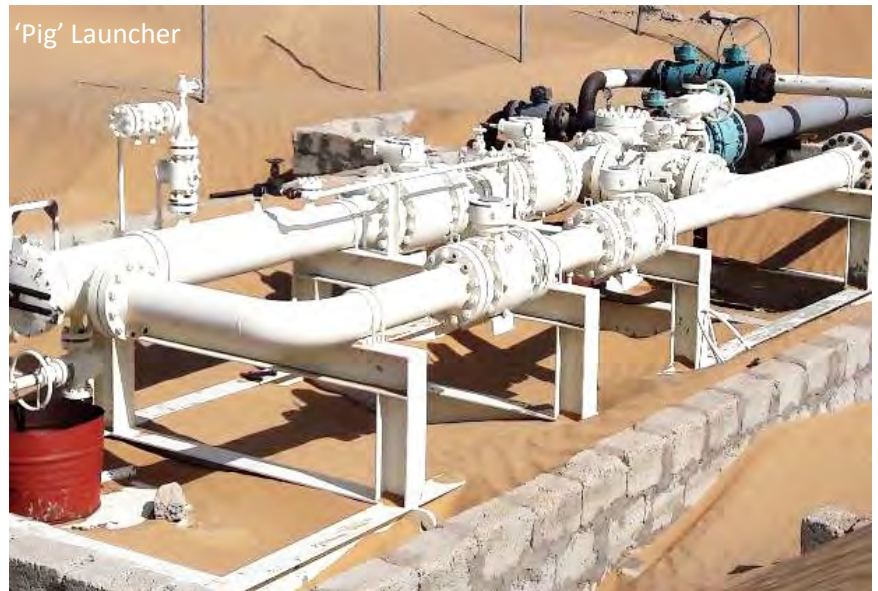
- ❖ The previous operator has invested over \$450MM in the An Nagyah Oilfield;
- ❖ The An Nagyah facility is in exceptional condition and has been well maintained during the current shut-in period.
- ❖ The CPF is connected via the Company's 80,000 bopd pipeline to the Marib Export Pipeline (200,000 bopd capacity) to the Export Terminal at Ras Isa on the Red Sea.

An Nagyah Oilfield

CPF Status



- ❖ No infrastructure within the Damis Licence has been damaged during the current conflict
- ❖ The CPF and associated equipment is being secured by the Yemeni government military and tribal contractor security services through a series of checkpoints and 24/7 perimeter guard rotation schedule
- ❖ Production is managed and remotely controlled by a modern hardware and software control system; Human Machine Interface System (HMI)
- ❖ The CPF can process up to 20,000 bopd and has a crude storage capacity of 17,500 bbls.
- ❖ The field was producing in excess of 5,000 bopd when production was suspended in February 2014.
- ❖ Yemeni production staff are based at the CPF
- ❖ **There are currently 15 production wells shut-in**



An Nagyah Oilfield

Current Activities

- ❖ A survey of every well head, pumping station, maintenance station, control room, equipment, and warehouse has been undertaken to understand the condition of main infrastructure at the An Nagyah oilfield
- ❖ The survey has identified no leaking equipment or damaged infrastructure nor damaged hardware associated with the An Nagyah production facility
- ❖ Maintenance on the security perimeter berm and roads and tracks within and around the Central Processing Facility (CPF) has started and is ongoing
- ❖ A mechanical engineering team will be mobilised to the CPF to identify maintenance issues and required repairs
- ❖ Planning for the restart of production through the trucking of crude to export terminals is currently underway; meetings with stakeholders and government authorities are ongoing

Oil Storage Manifold



Export Pumping Manifold

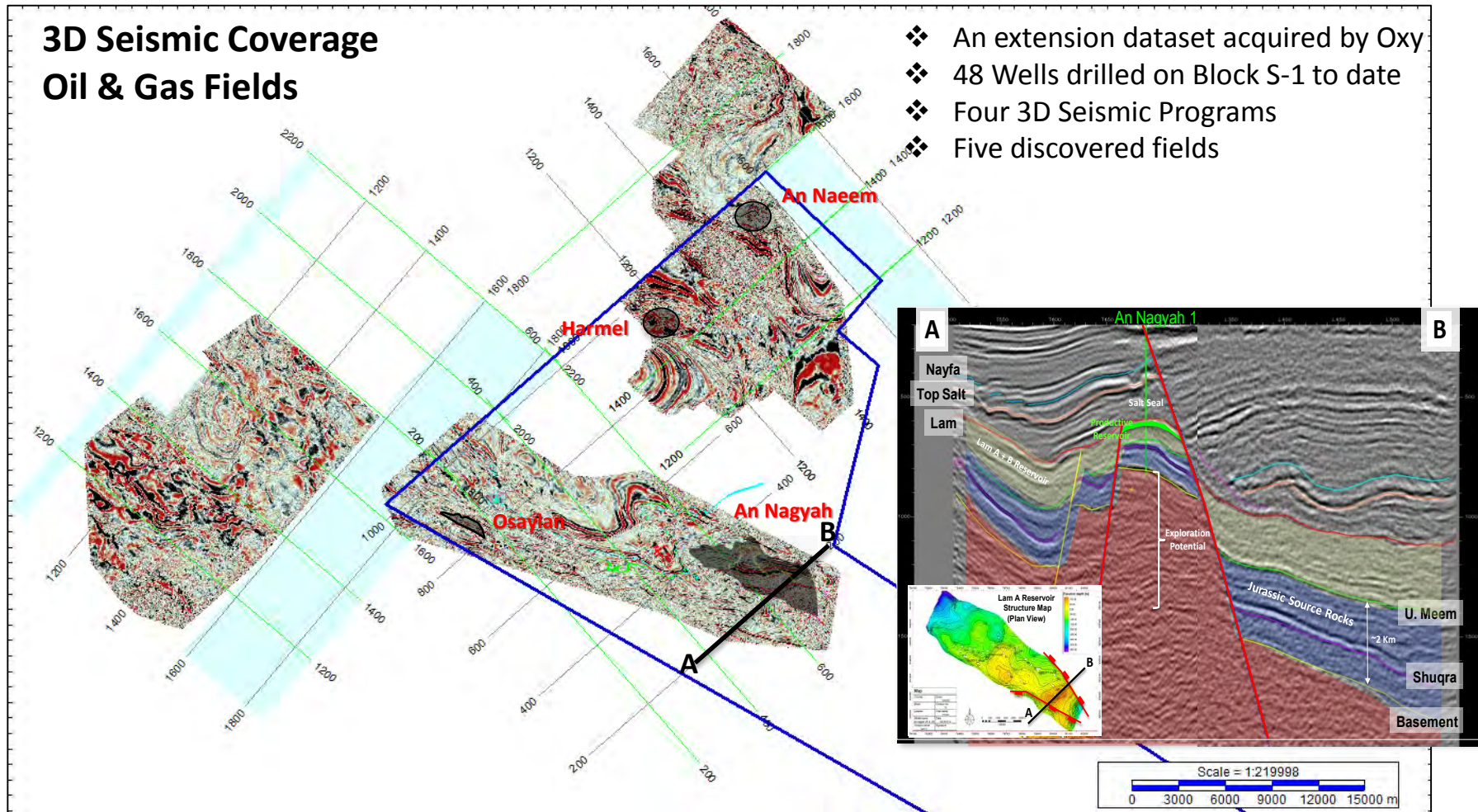


Water Injection Filtration Unit

DAMIS (Block S-1)

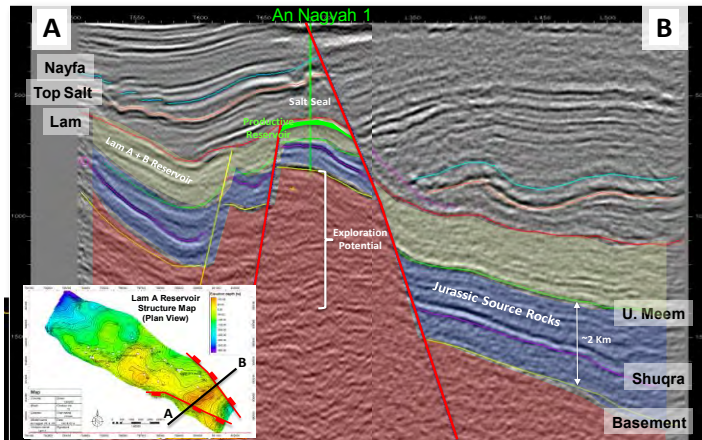
Subsurface: 3D Seismic Data Cubes

3D Seismic Coverage Oil & Gas Fields

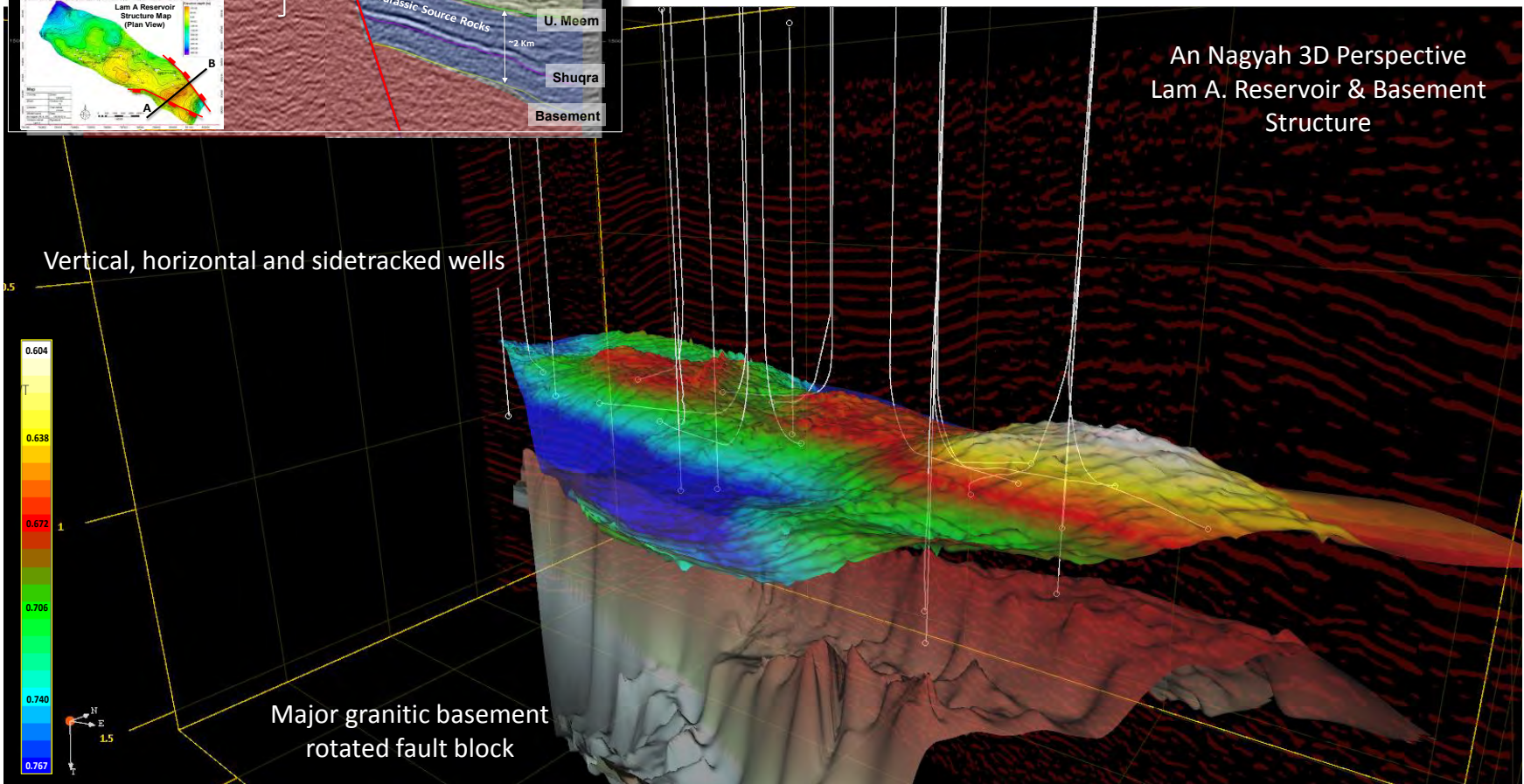


- ❖ An Nagyah Oilfield: Producing Field (since 2005) 42 deg API
- ❖ Osaylan Oilfield: 43 deg API - awaiting full field development and tie-in into An Nagyah CPF
- ❖ An Naeem Gas-Condensate Field: awaiting approvals and market study
- ❖ Harmel Oilfield: 22 deg API - awaiting full field development
- ❖ Wadi Bayhan Gas-Condensate Discovery: awaiting appraisal and commercialization study

An Nagyah Oilfield Subsurface 3D TWT Cube & Seismic Cross Section

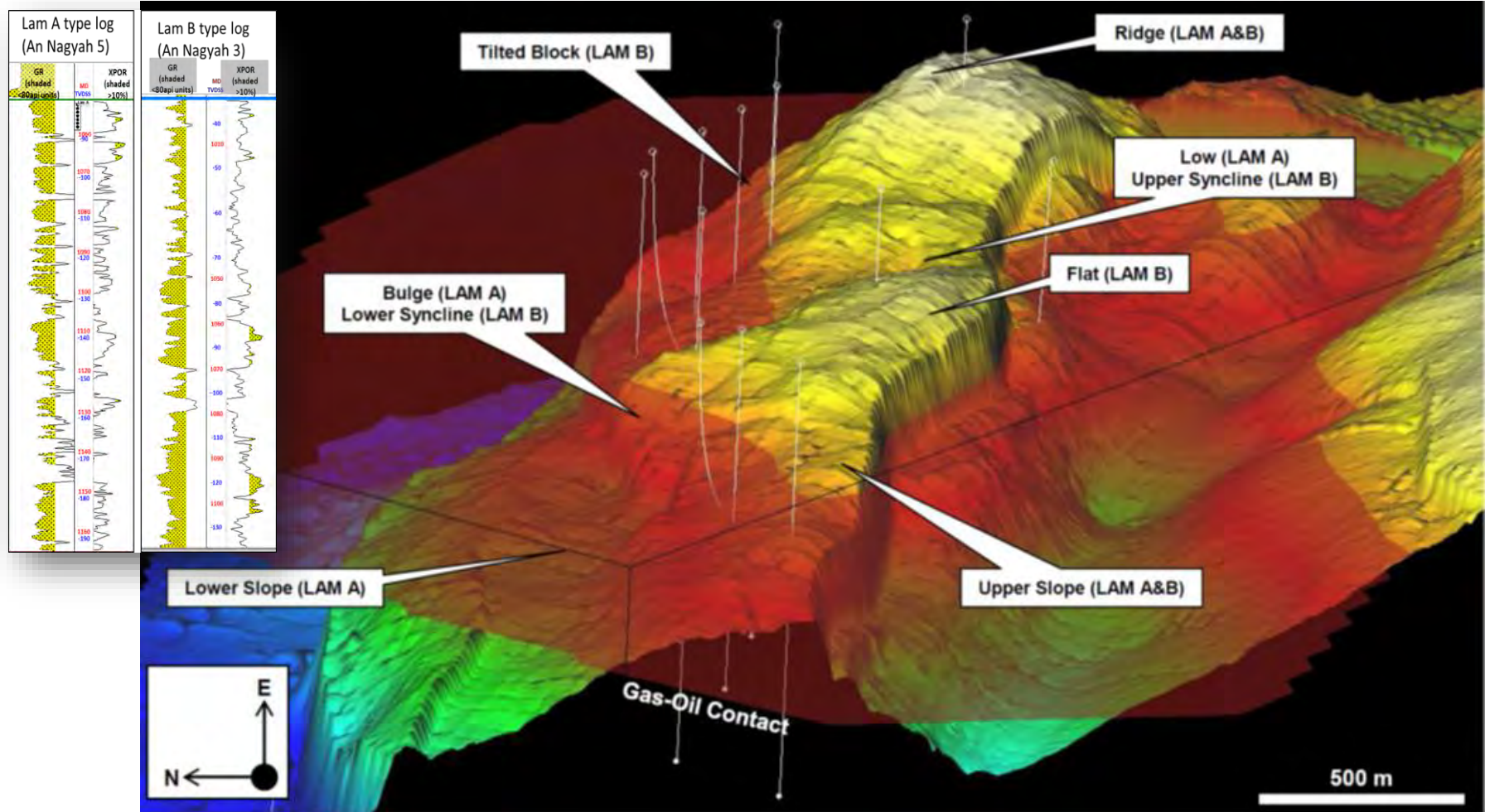


- ❖ The An Nagyah Oilfield is located within a world class petroleum system containing in excess of 2,000m of exceptional quality Jurassic source rocks.
- ❖ Structurally the field is a North-West to South-East trending tilted horst block within the Jurassic aged Sab'atayn Rift Basin.
- ❖ The most prolific reservoir is the uppermost Lam Sandstone, a thick sequence (100-125m) of delta front sandstones of Late Jurassic age.
- ❖ 15 production wells currently shut-in available for restart of production.



An Nagyah Oilfield

3D Perspective Near Top Lam Reservoir



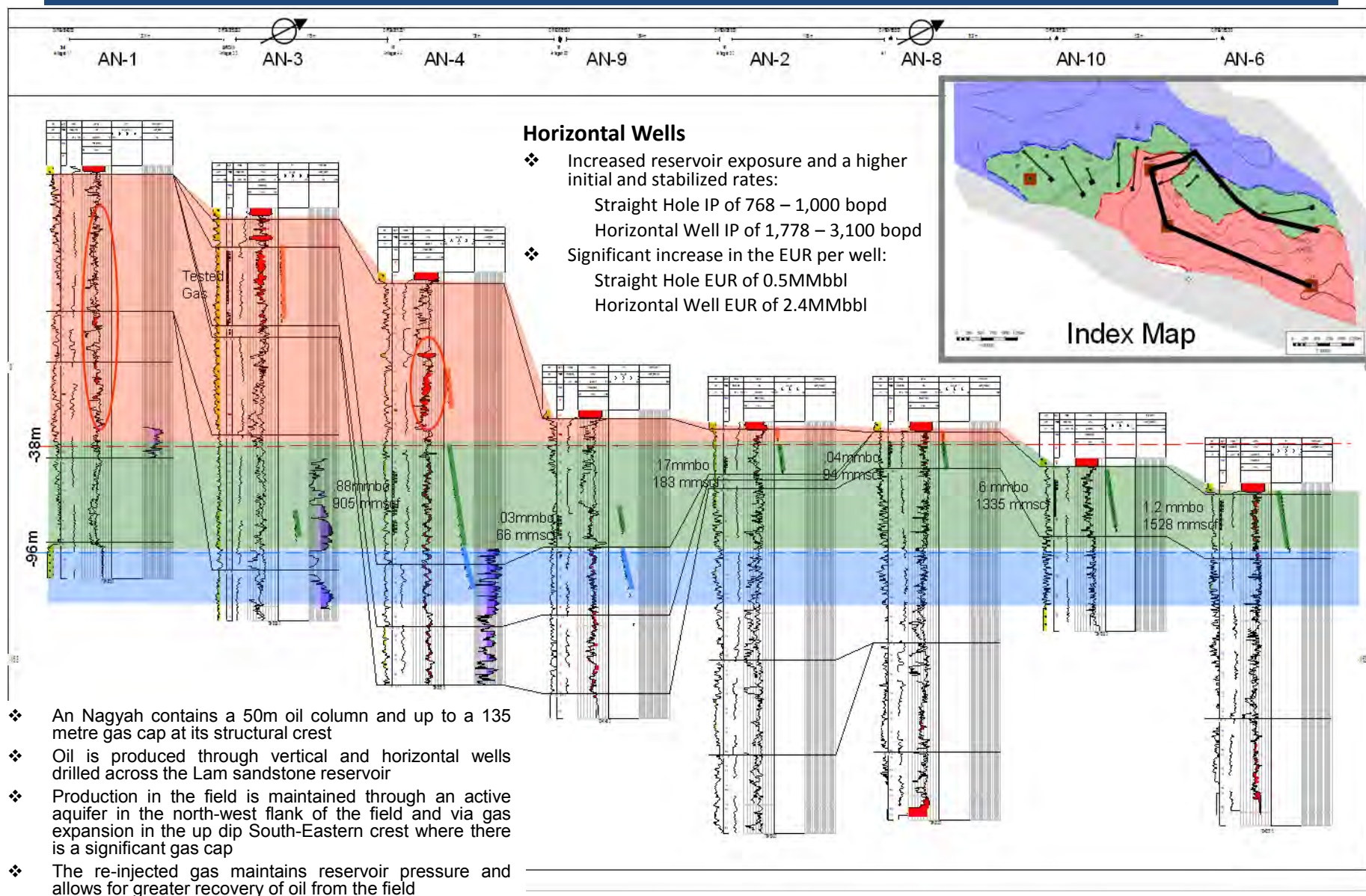
Two primary, Lam A and Lam B reservoirs

- ❖ In pressure communication
- ❖ With the same gas-oil contact and oil-water contact

Lam A reservoir: 19 oil producers were completed in the Lam A reservoir (15 currently active)
Four have since been shut-in or converted to gas injectors
4 gas injectors into Lam A (AN-3, 7, 8 and 11) Capacity up to 65 MMscfpd

Lam B reservoir: Two oil producers, An -23 and An-18
Water disposal into the Lam B (An-22)

An Nagyah Oilfield Well Cross Section Fluid Contacts (Lam A & B)

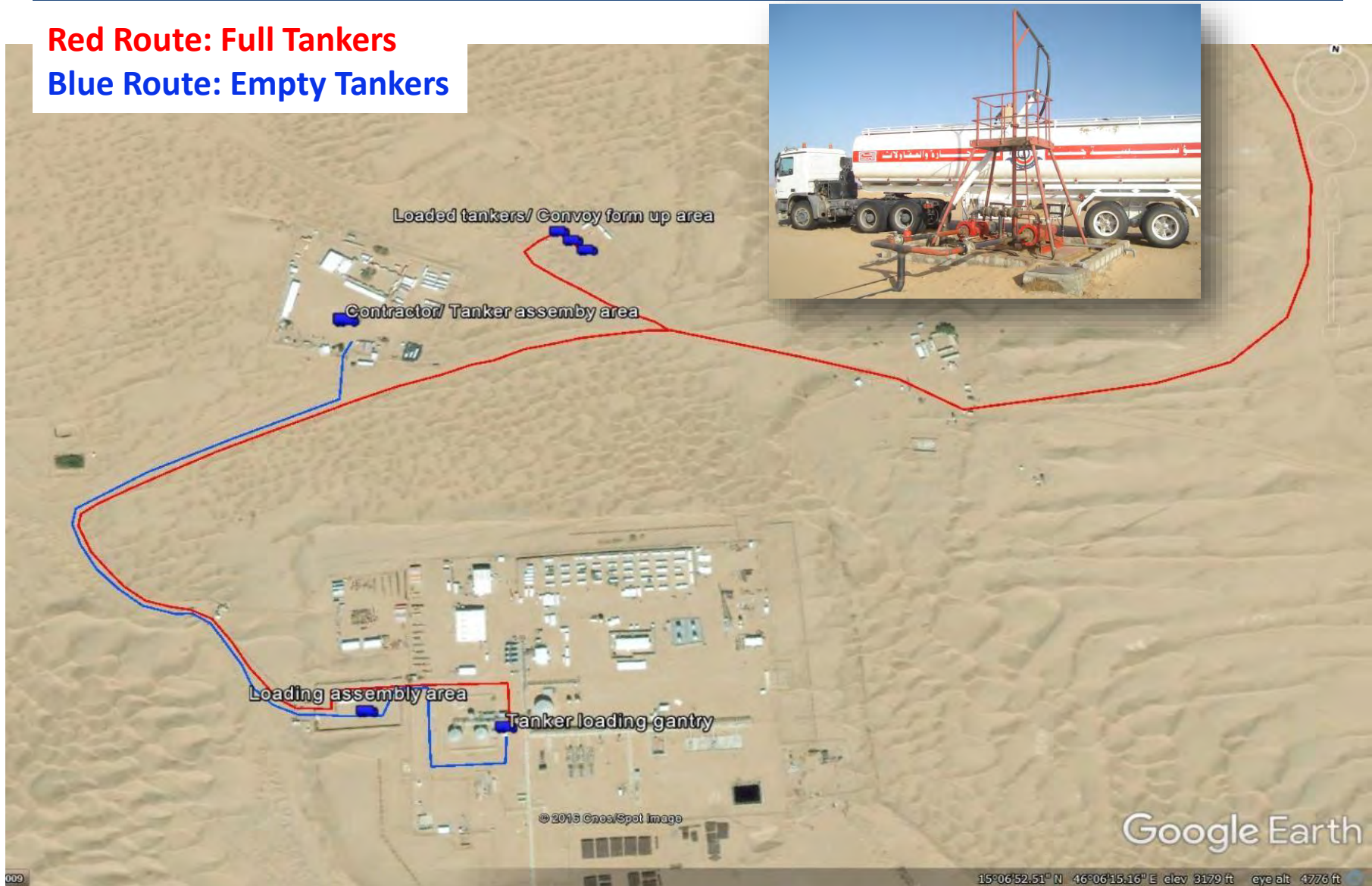


An Nagyah Oilfield: Trucking Plan

Tanker Assembly & Loading Areas

Red Route: Full Tankers

Blue Route: Empty Tankers



An Nagyah Oilfield: Trucking Routes

Block 4 Bir Ali terminal OR Block 14 Pipeline

Green: Pipe line runs from block 4 to Bir Ali. Preferred Option is to truck from Block S1 to Block 4 and ship to Bir Ali Terminal using existing pipeline. In the East the Masila Export Pipeline is currently pumping crude to the Ash Shihr Terminal.

Dark Blue: Trucking route to Bir Ali Terminal from Block S1.

Blue: Route Alternate option: Trucking route east to PetroMasila's, Block 14.

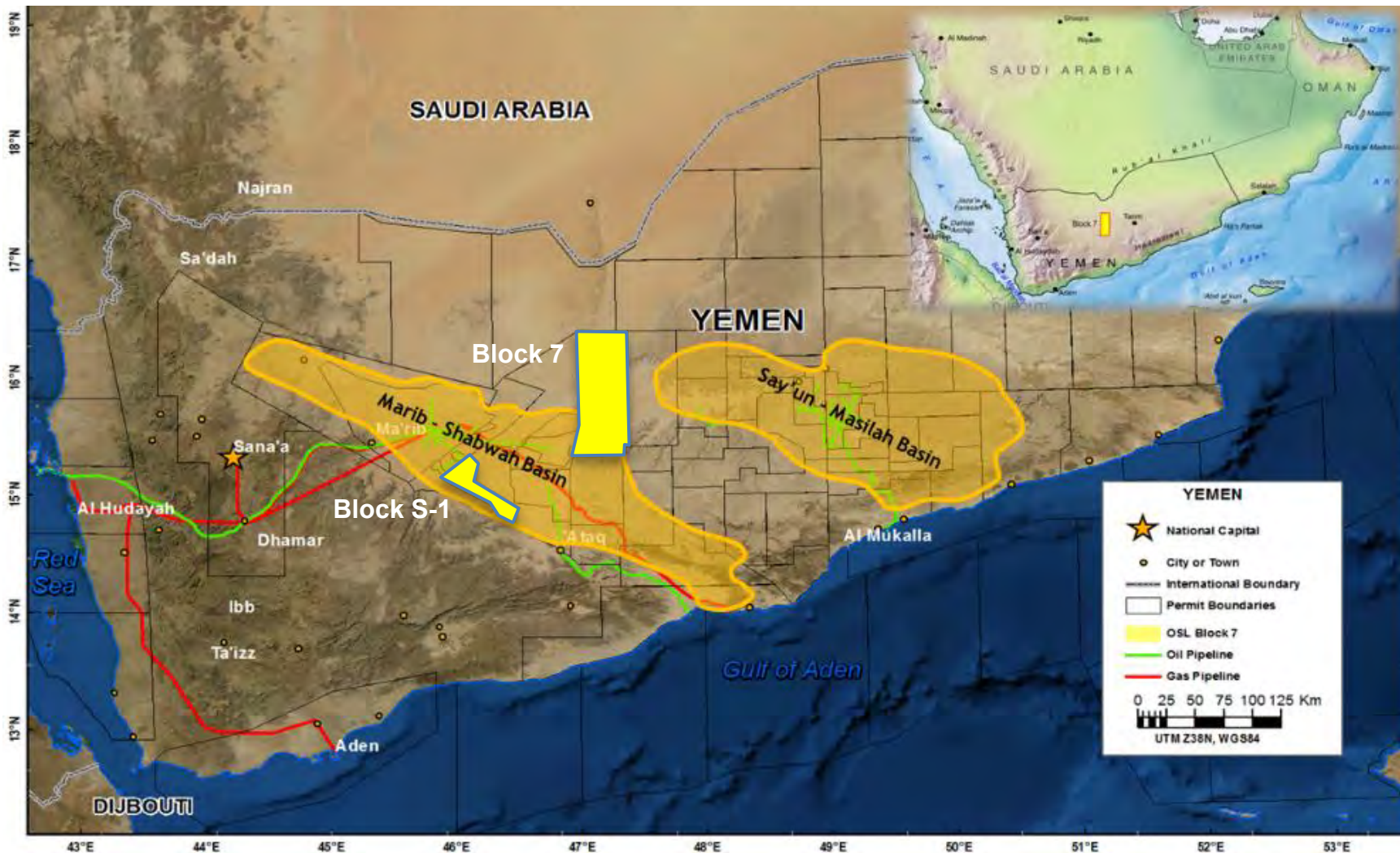
Red Route and Amber: Variable routes east (backup) access route.

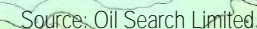


Al Barqa (Block 7)

Development & Exploration Potential

- ❖ The block holds the Al Meashar Oilfield (two wells) - targeting 11MMbbl oil gross (9.3MMbbl net) to > 50MMbbl potential.
- ❖ In addition, there are eight seismically (3D and 2D) defined prospects and leads with mapped target sizes ranging from 2 – 900 MMbo all with the same primary objectives of the Khulan-Basement reservoirs productive in OMV's Habban Oilfield 14km to the west of Al Meashar in the adjacent Block S2 recently producing ~20,000 BOPD.

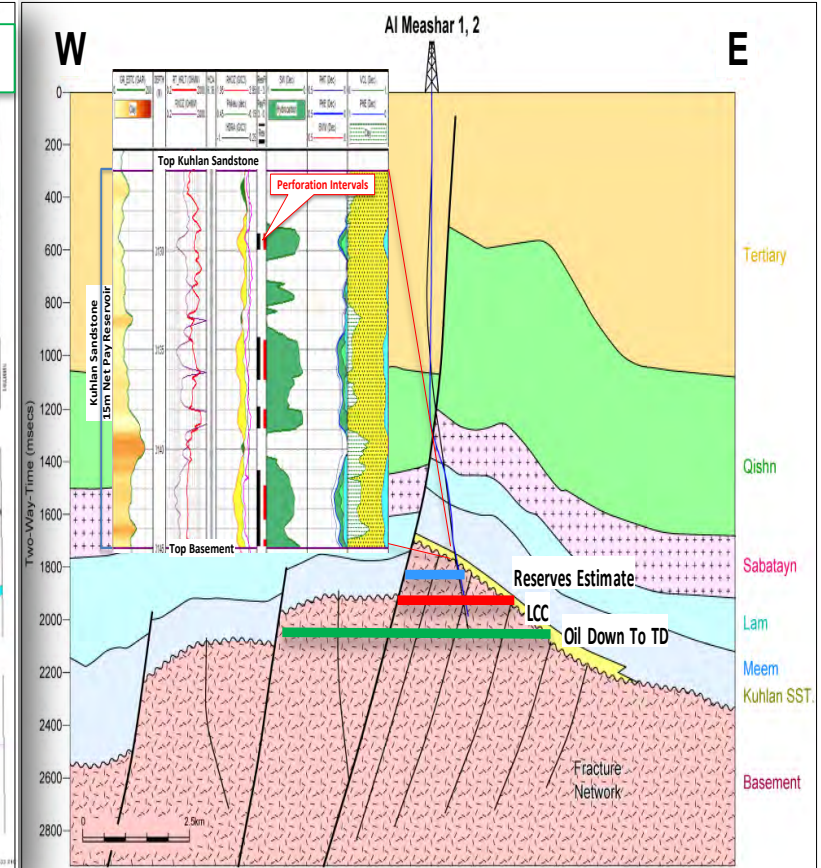
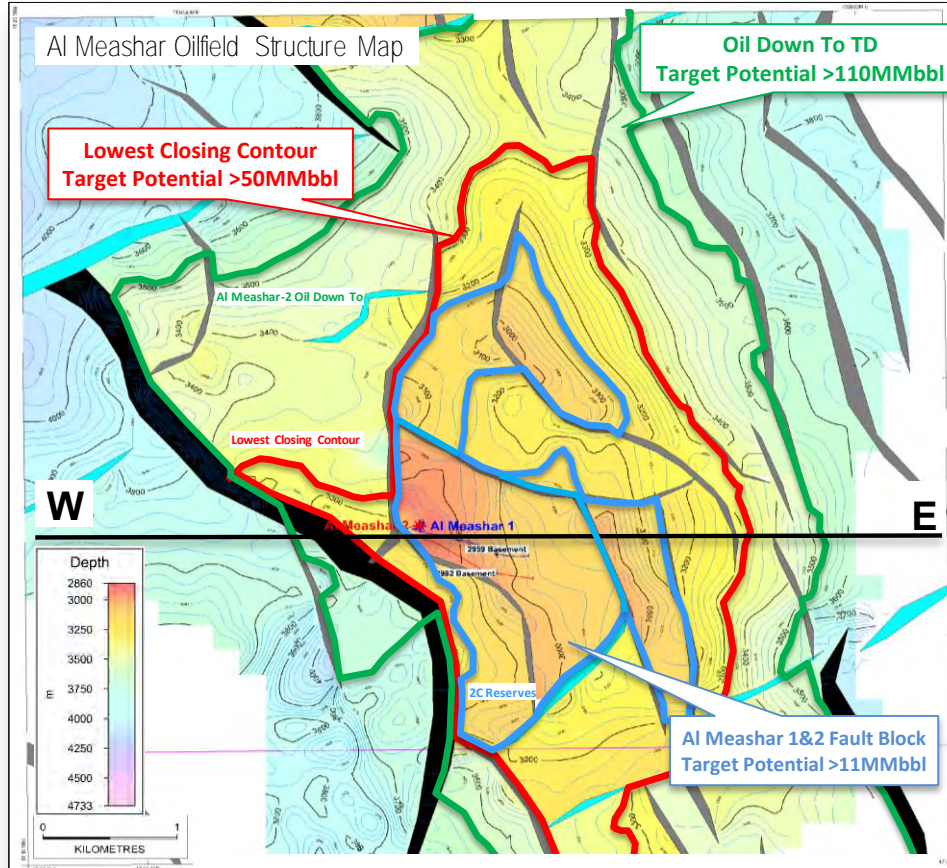




Al Barqa (Block 7)

Al Meashar Development Potential

- ❖ The **Al Meashar 1 & 2 discovery wells** intersected an oil column in excess of 800m in the Kuhlan Sandstone and Basement formations, the same formations as in **OMV's Habban Oilfield** which has an oil column of 945m and has been producing ~20,000 BOPD.
- ❖ The Al Meashar undeveloped oil discovery within the drilled fault block – two well intersection targets 11MMbbl oil gross (9.3MMbbl net) with potential to increase to > 50MMbbl within the currently mapped red Lowest Closing Contour.
- ❖ The oil column in the Al Meashar wells exceeds the mapped structural closure by more than 200m as defined by the red LCC contour in the map below. **Current estimates of oil target within the oil-down-to (ODT) green contour exceeds 110MMbbl.**
- ❖ The Kuhlan Sandstone overlaying basement is in communication with the Basement reservoir and is the production 'highway' as demonstrated in the Habban Oilfield. The well logs suggest 11% porosity consistent with Kuhlan in OMV's Habban Oilfield to the West.



Petsec Energy Ltd

Extraordinary General Meeting

December 2016

