Progressive EQUITY RESEARCH

PETRO MATAD
OIL & GAS

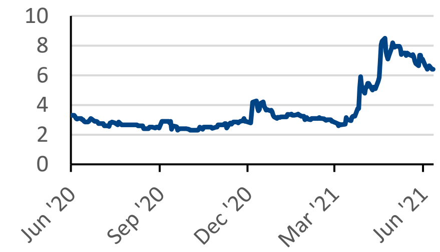
7 July 2021

MATD.L

6.4p

Market Cap: £43.6m

SHARE PRICE (p)



12m high/low	8.5p/2.3p

Source: LSE Data

KEY DATA

Net (Debt)/Cash	$1.0m *(at 31/12/20)*
Enterprise value	£42.9m
Index/market	AIM
Next news	Interims - Aug/Sept '21
Shares in Issue (m)	681.4
Chairman	Enkhmaa Davaanyam
Chief Executive	Mike Buck
Head of Finance	Tamir Battogtokh

COMPANY DESCRIPTION

Petro Matad is a UK listed exploration company which is focused on Mongolia

petromatadgroup.com

PETRO MATAD IS A RESEARCH CLIENT OF PROGRESSIVE

ANALYSTS

Peter Hitchens

+44 (0) 20 7781 5304

phitchens@progressive-research.com

The Hoards of Mongolia

Petro Matad is a Mongolian focused E & P company which is anticipating a step change in its operations now that it has secured the Exploitation Licence for its Heron-1 oil discovery from the Mongolian authorities. The company is now making plans to start an early development in 2022 from which it can generate cash flow. This will then be utilised to proceed with a staged full field development and then allow the company to execute an exploration programme. This has the potential to add significantly to asset valuation.

- Petro Matad is finalising its field development plan for the Heron field in Block XX in Mongolia where it has a 100% working interest. This is a 33 mmbbl discovery, with upside potential. It is expected that this plan would involve an initial development where the crude would be produced and trucked to the Petro China operated adjacent block for processing and then shipped to China for refining. This will generate cash flow which can then be used in a full field development. The company hopes that with better drilling techniques (such as horizontal drilling) it can increase the recovery at the field, with an upside potential of 58 mmbbl of recoverable reserves.

- The company has a relatively weak balance sheet following its major exploration programme in 2018/2019, which successfully discovered the Heron Field. With the approval of the Exploitation Licence by the Mongolian Government, which grants the company a 25-year licence over the Heron Field and surrounding prospects, much of the risk in this project has reduced. This will allow management to look at ways of getting finance in place to enable acceleration of the development project. This could involve a mixture of farming out a portion of its licences, raising new equity financing, and bank financing.

- Subject to such financing, management is eager to complete an exploration programme involving three wells – two around the Heron field and a further well in Block V where the company also has a 100% working interest. The wells around the Heron fields (Saiga and Gobi Bear) are targeting 70 mmbbl which could be easily tied into the Heron facilities. The well in Block V (Velociraptor) is a higher-risk prospect targeting approximately 200 mmbbl. Success at any of these wells would have a material impact on asset valuation.

- We have looked at the valuation of the operations through a standard RENAV (Risked Exploration Net Asset Value) derived from discounted cash flow. Using a flat Brent oil price of US55/bbl, we believe that the base Heron development could be worth approximately 9.3 p/share. We have assumed a 50% chance of the company being able to increase Heron's reserves up to the target level which would add a further 9.4 p/share to the valuation. The risked exploration would then add a further 10.1 p/share to this value. This gives an overall RENAV of 28.7p/share. Investors should view any valuation in the context of their own assessments of the relevant risks.

This publication should not be seen as an inducement under MiFID II regulations.

Please refer to important disclosures at the end of the document.

TABLE OF CONTENTS

Investment Summary

Petro Matad is about to see a step change in its operations as a result of the granting of the Heron oil field Exploitation Licence by the Mongolian authorities which removes many of the risks previously impacting this development. The company is now making preparations to start an early development of this discovery which will allow it to start to generate revenue and cash flow. This will then be utilised in a full development of the field and allow the company to execute an exploration programme that has the potential of adding significantly to asset valuation.

An excellent region for potential explorers

Petro Matad is a Mongolian focused E & P company, admitted to the AIM market in London in 2008. The company was formed in 2005 by Petrovis, a local fuel distribution company, as a vehicle to participate in the reinvigoration of the Mongolian upstream oil industry. Mongolia is an excellent region for potential explorers. The Mongolian oil industry took off in the 1940's with the discovery of several fields in the East Gobi with support from the Soviet Union. However, production ended in 1969 following an accident at the only oil refinery operating in the country and re-direction of Soviet Union resources to the newly discovered oil fields in Siberia. Following the collapse of the Soviet Union exploration activity re-started in the 1990's after a 20 year hiatus. The country has numerous underexplored basins that have been shown to have active petroleum systems. Through being onshore the cost of drilling and development should prove to be low. On top of this there is a relatively benign fiscal regime. The only major detraction is the relatively high cost of getting any crude oil to market. This is likely to be helped once a new domestic refinery that is being built is brought on stream stopping the need to export crude to China. This new 30,000 bbl/day refinery is expected to be onstream in 2024 and, under government plans, may be linked by a pipeline to Block XIX which is adjacent to Petro Matad's Heron field.

Highly experienced management team

Petro Matad has a highly experienced management team in place with significant upstream experience in other UK E & P companies. Mike Buck was appointed CEO in 2017, having more than 40 years of experience in the industry, and has assembled a strong team. One of the major strengths is that the management team have worked together for a significant length of time – albeit at different companies.

Assets

Petro Matad initially acquired a 100% working interest in the Matad Block XX PSC which is adjacent to discoveries that were initially made by SOCO International (and subsequently sold to PetroChina) in the east of the country near to the Chinese border. The company later acquired 100% working interests in Block IV and V in the centre of the country. The momentum changed with the appointment of Mike Buck as CEO in 2017. The company started a major drilling programme in 2018 that covered five wells (three in Block XX, and one each in Blocks IV and V). All of these wells, to some extent, proved the presence of working petroleum systems.

Focus on the Heron prospect

The big change was with the discovery of commercial oil at the Heron prospect. This is located adjacent to PetroChina's discoveries and could be an extension of its 19-46 oil field. Management believes that this field could contain recoverable reserves of 33 mmbbl of oil. With better drilling techniques (such as horizontal wells) it is believed that this recovery could be substantially increased and targeted recoverable reserves could rise to 58 mmbbl. Additional reserves from surrounding prospects and leads could be developed through the facilities and reduce the field unit capex and opex costs. The main focus for Petro Matad is getting this field on stream to start contributing cash flow to the business. Petro Matad has just received the approval from the Minister of Mining and Heavy Industry granting the Exploitation Licence over an area of 218 sq. km.

Addressing the funding shortfall

The only pitfall is that the company currently has a weak balance sheet. Management is aware of this and is looking at ways of getting the required funding. We believe that this could come from a combination of farming out an interest in its licences, an equity raise and bank financing. Once the field development plan is approved, much uncertainty will be removed and we believe that management will move swiftly to get the financing in place.

Development prospects

With financing in place the company would proceed with development. On top of this, Petro Matad would look at drilling more exploration wells. Two are likely to be around the Heron area (Saiga and Gobi Bear) and success could be tied into the planned Heron facilities. The company is also looking at drilling a well in Block V (Velociraptor) where a petroleum system was discovered by the drilling of the Snow Leopard exploration well. This is a high risk, low cost well but is targeting substantial reserves and would de-risk adjacent prospects.

Valuation

We have looked at the valuation of the operations through a standard RENAV (Risked Exploration Net Asset Value) derived from discounted cash flow. Using a flat Brent oil price of US55/bbl, we believe that the base Heron development could be worth approximately 9.3 p/share compared to the current share price of 6.4p. We have assumed a 50% chance of the company being able to increase Heron's reserves up to the target level which would add a further 9.4 p/share to the valuation. The risked exploration would then add a further 10.1 p/share to this value. This gives an overall RENAV of 28.7p/share. Investors should view any valuation in the context of their own assessments of the relevant risks. Investors should also be aware that if management decide to move through a farm out and/or equity raise that this is likely to alter valuations.

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 also 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

Perhaps the largest weakness for the company is in its current finances. The company has expended the money it raised in 2018 on a multi-well exploration programme. Petro Matad is now moving ahead on the development of the Heron discovery which will require significant capital expenditure for the full field development but early production is achievable at a modest cost. Management is aware of the funding weakness and is working on potential solutions. Mitigating this to some degree, Petro Matad is the operator and has a 100% working interest in its licences. This gives it the ability to proceed as it feels best to utilise its cash. 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. We believe that now the Exploitation Licence has been awarded, some uncertainty has been removed and now is the opportune time to look at financing options. The company has secured a loan from its major shareholder, Petrovis, to allow Petro Matad to maintain its operating capabilities until it can commence with field development.

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 still remain relatively high.

Opportunities

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

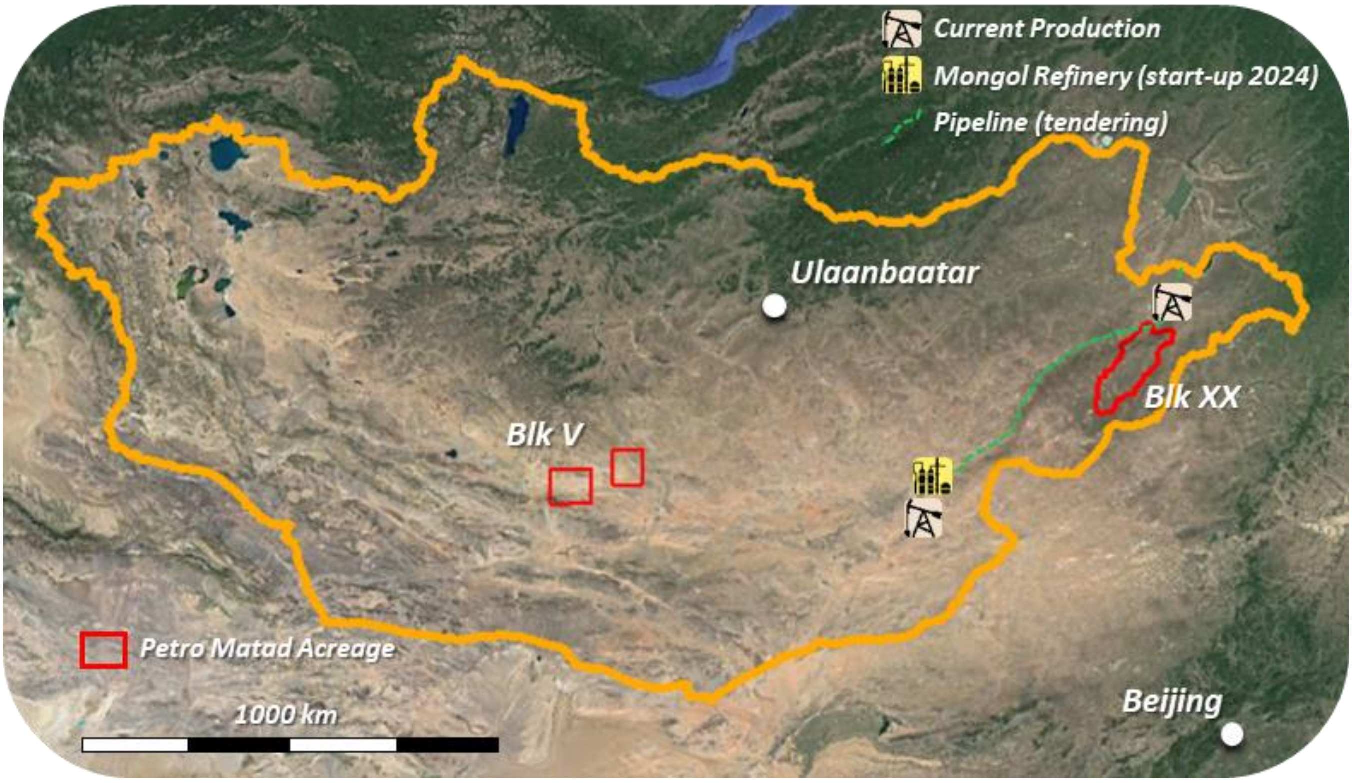
The main threat to the business (as well as all E & P companies) comes from the operating environment – especially the oil price. A fall in oil prices will affect the potential cash flows and hence the perceived valuation of the assets.

Another potential threat is that the company is solely focussed 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.

A clear focus

Petro Matad is a pure E & P company with a focus on Mongolia where it has the largest acreage position of western companies. The group was formed by Petrovis LLC in December 2004 as a vehicle to participate in oil exploration in Mongolia. Initially the group signed a PSC on Matad Block XX where it has a 100% working interest. The group was then listed on the AIM Market of the London Stock Exchange in May 2008. Since its listing it has signed two more licences in the centre of the country – Bogd Block IV and Ongi Block V - where it also had a 100% working interest. Block IV has now been relinquished although the company is looking at reapplying for some parts of this.

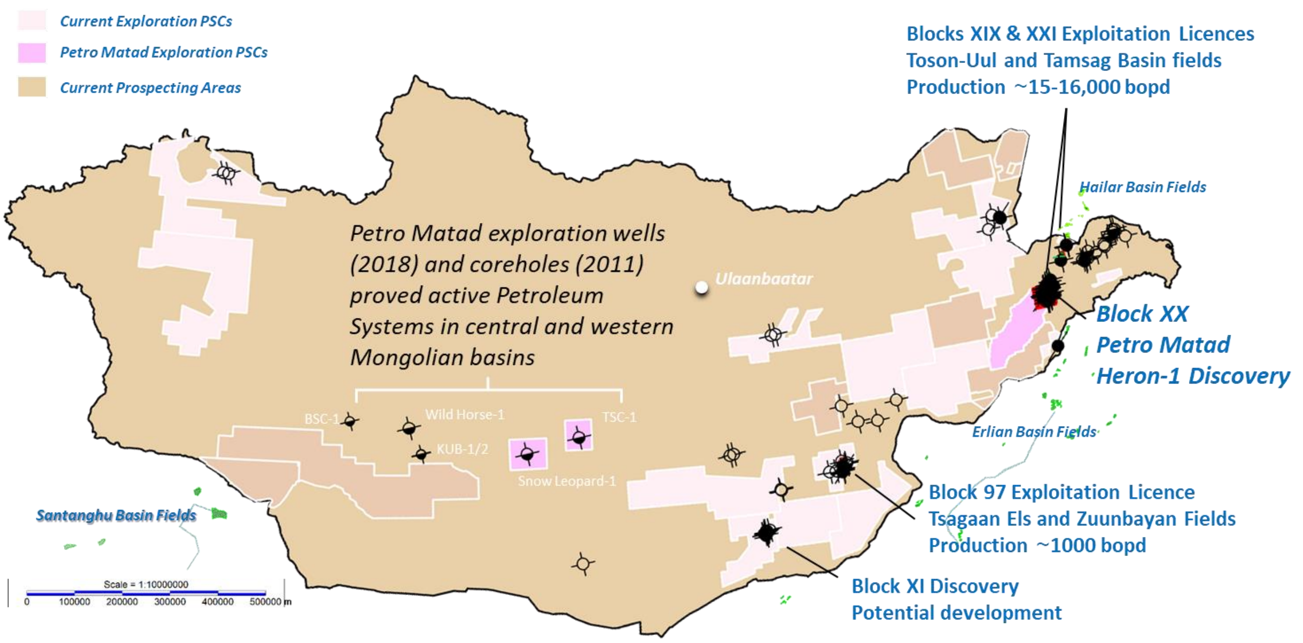
Petro Matad licences



Source: Petro Matad

The following map demonstrates the limited drilling that has occurred in the country with most of this being located in Block XIX. As can be seen, many of the wells have identified working oil and gas systems

Status of Exploration and Production



Source: Petro Matad

Management

Petro Matad has a highly experienced management team in place with significant upstream experience in other UK E & P companies. One of the major strengths is that the management team have worked together for a significant length of time – albeit at different companies.

CEO

Petro Matad is led by CEO, Mike Buck, who has extensive experience in the sector. He worked for 20 years at LASMO, one of the leading UK E & P companies, until its acquisition by ENI. He continued to work for ENI until he joined Salamander Energy in 2006 as COO where he helped to build up the business until it was acquired by Ophir Energy in 2015. Following Ophir's acquisition, Mike joined Petro Matad as CEO.

Senior Management

Jerry Smart is the exploration manager with 38 years industry experience having previously worked for LASMO, Eni, Salamander Energy and Ophir Energy. Following the retirement of John Henriksen in December 2020, Tamir Battogtokh has taken over the interim role of chief finance officer. Previously, she was the company's chief accountant.

Chairperson

The chairperson of the group is Enkhmaa Davaanyam, who is the CEO of Petrovis Group which is Mongolia's largest fuel supplier and hence is well connected within Mongolia. Ms Enkhmaa provides extensive experience in financing and risk management of mining, infrastructure and energy projects.

Non-Executive Directors

Tim Bushell sits on the board as non-executive director. He has a wealth of experience in the oil industry and most recently was CEO of Falkland Oil & Gas and now serves as a non-executive director on a number of boards of listed E&P companies. Shinezaya Batbold is the other non-executive director and is the Chairperson of the Petrovis Board and also CEO of Petrovis Venture Capital LLC, a local venture capital fund.

Shareholders

The company currently has 681.4 million shares in issue. Petro Matad's main shareholder is Petrovis which currently has a 21.44% holding in the company. Combined with shareholdings by management and other interested parties, the remaining 75.81% of the share capital is in public hands.

Mongolia

Mongolia is the second largest landlocked country in the world - sandwiched between Russia to the north and China to the south. Despite its large area, the country has a population of approximately 3.3 million people making it one of the most sparsely populated sovereign countries in the world. The economy is growing fast being fuelled by the mining sector with several large coal, gold and copper mines in production. The mining sector accounts for over 20% of the country's GDP.

With the collapse of the Soviet Union, the country became a democracy with the 1990 Democratic Revolution which saw the legalising of opposition parties and creation of an elected president and prime minister. At present the president is Khurelsukh Ukhnaa and the prime minister is Luvsannamsrain Oyun-Erdene. Democratic parliamentary elections occur every four years and peaceful transfer of power has been the norm for the country. The President is now elected every six years following an amendment to the constitution adopted in 2020.

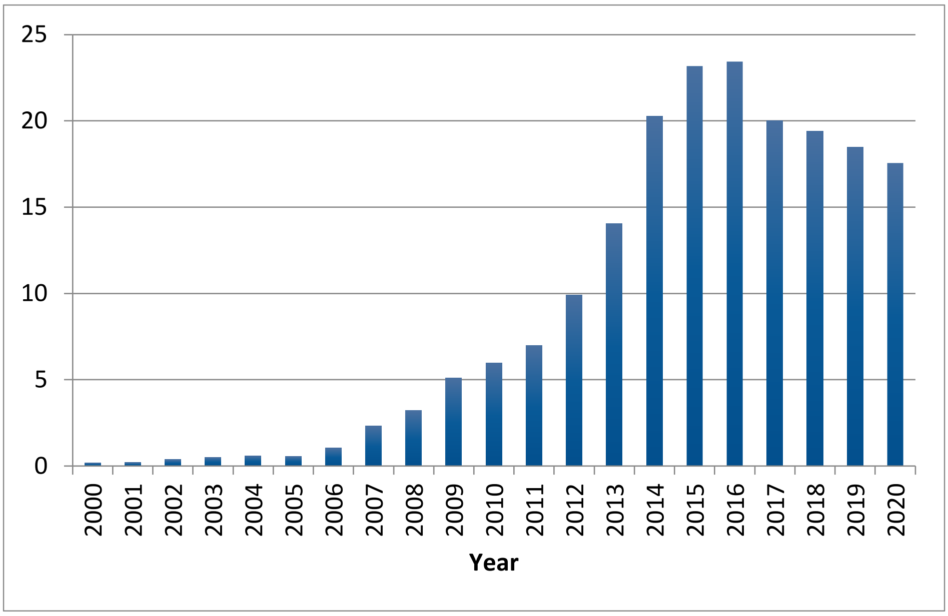
Oil

On the oil side, the country started production of crude oil in the 1940s from the Tsagaan Els and Zunbayaan fields in the East Gobi. These fields fed a small domestic refinery to meet much of Mongolia's domestic needs but production stopped in 1969 following a fire that destroyed the only refinery. This event coupled with a re-direction of Soviet Union resources to the newly discovered fields in Siberia led to a c.20 year hiatus in oil industry activity.

With the collapse in the Soviet Union in 1991, Mongolia looked at ways of reinvigorating its domestic oil industry through its Petroleum Program. This saw the formation of PSCs (Production Sharing Contracts) across the country. SOCO International, the UK listed E & P company, was one of the first players in the region and discovered oil in Blocks XIX and XXI adjacent to the Chinese border. These were put into production with the oil trucked to China for refining. These licences were sold in 2005 to Daqing Oilfield, a subsidiary of PetroChina. The country is, according to the EIA (Energy Information Administration), currently producing approximately 17,000 bbl/day of crude oil. PetroChina operates approximately 95% of Mongolia's oil production.

Mongolia would appear to be an excellent place for oil exploration. The country is huge and contains a myriad of small basins. The wells that have been drilled, to date, have proved that most of these contain working petroleum systems.

Mongolian oil production (000 bbl/day)



Source: EIA

Refining

Currently, to meet its domestic needs Mongolia imports petroleum product mainly from Russia. However, with the help of the Indian government, the country is now building a new refinery which is due on stream in 2024 and will have a capacity of approximately 30,000 bbl/day. This will create a ready market for any crude oil that can be produced within the country and cut the need to export crude to China and import product from Russia – saving the country significant costs. The refinery is located approximately 550 km to the southwest of Block XX and the government is looking at building a pipeline to supply crude oil to the refinery from the main producing areas in Mongolia. This will run from PetroChina's fields in Block XIX. The route has been approved and the pipeline is now at a pre-planning stage. Under the Petroleum Law, the government has the right to buy the contractor's share of cost oil and profit oil for the refinery at market prices.

Fiscal regime

Mongolia has a relatively benign fiscal regime for conventional oil production. There is a government royalty (5% - 15% dependent on the PSC) which is deducted from the gross revenues. The contractor is then able to recover the development and operating costs (Cost Recovery). This is capped at 40% of net revenue (after deducting the royalty and transportation costs). This will prove to be more attractive for contractors at higher production levels. Any costs that are not recovered can be carried forward indefinitely. The revenue after the cost recovery (Profit Oil) is then split between the government and contractors. This varies for a contractor share ranging from 45% to 60% and is dependent on the level of production and the PSC. There are some bonuses to be paid but these are modest but are not cost recoverable. The conventional exploitation licences have an initial term of 25 years with the potential of two five-year extensions.

Assets

Block XX

Petro Matad has a 100% working interest in this block which is located in the East of the country and is close to the Chinese border. The licence is located next to Block XIX where PetroChina is currently producing approximately 8,000 bbl/day of oil. In 2019, Petro Matad drilled three exploration wells on the Heron, Gazelle and Red Deer prospects.

Heron

Perhaps the most exciting well was on the Heron prospect which was drilled in the northern part of the block close to the PetroChina oil fields. The well discovered a potential 77 metre gross reservoir and flowed oil to surface without the need of artificial lift which is relatively uncommon in similar fields in this basin. The well was tested and reached a peak flow rate of over 800 bbl/day with no formation water being produced. The company believes that the recoverable reserves associated with this discovery could be 33 mmbbl. This implies a relatively low recovery rate of 17% of the 194 mmbbl believed to be in place. This discovery is thought to be a potential extension of PetroChina's 19-46 oil field in Block XIX.

Gazelle

The Gazelle prospect is located 5km to the west of the Heron discovery. Prior to drilling this well management had estimated that P50 prospective recoverable resources were 12 mmbbl. On drilling the well the main deeper thick sand proved to be water wet. However, two thin upper sands contained 3 metres of oil pay in good quality sandstones. Slightly disappointingly, the onset of cold weather prevented testing operations to be done. Although this is unlikely to be commercial, management hope that up dip of this well the thicker sands could be in the oil zone and hence could contain commercial quantities of oil. A Gazelle appraisal well is one of the wells that might be contemplated in any further drilling programme.

Red Deer

The Red Deer prospect was drilled in the south of the block and had some good oil shows but found no commercial oil accumulation. The presence of oil shows gives some encouragement on the nearby prospectivity in this part of the block. This area of the licence will be relinquished. However, Petro Matad is looking at reapplying for this area. With knowledge gained from the drilling programme, the company would appear to be better placed than many other players.

Fiscal regime

The royalty in this PSC is 5% of gross production. The contractor share of profit oil is 60% for production less that 25,000 bbl/day. The bonuses are modest with US$0.5 million on first oil and annual bonuses (training, support and development) of a modest US$65,000 per annum.

Through being a low cost onshore development, shareholders are relatively well protected against any weakening of oil prices. The fiscal regime allows the oil companies to benefit from any increase in prices. For example, at a US$50/bbl Brent price, Petro Matad sees an overall contractor take of 45%. This rises to a 50% take at a US$60/bbl price. This gives exceptional gearing to the oil price.

Development

Petro Matad is now looking at moving the Heron discovery through to development. This involved getting an exploitation licence from the government covering the Heron and Gazelle discoveries. The process was delayed given the Covid-19 pandemic but the Exploitation Licence has now been awarded. It covers 218 sq. km around the Heron discovery with the remainder of the block being relinquished at the end of the exploration period in July 2021.

The initial development plan would be looking to deliver some limited early production to generate some cash flow to fund the future development. This will involve drilling a few wells and installing storage capacity. The crude is expected to be trucked to Block XIX for processing at PetroChina's facilities. The processed crude would then be exported by truck to China for refining.

The next stage would be full field development which would involve the drilling of up to 32 production wells, water injection wells and the construction of its own processing capacity and water treatment facilities. The processed crude would be trucked to Block XIX where it would be put into the proposed pipeline and taken to the new Mongolian refinery. This should reduce the transportation costs when compared to the cost of trucking.

We anticipate that trucking oil to China for refining would cost approximately US$10/bbl whilst moving the oil by pipeline to the Mongolian refinery would substantially reduce these costs. However, the precise tariff on the pipeline has not been formally agreed.

Heron – Base development

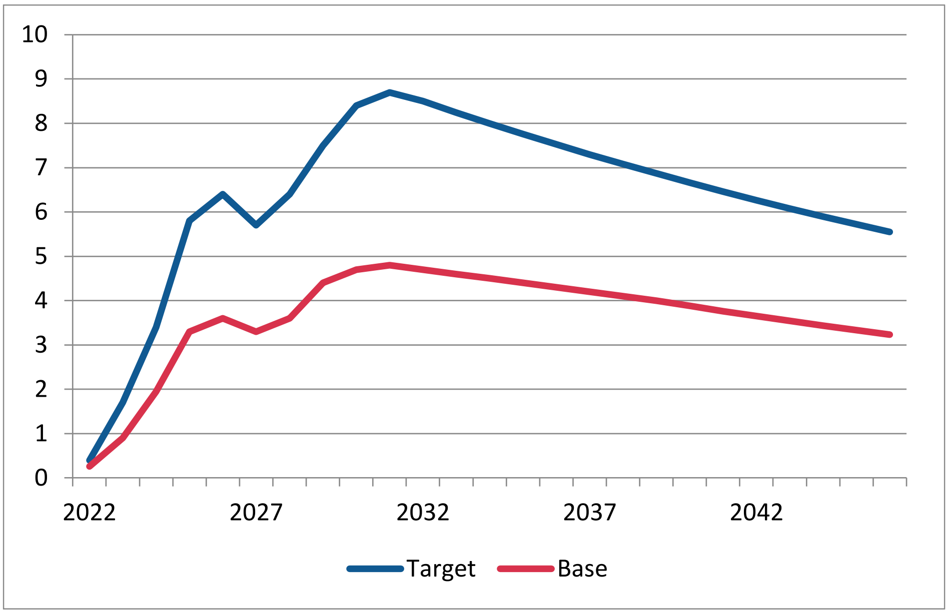
Management is looking at a base development which would look to exploit 33 mmbbl of oil which assumes a 17% recovery of the oil in place. This would involve using fracked wells with water injection. It would be hoped that production could get to a peak of approximately 5,000 bbl/day. Management believes that the total capital costs over the field life would be approximately US$250 million.

Heron – Target development

However, management is aware that the recovery factor could be enhanced with more optimal drilling which is likely to include radial drilling and fishbone completions if this proved to be cost effective. As we mentioned earlier, the base field development plan is looking at a 17% recovery of the resources in place and management believes that more optimal drilling could get this higher and could achieve a recovery rate of approximately 30%. This could see the recoverable reserves increased to 58 mmbbl and allow production to nearly double from the base development and at the peak get close to 9,000 bb/day. Management believes that the total capital costs over the field life in this target development would be approximately US$300 million.

The field economics would be improved dramatically. Operating costs at 5,000 bbl/day are estimated to be US$10 million per annum whilst increasing the production up to 9,000 bbl/day would see operating costs increase to US$15 million. This equates to a 17% decline in unit operating costs. Unit capital expenditure costs would drop from approximately US$7.60/bbl to US$5.20/bbl – representing a 31% decline.

Heron field production profile (000 bbl/day)



Source: Progressive Research estimates

Near field exploration

On top of this there are some near field exploration targets. Additional crude found would have a high impact on the economics. The costs would be modest given that the crude could be processed at the planned facilities in the Heron field – leaving the major cost being the wells.

Petro Matad would like to drill two prospects – Saiga (previously called Heron South West) and Gobi Bear. After these the company has other prospects and leads that could be drilled. These would be matured into drillable prospects once further 3D seismic data has been acquired.

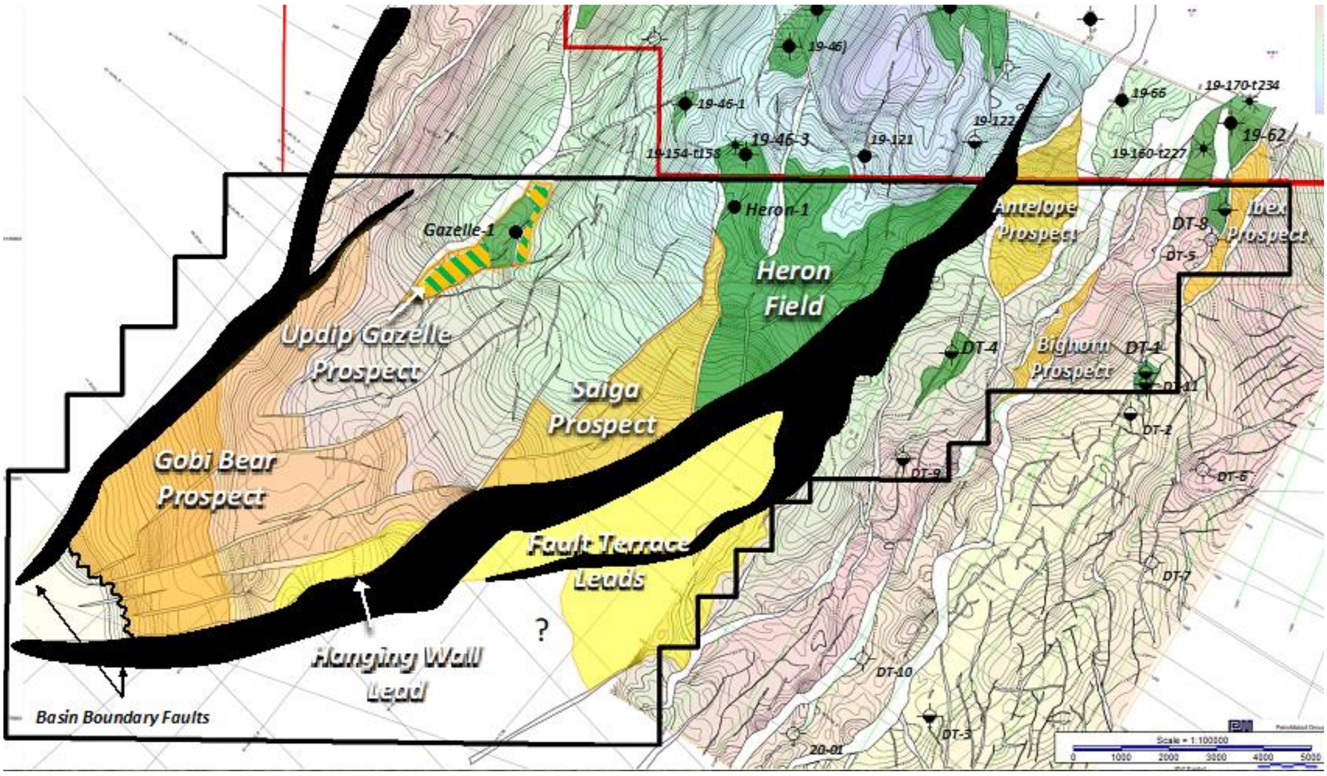
Saiga

Saiga is a similar play to the Heron discovery. This is a similar prospect to Heron and the well will test if oil from Heron spills over to charge this prospect. Management believes that, if successful, this prospect could have P50 prospective recoverable resources of 14.3 mmbbl. Management believes that the chance of success on this well is 57% given that the play is proven and the main risk is in the trapping mechanism.

Gobi Bear

Gobi Bear is a combination structural/stratigraphic trap in the south west of the exploitation licence. Through being a combination trap it is seen as higher risk than Saiga, although management believes that in this part of the block there could be better sands. This prospect, if successful, could contain P50 prospective recoverable resources of 55 mmbbl. Management believes that the chance of success on this well is 17% with the main risks being the migration distance and the trapping mechanism.

Block XX prospects



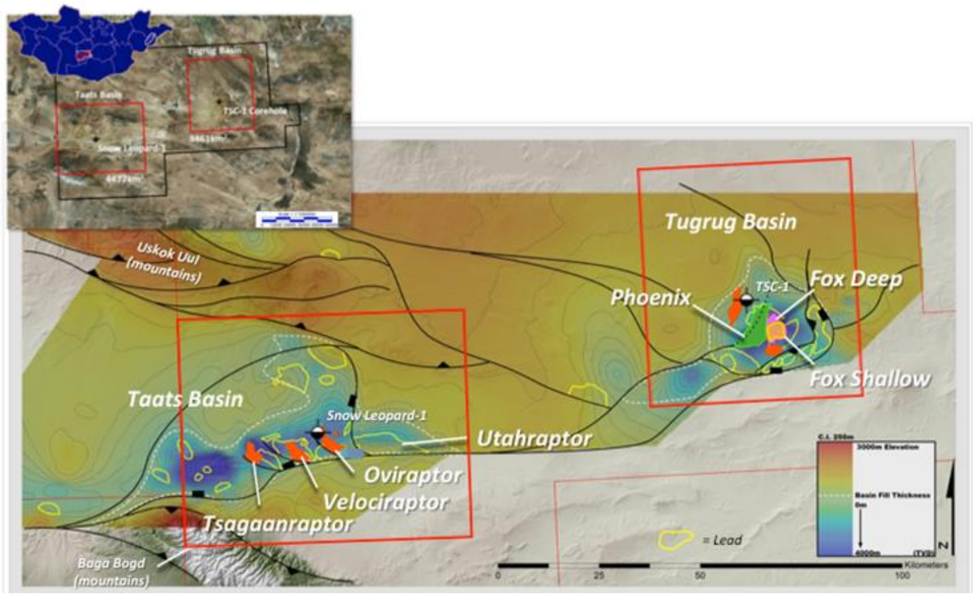
Source: Petro Matad

Block V

Block V, where Petro Matad has a 100% working interest, lies in the centre of the country. In 2018, the company drilled an exploration well on the Snow Leopard prospect contained in the Taats basin. This well had two targets. In the shallower target, the well found traces of gas and oil suggesting that oil had migrated through this prospect. The deeper target proved to be water wet but found the presence of source rocks. The company is now looking at a series of prospects (the Raptor Prospects) which are up-dip of the Snow Leopard well and management believes that these new prospects could be on the migration path from the source rocks. The company has identified four prospects (Tsagaanraptor, Velociraptor, Oviraptor and Utahraptor) which have multiple targets with potential recoverable prospective resources of approximately 600 mmbbl. Management is eager to drill one of these prospects in the short term with the most likely prospect to be drilled being Velociraptor. This is closer to the Snow Leopard well and is felt to have lower geological risk. Success here would significantly de-risk the other Raptor prospects. Management believes that the chance of success at Velociraptor is c.20% with the biggest risks being reservoir presence and trapping mechanism.

The eastern part of the block covers the Tugrug basin. A mining core hole was drilled and this found oil shows and the presence of source rocks proving the presence of an active petroleum system. The company has identified stacked targets on 3D seismic. However, this seismic has shown that the basin is complex geologically. If management were to drill exploration wells they are likely to be drilled on the Phoenix and Fox prospects which have combined potential recoverable prospective resources of over 300 mmbbl. There is substantial follow-up potential in the event of success. The key risks here are reservoir sand development and trap integrity.

Block V prospects



Source: Petro Matad

The company has had to relinquish much of this licence but retains approximately 8,000 km^2 that cover the main Taats and Tugrug basins. The company is now working on maturing drillable prospects. These are likely to be cheap shallow wells costing a mere US$2 million to drill. Management believes that the gross unrisked resource potential of these blocks could be in excess of a billion barrels.

Fiscal regime

On this licence, there is a royalty of 8% of gross production. The profit sharing starts with the contractor getting 57.5% below 5,000 bbl/day and declines incrementally until production reaches 25,000 bbl/day when the contractor is entitled to 50% of profit oil. Although at low production levels these fiscal terms are not as good as in Block XX, they improve at higher flow rates. Given the large exploration targets, we believe that this is more important should a commercial discovery be made. The bonuses are modest with US$0.5 million on first oil, US$1 million on reaching 20,000 bbl/day and US$4 million on 75,000 bbl/day and annual bonuses (training, support and development) of a modest US$135,000 per annum.

Block IV

The company had a 100% working interest in this licence which lies due west of Block V. An exploration well was drilled on the Wild Horse prospect in 2018. The well was drilled to granitic basement. Although this was uncommercial there was a small amount of oil extracted from the well cuttings suggesting that there may be an active source rock in the Baatsagaan basin. Petro Matad chose to relinquish this licence. However, the company is looking at the potential of re-applying for certain parts of this licence.

BG Farm out

Petro Matad farmed out a 78% interest in Blocks V and IV to BG Group in 2015. As part of this farm out, BG paid US$4.55 million cash to Petro Matad and agreed to fund a US$28 million gross work programme. However on taking over BG Group, Royal Dutch Shell decided to pull out of exploration in the region as part of its post-takeover rationalisation strategy partially driven by a retreat in oil prices. The unspent portion of the $28 million work programme was paid in cash to Petro Matad by Shell. However, the interest of a large player in this acreage indicates the potential upside in the acreage.

Asset Valuation

Methodology

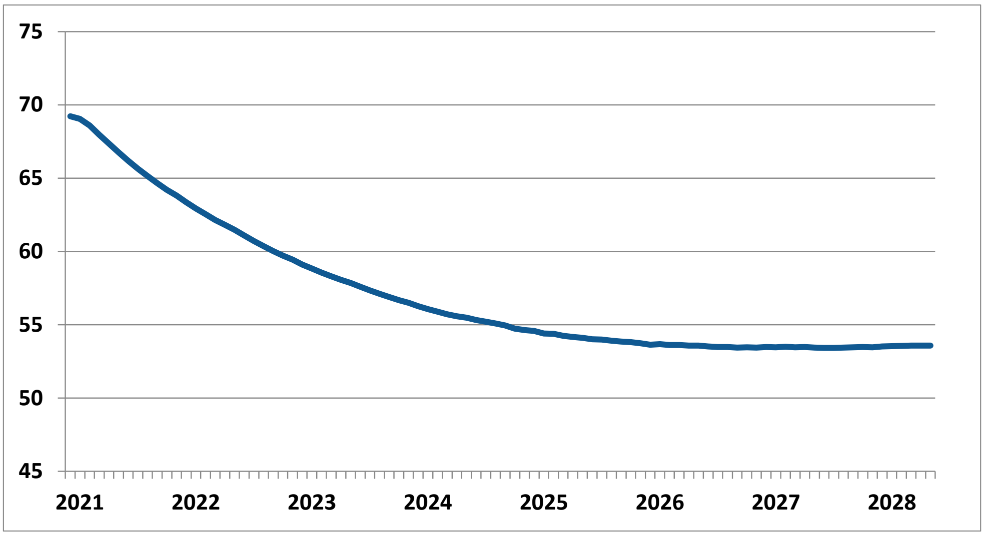
For valuing E & P companies we take the traditional approach of asset valuation that is used by the industry. Investors should therefore view any valuation in the context of their own assessments of the relevant risks. This valuation is derived through using a DCF (discounted cash flow) methodology to 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 twelve 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)

Commodity prices

Oil

We have assumed a flat oil price. In our base case, we use a Brent oil price of US$55/bbl. This is below the current level of approximately US$70/bbl but is the level that the forward futures curve tends to gravitate to over the next few years. We will provide a sensitivity analysis at the end of this section to allow investors to see the value of the assets under various oil price assumptions. 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.

Forward Brent oil curve (US$/bbl



Source: Refinitiv

Gas

It is not anticipated that there will be any commercial quantities of gas associated with the Mongolian oil fields. Even though there has been some associated gas, the lack of infrastructure will not make this commercial. We have therefore not forecast any value from gas.

Discount Rate & Exchange rates

The discount rate that we use in the valuation is the standard 10%. Although it could be argued that this should be adjusted to reflect the company's WACC (weighted average cost of capital), this is the standard rate that is widely used by the industry in making acquisitions. Investors might have differing views of the discount rate and we provide sensitivities later in this note.

The oil and gas industry very much works in US dollars. Therefore, 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 1.40. A stronger US Dollar would prove to be beneficial for UK shareholders.

Heron Development

We have detailed the development plans earlier. For the base case scenario we have assumed capital expenditure of US$251 million which covers the drilling of the wells (US$160 million), the facilities (US$85 million) and G & G/Seismic (US$6 million). The operating costs, once the field is up and running are expected to be US$10 million per annum. With the target development we have increased the facilities expenditure to US$135 million to leave total capital expenditure at US$301 million. The operating costs on the field are expected to rise to US$15 million. Both field concepts are expected to start up gradually in 2022. We have also assumed that the company has already spent US$57.7 million on its historical exploration on the block which will be paid back through cost recovery.

A field development plan prepared by Petro Matad was approved by the Mongolian authorities as part of the process of awarding the Exploitation Licence.

Near field exploration

As we have mentioned earlier, the company has identified three exploration targets that it would like to drill in the short term. Two of these (Saiga and Gobi Bear) are relatively low risk near-field exploration wells in the Block XX exploitation licence. The third well is likely to be on the Velociraptor prospect in Block V. For the sake of conservatism we have used success at the smaller target in this which is a modest 55 mmbbl. Investors should be aware that if both targets in Velociraptor work then this could be multiplied by approximately four times to 204 mmbbl.

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 not adjusted for the balance sheet given that the company has effectively no net cash or debt.

The following table details the asset value we derive for the company. For the Heron base development, we derive a value of approximately 9.3 p/share The Heron Target development upside and risked exploration could both produce a similar value.

Petro Matad RENAV (p/share)

	Risking %	NPV US$m	GBP	p/share
Fields				
Heron Base	100%	89.1	63.2	9.3
Exploitation upside				
Heron Target	50%	89.9	63.7	9.4
Exploration upside				
Gobi Bear	17%	34.2	24.3	3.6
Saiga	57%	33.3	23.6	3.5
Velociraptor	20%	29.2	20.7	3.0
Total		275.6	195.5	28.7

Source: Progressive Research estimates

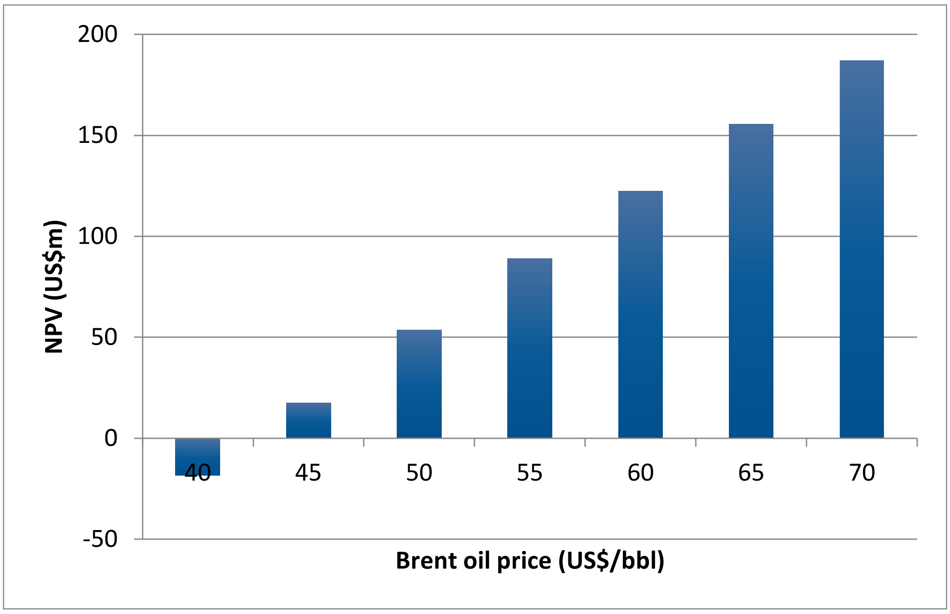
The above analysis is for information purposes only, and does not represent a valuation or target price. Investors should view any valuation in the context of their own assessments of the relevant risks.

Sensitivity

Oil

We have based our core valuations on the oil price discussed earlier. However, we are aware that investors will have differing thoughts on the oil price. As such we have provided a look at the value of the Heron field (Base Development) under differing oil prices. The chart below gives the value of the Heron field under flat oil prices. As can be seen in the chart, the field is very sensitive to the oil price. Although the field development costs are low and the fiscal regime benign at very low oil prices, the impact of the high transportation costs becomes apparent. Investors should also be aware that the improved well recoveries that the management is targeting will improve the economics of the field and drive the break-even oil price of this development substantially lower.

Heron Oil field NPV at differing flat Brent oil prices (US$m)

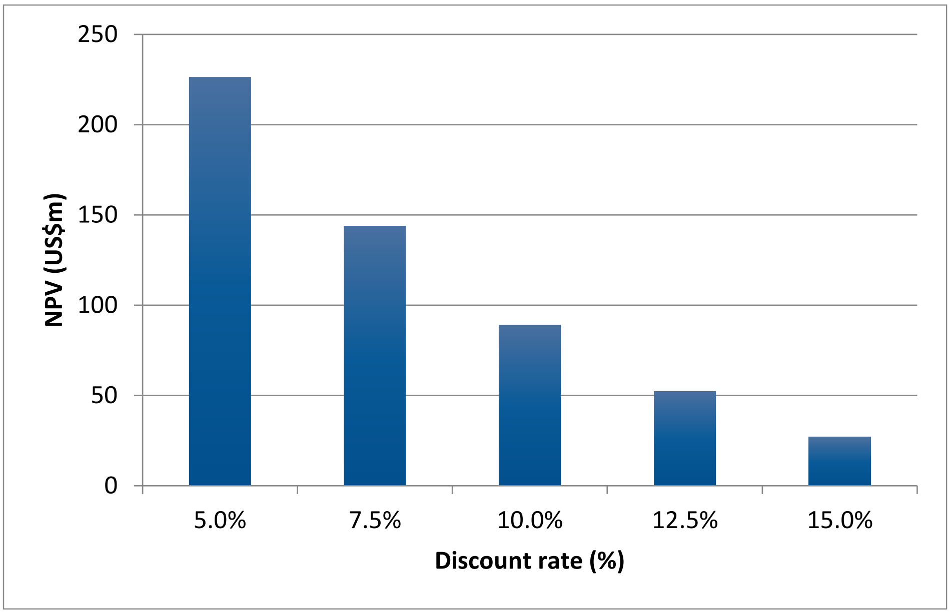


Source: Progressive Research estimates

Discount rate

We have based our core valuations on a 10% discount rate. However, we are aware that investors will have differing thoughts on the discount rate. The chart below gives the value of the Heron field under differing discount rates. The field is very sensitive to the assumption of the discount rate given that there is significant up front capital expenditure and a long production profile.

Heron Oil field NPV at differing discount rates (US$m)



Source: Progressive Research estimates

Finances

At this stage, we are not going to forecast the profit and loss of the company. There is much uncertainty over the timing of the development and that the main revenues are not expected to accrue until 2025. The big issue for Petro Matad's management is that it has a weak balance sheet. At year-end 2020, the company had net cash of approximately US$1 million. This will be run down relatively quickly and so in the short term the company has secured a loan from its major shareholder.

Petrovis loan

Petrovis has made a line of credit available to the company of US$1.5 million in order to allow Petro Matad to maintain its operating capabilities. This will be paid back from production, as a contribution to any equity financing or out of the proceeds of any farm out deal that Petro Matad achieves. By mid-year 2021, the company had drawn down US$0.45 million of this loan.

Longer term financing

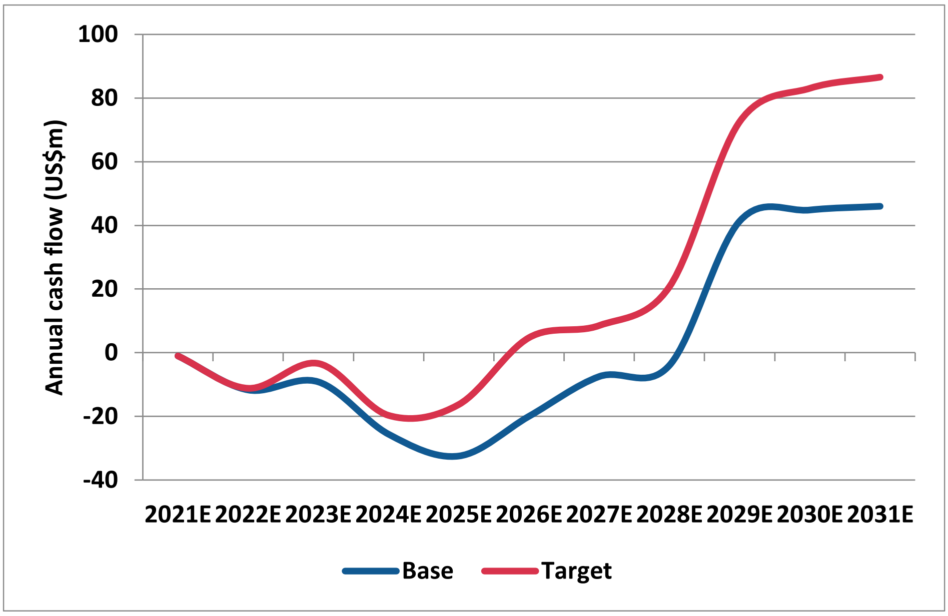
Management is now focused on putting in place financing to allow the company to move forward with the development of the business. We believe that there are three basic options open to management: equity financing, farm out/sale, bank financing. We believe that it is more likely to be a mixture of the three. With the recent approval of the Heron field development plan and Exploitation Licence from the Mongolian authorities, much of the perceived uncertainty has been removed and so it will become easier to sort out the financing.

Looking at the full field development, there is a significant capital expenditure programme required to get the field to peak production comprising a development spend of US$251 million in the first eight years. However, the initial development cost to start production is very low as the company enjoys a low cost operating environment and has access to nearby processing facilities and export route both with spare capacity. Revenue from early production will help to fund the full field development.

The following chart shows the potential flow of funds from the Heron Base and Heron Target developments. As can be seen there is a net annual outflow of cash in the base development until 2028. The Target Development through high production will start to generate free cash from 2026.

This is a projection based on a conservative oil price assumption, significantly below current spot prices, and so a higher oil price will enhance the economics. The ability to bring in a partner would provide a potential cash injection and reduce Petro Matad's funding requirements.

Heron Oil field annual cash flow (US$ m)



Source: Progressive Research estimates

Risks

The company has highlighted the main perceived risks in the business in its report and accounts with measures that management have put in place to mitigate the major risks. We have detailed what we believe to be the main risks in our SWOT section earlier in the note.

Risks

Risk	Risk/impact	Management action/comments
Financial Risk	Bank default, lack of funding leading to temporary slowdown, lack of funding leading to insolvency and financial risks (inflation, exchange rates etc.	Observe government policies, economic indicators, changes in bank policies, bank ratings, liquidity indicators and maintain contacts placed within banking and government institutions. Constant focus on judicious use of funds and budgetary control and continue to seek farmin partner to share costs. Execute bare-bones running cost strategy if needed. Maintain bulk of cash in USD. Monitor exchange rates closely. Higher interest rates for MNT deposits will provide arbitrage opportunities in times of relatively stable exchange rates.
Government/Statutory Risks	Expropriation of PSC, sanctity of contract (detrimental change of PSC terms), statutory environment (FDI, Petroleum Law tax etc.,), Government ineffectiveness/institutional failure, loss of listed status and external statutory risks (anti-bribery, FCA).	Establish and maintain contacts in Government, MRPAM and related agencies. Retain access to competent legal advice and participate in industry associations and lobbying groups. Minimise financial risk by timing investment decisions in accordance with assessment on government effectiveness. Knowledge of and compliance with all relevant laws and guidelines ensured by in-house education and documentation. Constant liaison with Nomad and monitoring information flow and in-house company knowledge.
Operational Risks	Lack of sufficient success in next exploration programme, contractual risk (quality of work or value for money not achieved), work programme risk (improper well design and others), contractor risk (equipment failure).	Exploration operations will be fit for purpose with a focus on minimising costs in the event of failure. With success, appraisal drilling and evaluation will mitigate any residual subsurface uncertainties. Farmout efforts continue with a view to reduce the company's financial exposure. Company policies require open and transparent tendering of major contracts with scope of work fully defined and agreed with both the company tenders board and MRPAM and contract awards subject operational and legal review before signing. Post contract award, supervision of work done, scope compliance, quality assurance and approval for invoice payment will be by performed by authorised company personnel. All contractors must agree to and be compliant with company HSES policies and standards. Well design will be compliant with international standards and best industry practices and company peer reviewed before materials ordered (casing, etc.). All equipment, especially rigs, will be inspected and compliant with company, national and international standards before contracts signed. Contracts with contain provisions for downtime protection. All operations will be supervised on location by qualified/authorised company personnel.

Source: Petro Matad, Progressive Research

Risks

Risk	Risk/impact	Management action/comments
Health, Safety, Security and Environmental Risks	Natural disasters/health epidemics and pandemics, environmental damage, accidents in workplace and security concern (civil unrest, terrorism, sabotage),	Implement and regularly review disaster recovery plans. Ensure medical and emergency evacuation plans are up to date and in line with operational and personnel risks. Be compliant with national and international laws and regulations and adhere to oil field best practice, company with hire qualified professionals to actively advise and assist during high risk operations. Policies and procedures are in place to mitigate risks and staff, contractor and sub-contractor education performed to ensure these are known. Reporting structure in-place to record all incidents and publication of Lessons Learned will allow active feedback to update documentation and training as required. Qualified advisors employed to facilitate HSE awareness. Establish and practice office evacuation procedures and facilitate fire awareness through fire drills and training. Maintain good community relations. Implement a cultural training programme for foreigners working in operational areas. Provide community support when appropriate, hire staff where possible from local communities. Establish and maintain coordination with local law enforcement and maintain company security presence at operating locations. Conduct socialisation visits in operational areas before work programme activities commence.
Management Risks	Management effectiveness, project management/operational efficiency and loss of key staff.	Actively monitor budgetary performance; set measurable objectives and monitor progress; ensure effective management teamwork; peer reviews and independent measurements such as statutory audits. Set measurable targets. Performance against budget monitored and variances with be investigated and resolved, compare company metrics to best practice. Peer reviews performed where applicable to monitor HSE & contractor performance and community issues arising as a result of company operations. Competitive salary & benefit packages and meaningful work objectives, training and related capacity building defined to encourage staff retention. Focus on right sizing organisation and encourage of motivational managers to ensure alignment to company mission and goals. Regular employee reviews and evaluations with feedback in-place. Maintain offsite storage facilities and regular and secure back-up of data.

Source: Petro Matad, Progressive Research

7 July 2021

Disclaimers and Disclosures

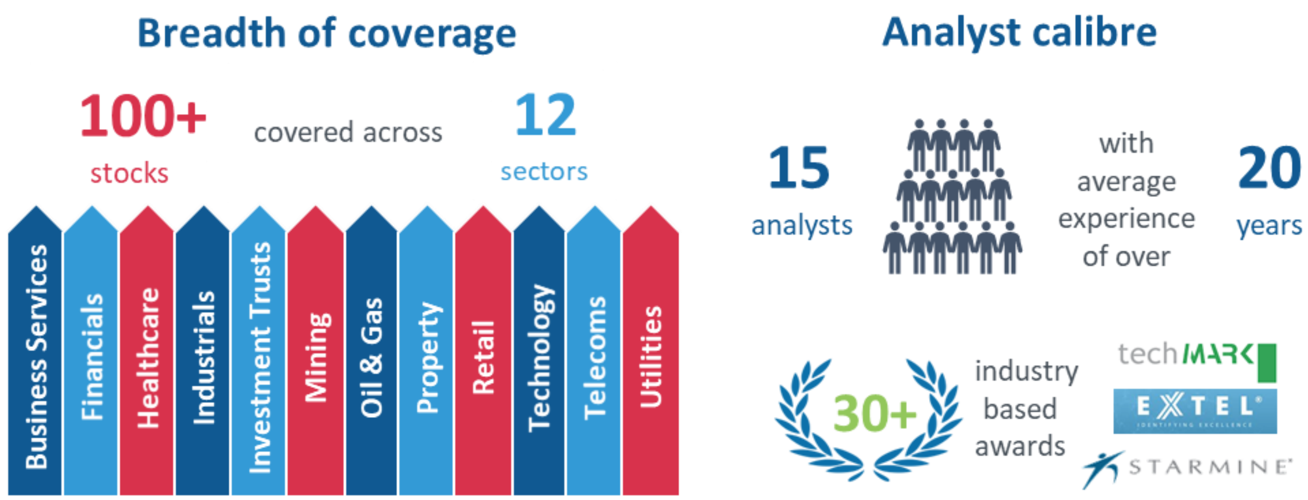
Copyright 2021 Progressive Equity Research Limited (“PERL”). All rights reserved. Progressive’s research is commissioned by the subject company under contract and is freely available to the public and all institutional investors. Progressive does not offer investors the ability to trade securities. Our publications should not, therefore, be considered an inducement under MiFID II regulations. PERL provides professional equity research services, and the companies researched pay a fee in order for this research to be made available. This report has been commissioned by the subject company and prepared and issued by PERL for publication in the United Kingdom only. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable; however, PERL does not guarantee the accuracy or completeness of this report. Opinions contained in this report represent those of the research department of PERL at the time of publication, and any estimates are those of PERL and not of the companies concerned unless specifically sourced otherwise. PERL is authorised and regulated by the Financial Conduct Authority (FCA) of the United Kingdom (registration number 697355).

This document is provided for information purposes only, and is not a solicitation or inducement to buy, sell, subscribe, or underwrite securities or units. Investors should seek advice from an Independent Financial Adviser or regulated stockbroker before making any investment decisions. PERL does not make investment recommendations. Any valuation given in a research note is the theoretical result of a study of a range of possible outcomes, and not a forecast of a likely share price. PERL does not undertake to provide updates to any opinions or views expressed in this document.

This document has not been approved for the purposes of Section 21(2) of the Financial Services & Markets Act 2000 of the United Kingdom. It has not been prepared in accordance with the legal requirements designed to promote the independence of investment research. It is not subject to any prohibition on dealing ahead of the dissemination of investment research.

PERL does not hold any positions in the securities mentioned in this report. However, PERL’s directors, officers, employees and contractors may have a position in any or related securities mentioned in this report. PERL or its affiliates may perform services or solicit business from any of the companies mentioned in this report.

The value of securities mentioned in this report can fall as well as rise and may be subject to large and sudden swings. In addition, the level of marketability of the shares mentioned in this report may result in significant trading spreads and sometimes may lead to difficulties in opening and/or closing positions. It may be difficult to obtain accurate information about the value of securities mentioned in this report. Past performance is not necessarily a guide to future performance.



To arrange a meeting with the management team, or for further information about Progressive, please contact:
Emily Ritchie
+44 (0) 20 7781 5311
eritchie@progressive-research.com