

PETRO MATAD

OIL & GAS

19 January 2022

MATD.L

4.4p

Market Cap: £39.5m

SHARE PRICE (p) 10 8 6 4 2 0 Ś

8.3p/2.5p

Source: LSE Data

12m high/low

KEY DATA	
Net (Debt)/Cash	\$10.0m (at 05/08/21)
Enterprise value	£32.4m
Index/market	AIM
Next news	Finals - Apr/May '22
Shares in Issue (m)	898.5
Chairman	Enkhmaa Davaanyam
Chief Executive	Mike Buck
Head of Finance	Tamir Battogtokh

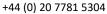
COMPANY DESCRIPTION

Petro Matad is a UK-listed exploration company that is focused on Mongolia. petromatadgroup.com

PETRO MATAD IS A RESEARCH CLIENT OF **PROGRESSIVE**

ANALYSTS

Peter Hitchens





Promising outlook for 2022

Heron moving ahead

Petro Matad issued a trading update in December highlighting that the company is on track for its target of starting production at its Heron oil discovery in Mongolia in the middle of 2022. The Heron field is located in Block XX, where the company has a 100% working interest. This production will allow Petro Matad to start generating cash flow, which will give the company the funds required to accelerate its anticipated work programme.

- Heron moving to production. Petro Matad is in negotiations with oil service contractors with the hope of getting in place the required contracts to allow the completion of the Heron-1 discovery well as a production well when the operating season starts in Q2 2022. The company would then look to drill a further two production wells, allowing production to be ramped up higher.
- Seeking a partner. The company is still looking at bringing in a partner and has opened a virtual data room. A partner would bring in additional funds that could allow Petro Matad to further accelerate the ramp-up of production, as well as drilling some exciting exploration wells. However, the recent fundraise means that the company can start the development and is not reliant on getting a partner should management feel a reasonable offer has not been received.
- **Finances are strong.** Petro Matad's finances remain strong after the share issue in August 2021 that raised US\$10.5m gross. This should be sufficient to fund the initial development of the Heron field on a 100% working interest basis, where the initial three-well programme is forecast to cost US\$9m. Thereafter, the company would start to receive cash flow to further the development.
- Further exploration. Petro Matad is looking at further exploration over the next 18 months. This is likely to be a combination of near-field exploration in Block XX as well as some exciting wild cat wells in Block V. Success at any of these wells will provide a material boost to Petro Matad's potential recoverable reserve and resources base.
- RENAV increased. Our RENAV (Risked Exploration Net Asset Value) is increased to 29.0p/share, which represents a 29% increase on our previous RENAV of 22.5p/share. This increase is predominantly due to an increase in our long-term oil price assumption to US\$60/bbl from US\$55/bbl to better reflect the forward futures curve after the recent rally in oil prices. Investors should view any valuation in the context of their own assessments of the relevant risks.



Investment summary

2022 is set to be a pivotal year for Petro Matad. The main focus for management will be to complete the Heron-1 discovery well as a producing well and to drill two further production wells on the field. The company is in the process of finalising contracts with oil services companies to allow this to be done when the operational season starts in Q2 2022. This will allow the company to start generating cash flow, which can be used to grow the business further.

Petro Matad is in negotiations with oil service contractors with the hope of getting in place the required contracts to allow the completion of the Heron-1 discovery well as a production well when the operating season starts in Q2 2022. Production is then expected to be transported to PetroChina's facilities in the adjacent licence where it would be processed and then, most likely, shipped to China for refining. The company would then look to drill two further production wells, allowing production to be ramped up. To help this, Petro Matad is in discussions with the Mineral Resources and Petroleum Authority of Mongolia (MRPAM) about the pricing of the Heron crude oil to allow negotiations to start with potential buyers.

The company is still looking at bringing in a partner to take an interest in the operations and has opened a virtual data room to help this process. A partner would reduce Petro Matad's net spending, allowing it to use its cash balances to accelerate the ramp-up of production at the Heron field, as well as drilling some exciting exploration wells nearby to Heron and in its other licence, Block V. The recent fundraise means that the company has sufficient funds to proceed with the planned development programme for 2022 and is therefore not reliant on getting a partner should a satisfactory offer not materialise.

The finances of the company remain strong after the share issue in August 2021, in which Petro Matad raised US\$10.5m gross. We believe that the company now has net cash of approximately US\$10m, which should be sufficient to fund the initial three-well development of the Heron field on a 100% working interest basis. This initial development is expected to cost approximately US\$9m gross. Once the initial development has been completed the field will start generating cash flow that will fund the further development.

Petro Matad is looking at further exploration over the next 18 months. This is likely to be a combination of near-field exploration and wildcat wells. In Block XX, Petro Matad has identified two prospects (Saiga and Gobi Bear) where success would help improve the economics of the Heron development. Management would also like to drill a high-impact exploration well on Block V, probably on the Velociraptor prospect. Although this is higher risk, it would open up further prospects in the region. Success at any of these wells would provide a material boost to the company's potential recoverable reserve and resource base.

Our RENAV (Risked Exploration Net Asset Value) is increased to 29.0p/share, which represents a 29% increase in our previous RENAV of 22.5p/share. This increase is predominantly due to an increase in the long-term oil price after the recent rallies in commodity prices. We have decided to raise our long-term Brent oil price from US\$55/bbl to US\$60/bbl to reflect the forward futures curve. With high transportation costs, this modest increase in oil price assumptions gives a more marked increase in implied valuation. Additionally, a stronger US Dollar and change in discount year provide a fillip to this valuation. Investors should view any valuation in the context of their own assessments of the relevant risks.



SWOT Analysis

Strengths

One of the main strengths comes from its operations being located in Mongolia. Through being onshore, the costs of exploration, production and development are low and should therefore allow more protection against weaker oil prices than many other E & P companies operating in other arenas such as offshore North Sea. On top of this, the country has a relatively benign fiscal regime — especially for larger discoveries. This, coupled with the low costs, should allow the company to benefit from high-margin production. This will allow shareholders to benefit substantially from any commercial production and new reserves and resources found.

Weaknesses

One of the weaknesses for the company is in its current finances. Petro Matad raised US\$10.5m gross in August, which will allow the company to start the development of the Heron field and generate cash flow. However, it might be constrained in some of its plans to carry out additional exploration in the short term. Petro Matad is the operator and has a 100% working interest in its licences, and there is also the option at some stage to sell/farm out some of these licences, which would lessen its commitments as well the potential to receive cash.

Another weakness for Petro Matad is with the transportation costs of the crude. Prior to the Mongolian refinery being up and running, crude produced will have to be trucked to a refinery in China, which will prove expensive. The start-up of the new domestic oil refinery should allow the company to see a significant reduction in these costs, although they will remain relatively high.

Opportunities

Petro Matad is one of the few international players to be involved in Mongolia. The company has built strong relationships within the country and is now in a position whereby it could build its presence further, should this be required. To reflect this good reputation, Petro Matad has received 'Leading Explorer' and 'Best Entity' awards from the government.

Petro Matad has a very significant portfolio of acreage, data base and knowledge within the country. This will give the company a significant competitive advantage. As we mentioned earlier, any new discoveries made will have a substantial impact on shareholder value. Once the company has brought on stream its Heron development, discretionary cash flow can be channelled into further exploration. The main focus, outside of the Heron area, will be on Block V where there is very significant prospectivity.

The company also has near-field exploration around the Heron discovery. Although these might be more modest in size, they can be cheaply tied into the development infrastructure that will be put into place and have a high unit impact on shareholder value.

Threats

The main threat to the business (as for all E&P companies) comes from the operating environment – especially the oil price. A fall in oil prices will affect the potential cash flows and hence the perceived valuation of the assets.

Another potential threat is that the company is solely focused on Mongolia and, as such, will be subject to any changes in the political climate within the country. That being said, Mongolia has proved to be relatively stable over the last few decades since the 1990 democratic revolution, and we feel that this is currently a minor risk.



Heron Field

The Heron field is located in Block XX, where Petro Matad currently has a 100% working interest. The field was discovered in 2019 by the Heron-1 discovery well. This well was tested and achieved a peak flow rate of over 800 bbl/day of oil with no formation water. This discovery is thought to be an extension of PetroChina's 19-46-3 oil field in the adjacent Block XIX. After testing, the well was then suspended.

Management is currently in negotiations with drilling, well completion and infrastructure service providers in order to get the necessary contracts in place at the start of the operating season, which is expected to start in Q2 2022. This would allow the company to move ahead with completing the Heron-1 discovery as a production well and start production at the field, with the crude initially being trucked through to PetroChina's facilities in Block XIX where it would be processed and then transported to China for refining. Petro Matad will then drill two additional wells before the end of the year and onset of winter. The two new wells will be drilled in the area where it has 3D seismic data.

Petro Matad is looking at acquiring further 3D seismic data over the Heron area to allow the siting of additional production wells. Unfortunately, due to Covid-19 restrictions, the company was not able carry out this acquisition of new 3D data during the main winter 2021/22 season. With the contract valid through 2022, management would be looking to put in place the 3D programme in the next winter season. Although this might be seen as slightly disappointing, it will not affect the initial development of the Heron field as the next two wells are expected to be drilled in the area of existing 3D seismic data.

Management is also working on the pricing of the Heron crude. Petro Matad is in discussions with MRPAM over technical details of the benchmarking and pricing of the crude produced. In the past, crude produced has been benchmarked to both Brent and Daqing crudes. However, management is hoping that, given Heron crude is chemically similar to Brent, it can be benchmarked to Brent. Once the pricing issue has been resolved, Petro Matad will then be in a position to start negotiations with potential buyers ahead of the start of production.

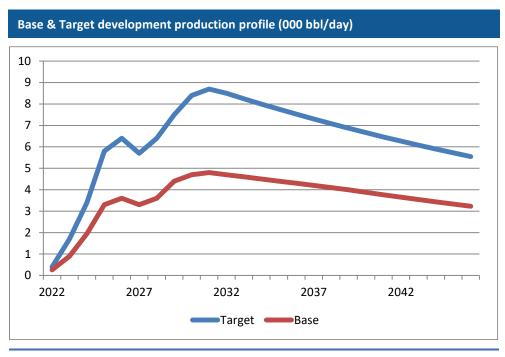
Base development

At present, management is looking at a base development of the Heron field that would seek to exploit 33 mmbbl – which assumes a recovery factor of a mere 17%. With a combination of fracked wells and water injection, it is hopes that production could reach a peak of approximately 5,000 bbl/day. The capital cost of this development would be approximately US\$250m, which would be met by cash resources and cash flow generated by the field.

Target development

Management believes that through a process of more optimal drilling (such as radial drilling and fishbone completions) it might be able to increase the recovery rate to 30%. This would see recoverable resources increased to 58 mmbbl and allow peak production to increase to approximately 9,000 bbl/day. As might be expected, this would augment the economics of the field development. Unit operating costs and capital expenditure costs would be reduced by 17% and 31%, respectively. We feel that as management receives more production data it will be in a better position to ascertain the potential of achieving the target development.





Source: Progressive Equity Research estimates

Near-field exploration

Petro Matad has identified some exploration prospects in Block XX that management is eager to drill – although we believe that the focus in the short term is very much on getting Heron producing and starting to generate cash flow. However, any additional barrels discovered would have a material impact on the economics of the area given that the infrastructure would already be in place for the Heron field. The two exploration prospects that are most likely to be drilled are Saiga and Gobi Bear. These are shallow targets and it is estimated that the wells might cost a mere US\$1m to drill.

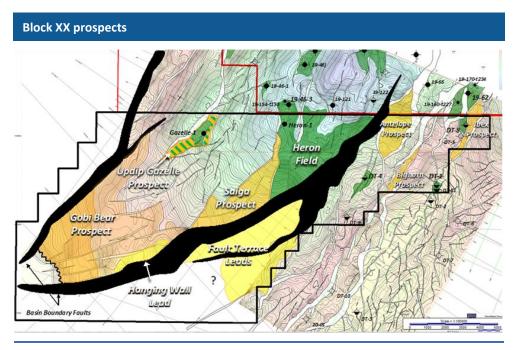
Saiga

This is a similar play to Heron and could contain P50 prospective recoverable resources of approximately 14 mmbbl. This is seen as a low-risk prospect given that the play type is proven with Heron, with the main risk being the trapping mechanism. Management believes that the chance of success is 57%.

Gobi Bear

This is a different play to Heron, being a combination structural/stratigraphic trap in the southwest of the licence. Through being a different play, it is seen as higher risk, with a chance of success of 17% and the main risks being migration and trapping. However, despite being higher risk, management believes that there could be better sand in this part of the licence. If successful, P50 prospective recoverable resources could be 55 mmbbl.





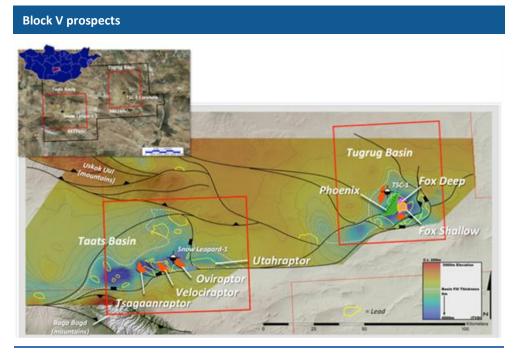
Source: Petro Matad

Block V

The other area that management is keen to work on is exploration on Block V, where the company has a 100% working interest. This licence is due to expire in 2023 and management would like to test the potential before it is given up. Petro Matad is putting in place the requirements to allow potential exploration wells to be drilled in the current year. To this aim, it has submitted documentation to the Mongolian Ministry of Environment with the hope of getting approval for the environment impact assessment soon.

In this block, Petro Matad drilled the Snow Leopard prospect in 2018. This found traces of oil and gas, suggesting that oil and gas had migrated through the block, proving up a potential working petroleum system. The company has now identified four prospects, Tsagaanraptor, Velociraptor, Oviraptor and Utahraptor, which are up-dip of the Snow Leopard prospect. These have multiple targets with potential combined recoverable prospective resources of approximately 600 mmbbl. The first well is likely to be on the Velociraptor, which is closer to the Snow Leopard well and hence viewed as a lower risk. This is thought to have c.20% chance of success, with the main risks being reservoir presence and trapping mechanism. Success at Velociraptor would de-risk the other prospects and provide investors with a significant boost to potential recoverable reserves and resources. The initial well is very shallow and expected to cost a mere US\$2m to drill, with a small rig or a modified mineral rig.





Source: Petro Matad

Finances

The finances of the company have been strengthened by the fundraise in August 2021, which raised approximately US\$10.5m gross through a placing and open offer. The company now has estimated net cash of approximately US\$10m. This gives the company sufficient resources to start the Heron development.

The initial development will entail the completion of the Heron-1 well into a production well and the purchase of the equipment required to start production. Thereafter, management will look to drill a further two production wells, Heron-2 & Heron-3. Overall, this initial phase of the development (well costs, facilities and G&G) is expected to cost approximately US\$9m. At this stage, the field production will start to generate cash flow, which will be utilised to fund the further development of the field.

The pace of the development will depend on whether a partner can be brought in on terms that are attractive to Petro Matad. A new partner would take an interest in some, if not all, of the company's licences. This would leave Petro Matad with a reduced level of net spending, which would allow its cash to be used to increase the pace of development. Management would also like to see any partner pay for past costs incurred and potentially pay a premium for the historical works carried out. This would give the company the ability to further accelerate development and also give it the funds to start an exploration programme. As we mentioned previously, management is eager to drill two exploration wells near to the Heron field and at least one well in Block V. These are shallow onshore wells and hence are not expected to be expensive; we believe that each well could cost approximately US\$2m to drill. Petro Matad has opened a virtual data room to allow any potential partners to see the relevant data.



Valuation

Our RENAV (Risked Exploration Net Asset Value) valuation of the company has been increased from 22.5p/share to 29.0p/share. This major change has three drivers: oil prices, exchange rates and discount year. There has been no change in the economics (such as timing, costing and production profile) of the various projects, with main factor behind this valuation change being the oil price assumption.

On the oil price, we have increased our base Brent price assumption from US\$55/bbl to US\$60/bbl. This reflects the recent strength in oil prices. Although this is below the current level of approximately US\$80/bbl, it is the level that the forward futures curve is suggesting that the long-term price will gravitate to over the next five years. Given the high transportation costs, the increase in the oil price assumption has a marked increase in the derived DCF. The crude oil discovered at Heron is a light crude (API 43.7), low sulphur (0.03%), but has a high wax content. We are assuming that initially this crude is likely to trade at a 5% discount to the Brent crude marker. This is likely to be clarified by the negotiations with MRPAM and we will review our valuation to reflect the outcome of these discussions.

We model our valuations in US dollars, which tends to be the main currency in pricings and costings in the global oil industry, and then translate this through at the current exchange rate to give a sterling valuation for investors. We have seen a strengthening in the US dollar relative to sterling. At present, the USD/GBP exchange rate is standing at approximately USD1.35/GBP, which compares to the previous rate of US\$1.40; this provides an approximate 4% increase in the translated valuation for UK investors.

The other impact comes from the year we start discounting, given that we are now in 2022 rather than 2021 and the start of production from Heron is, hopefully, a mere six months away.

Methodology

For valuing E & P companies, we take the traditional approach of asset valuation that is used by the industry. Investors should therefore view any valuation in the context of their own assessments of the relevant risks. This valuation is derived through using a DCF (discounted cash flow) methodology applied to the known fields and discoveries of the company. The field production profiles, capital expenditure and operating costs are modelled under the appropriate fiscal regime to give a cash flow profile, which is discounted to provide a net present value for each asset. We usually add an element of value for the risked exploration upside to give an indication of how this asset value may change over the next 12 months. The risk that we take is based on the play chances (reservoir, source and seal) coupled with the local chances (seal, migration and trap). Adding these together, we can derive a RENAV (Risked Exploration Net Asset Value). We have assumed a flat oil price. In our base case, we use a Brent oil price of US\$60/bbl.

The discount rate that we use in the valuation is the standard 10%. We have modelled the assets in US dollars and will translate this through at the current exchange rate to allow investors to see a sterling-based valuation. Sterling is currently trading at a USD/GBP level of approximately 1.35. A more detailed explanation of the calculations and sensitivities can be found in our initiation of coverage note (Petro Matad: The Hoards of Mongolia, 7 July 2021).



Asset valuation

For the asset valuation, we have taken the value of the Heron base development. With the Heron target development there is still some uncertainty. Although the reserves are in place, there are questions over the ability to get the recovery rate higher. We have therefore assumed that there is a 50% chance of achieving this. As such, we have added 50% of the incremental value of this development. We have also added the potential risked upside in the exploration. As a risking, we have assumed the GCOS (Geological Chance of Success). As we mentioned earlier, the GCOS on the prospects is as follows: Saiga (57%), Gobi Bear (17%) and Velociraptor (20%). We have adjusted for the balance sheet given that the company has effectively US\$10m of net cash.

The following table details the asset value we derive for the company. For the Heron base development, we derive a value of approximately 10.1p/share, increased from our previous estimate of 7.0p/share due primarily to the change in oil price assumption. The risked Heron target development upside could produce a value of 8.4p/share (up from 7.1p/share) while the risked exploration could produce a value of 9.7p/share (up from 7.6 p/share). The cash is valued at a level of 0.8p/share. This therefore gives a RENAV of 29.0p/share, up from our previous valuation of 22.5p/share.

Petro Matad RENAV (p/share)					
	Risking %	NPV US\$m	GBP	p/share	
Fields					
Heron Base	100%	122.4	90.7	10.1	
Exploitation upside					
Heron Target	50%	101.4	75.1	8.4	
Exploration upside					
Gobi Bear	17%	41.7	30.9	3.4	
Saiga	57%	40.1	29.7	3.3	
Velociraptor	20%	36.0	26.6	3.0	
Cash	100%	10.0	7.4	0.8	
Total		351.5	260.4	29.0	

Source: Progressive Equity Research estimates

The above analysis is for information purposes only, and does not represent a valuation or target price. Investors should view any valuation in the context of their own assessments of the relevant risks.



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