

Petro Matad

Company update

2019 Mongolia drilling campaign kick-off

Petro Matad is set to kick off its 2019 exploration and appraisal campaign targeting a series of low-cost, near-field and low-risk targets. Drill sites for the three Block XX wells have been constructed and management expects drilling to begin in July 2019. Prospects Heron-1 and Gazelle-1 are analogous to producing fields to the north-east in Block XIX, while Red Deer-1 is more material at 48mmbbls and is located further away from known oil. Petro Matad is funded for 2019 from the net proceeds of equity raised in 2018. However, additional funding would be required to commit to additional exploration and to support G&A in 2020. We update our valuation based on the company's increased estimate of Heron-1 prospective resources at 25mmbbls (gross) from 16mmbbls. Our risked valuation stands at 21.6p/share (+6%), which we expect to revisit post-drill.

Year-end	Operating cash flow (\$m)	PBT* (\$m)	Net debt/ (cash) (\$m)**	Capex (\$m)	EBITDA (\$m)
12/17	(2.5)	(9.9)	(8.1)	(0.1)	(9.7)
12/18	(19.6)	(18.5)	(21.3)	(0.1)	(18.2)
12/19e	(4.8)	(5.0)	(6.5)	(10.0)	(5.0)
12/20e	(5.0)	(5.0)	(1.5)	(5.0)	(5.0)

Note: *PBT is normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. **Including financial assets.

Block XX low-cost, low-risk targets

Block XX's location immediately south of existing production in Block XIX is the target of three low-cost, low-risk drill targets in 2019. The first well, Heron-1, is an appraisal of the T19-46 oil field located on Block XIX. Petro Matad is targeting 86mmbbls across Heron-1, Gazelle-1 and Red Deer-1. Based on our analysis, the threshold for commerciality for Block XX is low, with development of small discoveries (c 10mmbbl) generating an IRR in excess of 10%.

Rapid appraisal in success case

In the Block XX success case, we expect Petro Matad to emphasise the appraisal of prospective resource de-risked by the 2019 exploration programme. In this event, drilling in frontier Blocks IV and V will likely be postponed to 2020. Management expects the higher risk/reward Block V exploration programme to start with the 201mmbbl Velociraptor prospect.

Valuation: Base case risked valuation of 21.6p/share

Our updated base case risked valuation of 21.6p/share (+6%) assumes a 50% value dilution through farm-down. A 6% increase in RENAV from our last published [note](#) is driven by Petro Matad's recent upgrade of Heron prospective resource. The company increased its assessment of the mean prospective resources from 16mmbbls to 25mmbbls following mapping of reprocessed seismic. Petro Matad is fully funded for 2019 and we assume a farm-down to fund future development. However, further issues of equity at the current share price could be significantly dilutive to our per-share valuation.

Oil & gas

12 July 2019

Price **7p**
Market cap **£46m**

US\$/£1.29

Net cash (\$m) at 31 December 2018 (includes \$19.2m financial assets) 21.3

Shares in issue 662.2m

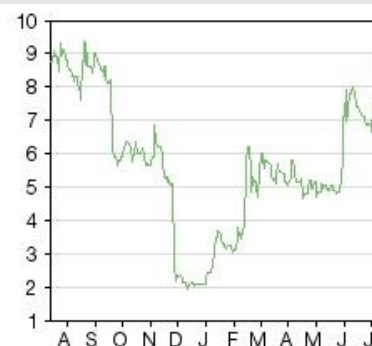
Free float 80.8%

Code MATD

Primary exchange AIM

Secondary exchange N/A

Share price performance



%	1m	3m	12m
Abs	11.7	71.8	(2.2)
Rel (local)	10.3	70.3	(0.2)

52-week high/low 9.35p 1.95p

Business description

Petro Matad is a pure-play Mongolian exploration company with a 100% equity interest in Blocks IV, V and XX. Management plans to drill three exploration and appraisal wells in 2019, targeting low-risk prospects in Block XX.

Next events

Heron-1 Spud July 2019

Red Deer-1 Spud July 2019

Gazelle-1 Spud Q319

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2019 exploration and appraisal programme

Petro Matad's 2019 three-well drilling campaign in Block XX will begin in July 2019, with the spud of the Heron-1 appraisal well utilising DQE's rig 40105. Red Deer-1, in the south of the block, is expected to commence drilling shortly after, using the company's second rig, DXZ1. Gazelle-1 is scheduled to be drilled after completion of operations at Heron-1. The company has completed site construction for all drilling locations and rig mobilisation is currently underway.

Exhibit 1: 2019 Block XX exploration campaign schedule

Block	Activity	2019			2020															
		Q2	Q3	Q4	Q1	Q2	Q3													
		A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
XX	Seismic Reprocessing																			
	Re-interpretation/mapping	■	■	■				■	■	■										
	Drilling Location Definition	■	■	■																
	Permitting/Contracting	■	■	■																
	Heron-1				■	■	■	■	■	■	■	■	■	■	■	■				
	Gazelle-1					■	■	■	■	■	■	■	■	■	■	■				
	Red Deer-1				■	■	■	■	■	■	■	■	■	■	■	■				
	Exploitation Term Application Process										■	■	■	■	■	■	■	■	■	■

Source: Petro Matad

Petro Matad will look to rapidly appraise any discoveries in Block XX during the 2019 drilling season, potentially delaying frontier exploration in Blocks IV and V to the 2020 drilling season. Technical work is ongoing on Blocks IV and V, incorporating results from the 2018 drilling campaign; the 201mmbbl Velociraptor prospect has been selected as the next target in Block V.

Heron-1 well

The first well in the programme, Heron-1, is an appraisal of the Petro China-operated T19-46 oil field immediately to the north in Block XIX. Petro Matad increased its assessment of the mean prospective resources by over 50% from 16mmbbl to 25mmbbl following mapping of reprocessed 2D seismic and this has been confirmed by 3D seismic recently provided by Petro China. The mapping indicates that the majority of the 13km² structure sits in Block XX and the updated estimate includes potential to the east of the prospect, which has now been confirmed as part of the Heron structure. Heron-1 will be drilled to a planned total depth (TD) of 3,050m and is expected to take around 40 days to drill and log.

Red Deer-1 and Gazelle-1

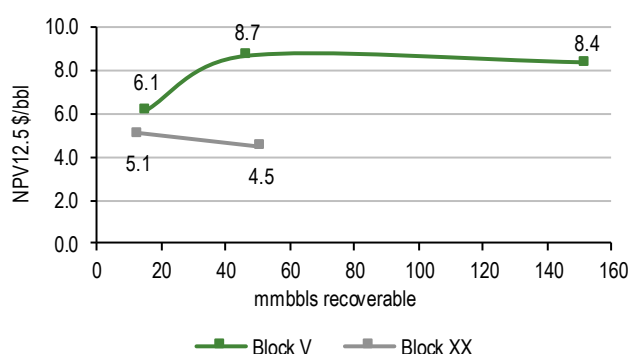
Red Deer-1 is expected to spud by the end of July 2019 and will target mean prospective resources of 48mmbbls in a basin centre, fault-bounded, structural closure in the southern part of Block XX. It is located in an undrilled basin but is adjacent to productive basins that have the same geology and petroleum systems seen to the north-east in Block XIX. The well will be drilled to a TD of 2,100m and is scheduled to take 35 days to drill and log.

Gazelle-1 sits 5km west of Heron-1, updip of proven oil and on trend with the best-producing wells in Block XIX. The company estimates that the well contains mean prospective resources of 13mmbbls. However, this is based on the structural trap and there is potential upside in a stratigraphically trapped part of the accumulation. The well will be drilled back to back with Heron-1 and is expected to take 35 days to drill and log to a TD of 2,500m.

Valuation

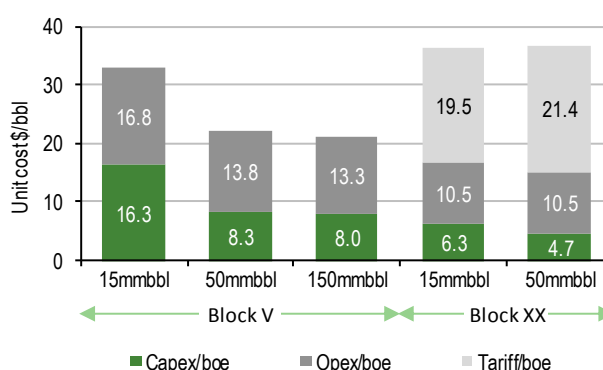
Our valuation of Petro Matad is based on risked value for the company's drill-ready and committed prospects in Block XX (Heron, Red Deer and Gazelle) and Block V (Velociraptor). Details of the prospects are provided above. We calculate economics per unit volume (\$/boe) using modelled company development plans for Block XX and Block V. Our unit values are shown below and are driven by discovery size (for more details, see our [outlook note](#) published on 28 January 2019).

Exhibit 2: Block V and Block XX unit NPV_{12.5}



Source: Edison Investment Research

Exhibit 3: Modelled capex, opex and tariff costs



Source: Edison Investment Research

In our base case valuation, shown below, we typically include elements of dilution, of which investors need to be mindful when investing in the small-cap E&P sector:

- While we do not currently include equity dilution through a future fund-raise, this has the potential to be significantly dilutive to our per-share NAV valuation.
- We include asset-level working interest dilution through the farm-down of discoveries made during the exploration phase.

We include a total of \$21.3m (\$2.1m FY18 year-end cash balance and \$19.2m financial assets) to fund the 2019/20 exploration campaign, contingency and SG&A.

Exhibit 4: Petro Matad base case valuation

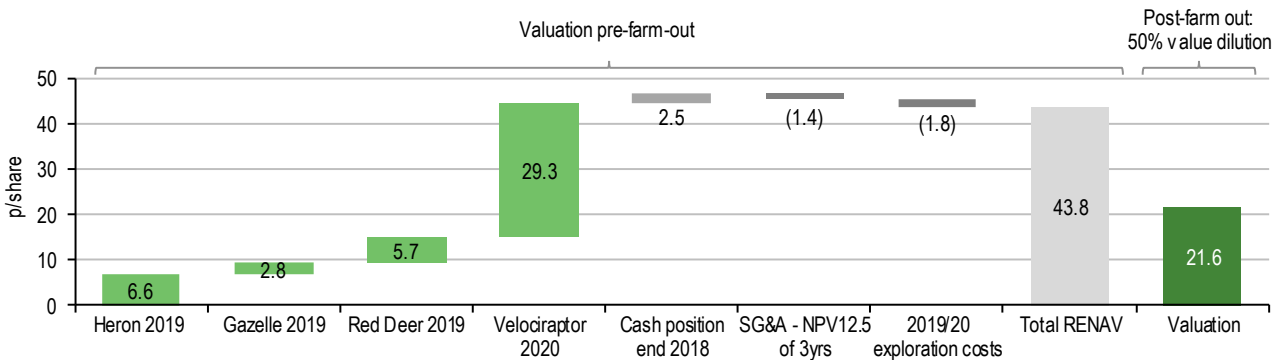
Asset	Country	Diluted WI	Pc**	Recoverable reserves		Net risked value		Risked value per share		
				Gross	Net	NPV _{12.5} /boe	NPV _{12.5}	12.5%	10.0%	15.0%
		%	%	mboe	mboe	\$/boe	\$m	p/share	p/share	p/share
Net cash - end 2018							2.1	0.2	0.2	0.2
Financial assets - end 2018							19.2	2.2	2.2	2.2
SG&A - NPV _{12.5} of 3yrs							(11.9)	(1.4)	(1.4)	(1.4)
2019/20 committed prospects							(15.0)	(1.8)	(1.8)	(1.8)
Core NAV							(5.6)	(0.7)	(0.7)	(0.7)
Exploration										
Block XX - Heron 2019	Mongolia	50%*	45%	25.0	12.5	5.1	28.5	3.3	4.1	2.7
Block XX - Gazelle 2019	Mongolia	50%*	36%	13.0	6.5	5.1	11.8	1.4	1.7	1.1
Block XX - Red Deer 2019	Mongolia	50%*	23%	48.0	24.0	4.5	24.3	2.8	3.7	2.2
Block V - Velociraptor 2020	Mongolia	50%*	15%	200.0	100.0	8.4	125.7	14.7	18.0	12.0
Exploration NAV				286.0	143.0		190.3	22.2	27.4	18.1
RENAV				286.0	143.0		184.7	21.6	26.8	17.5

Source: Edison Investment Research. Note: *Reflects value retained after assumed development farm-down. **Pc = Pg x Pe. Pg assumed at 50% for Heron, 40% for Gazelle, 25% for Red Deer, 20% for Velociraptor. Pe assumed to be 90% for Block XX and 75% for Block V. Number of shares = 662m, FX: US\$/£1.29.

The valuation waterfall below provides a breakdown of our risked valuation prior to farm-down at 43.8p/share, followed by what this could look like post farm-down. Our updated base case valuation of 21.6p/share (+6%) is on the basis of a \$70/bbl Brent long-term (2022) oil price and 50% asset-level value dilution through farm-down (please see Appendix A for further details on our farm-down

framework). The main change in our valuation is the update in Heron’s gross prospective resource estimate to from 16mmbbls to 25mmbbls.

Exhibit 5: RENA V waterfall and post-funding risked valuation range (NPV_{12.5})



Source: Edison Investment Research

Financials

Petro Matad closed FY18 with \$2.1m of cash and \$19.2m of financial assets, enough to cover its four-well 2019/20 exploration and appraisal campaign. Additional funding would be required to commit to an exploration programme and to support group G&A beyond 2020. We assume a short-term debt facility for the initial two years of development (over 2021 and 2022).

We assume a capex cost of \$15m for the 2019/20 well programme including contingency but excluding overheads and PSC costs, with a cost of \$3m for Heron, \$3m for Gazelle, \$3m for Red Deer, \$4m for Velociraptor and \$2m for geological studies.

Exhibit 6: Financial summary

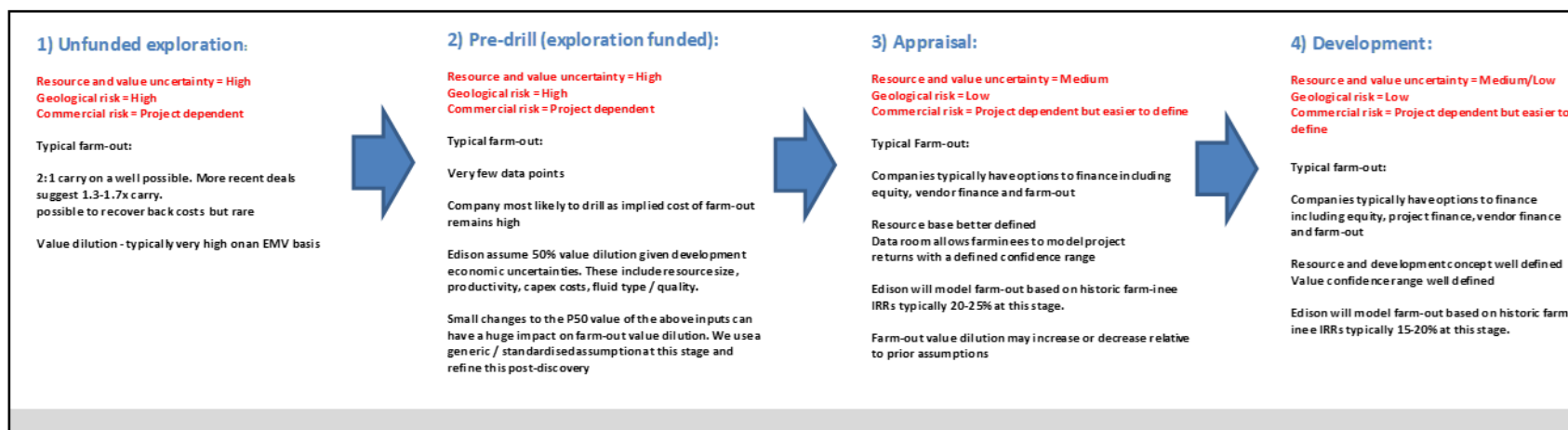
	\$m	2016	2017	2018	2019e	2020e
Year-end: December		IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS						
Revenue		18.9	0.2	0.6	0.0	0.0
Cost of Sales		0.0	0.0	0.0	0.0	0.0
Gross Profit		18.9	0.2	0.6	0.0	0.0
EBITDA		11.1	(9.7)	(18.2)	(5.0)	(5.0)
Operating Profit (before amort. and except.)		10.9	(9.9)	(18.4)	(5.0)	(5.0)
Intangible Amortisation		0.0	0.0	0.0	0.0	0.0
Exceptionals		0.0	0.0	0.0	0.0	0.0
Other		0.0	0.0	0.0	0.0	0.0
Operating Profit		10.9	(9.9)	(18.4)	(5.0)	(5.0)
Net Interest		(0.1)	0.0	(0.1)	0.0	0.0
Profit Before Tax (norm)		10.8	(9.9)	(18.5)	(5.0)	(5.0)
Profit Before Tax (FRS 3)		10.8	(9.9)	(18.5)	(5.0)	(5.0)
Tax		0.0	0.0	0.0	0.0	0.0
Profit After Tax (norm)		10.8	(9.9)	(18.5)	(5.0)	(5.0)
Profit After Tax (FRS 3)		10.8	(9.9)	(18.5)	(5.0)	(5.0)
Average Number of Shares Outstanding (m)		287.5	308.5	571.8	662.2	662.2
EPS - normalised (c)		0.4	(0.3)	(0.3)	(0.1)	(0.1)
EPS - normalised and fully diluted (c)		0.4	(0.3)	(0.3)	(0.1)	(0.1)
EPS - (IFRS) (c)		0.0	(0.0)	(0.0)	(0.0)	(0.0)
Dividend per share (c)		0.0	0.0	0.0	0.0	0.0
Gross Margin (%)		100.0	100.0	100.0	-	-
EBITDA Margin (%)		58.9	-	-	-	-
Operating Margin (before GW and except.) (%)		57.7	-	-	-	-
BALANCE SHEET						
Fixed Assets		16.1	15.9	15.6	25.6	30.6
Intangible Assets		15.3	15.3	15.3	15.3	15.3
Tangible Assets		0.8	0.6	0.3	10.3	15.3
Investments		0.0	0.0	0.0	0.0	0.0
Current Assets		12.2	8.6	21.7	6.7	1.7
Stocks		0.5	0.3	0.2	0.0	0.0
Debtors		5.2	0.2	0.2	0.2	0.2
Cash		6.5	5.1	2.1	6.5	1.5
Financial assets		0.0	3.0	19.2	0.0	0.0
Current Liabilities		(1.4)	(3.4)	(1.3)	(1.3)	(1.3)
Creditors		(1.4)	(3.4)	(1.3)	(1.3)	(1.3)
Short term borrowings		0.0	0.0	0.0	0.0	0.0
Long Term Liabilities		0.0	0.0	0.0	0.0	(5.0)
Long term borrowings		0.0	0.0	0.0	0.0	0.0
Other long-term liabilities		0.0	0.0	0.0	0.0	(5.0)
Net Assets		26.9	21.1	36.0	31.0	26.0
CASH FLOW						
Operating Cash Flow		1.8	(2.5)	(19.6)	(4.8)	(5.0)
Net Interest		0.0	0.0	0.0	0.0	0.0
Tax		0.0	0.0	0.0	0.0	0.0
Capex*		(0.6)	(0.1)	(0.1)	(10.0)	(5.0)
Acquisitions/disposals		0.0	0.0	0.0	0.0	0.0
Financing		(0.0)	4.2	32.8	0.0	5.0
Dividends		0.0	0.0	0.0	0.0	0.0
Net Cash Flow		1.1	1.6	13.2	(14.8)	(5.0)
Opening net debt/(cash)**		(5.3)	(6.5)	(8.1)	(21.3)	(6.5)
HP finance leases initiated		0.0	0.0	0.0	0.0	0.0
Other		(0.0)	(0.0)	0.0	0.0	0.0
Closing net debt/(cash)**		(6.5)	(8.1)	(21.3)	(6.5)	(1.5)

Source: Edison Investment Research, Petro Matad accounts. Note: *Farm-in proceeds to cover capex beyond 2020. **Including financial assets.

Appendix A

We use a farm-down framework when valuing E&P assets that are not self-funded through to first oil. In general, the extent of value dilution we assume through farm-down decreases as asset certainty and risks decrease, as shown in Exhibit 7. Given the current uncertainty with regard to unrisks resource size, productivity, oil quality and costs, we use a generic assumption of 50% value dilution (stage 2 of our framework) for Petro Matad, which we intend to refine post-drill.

Exhibit 7: Edison E&P farm-down framework



Source: Edison Investment Research



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