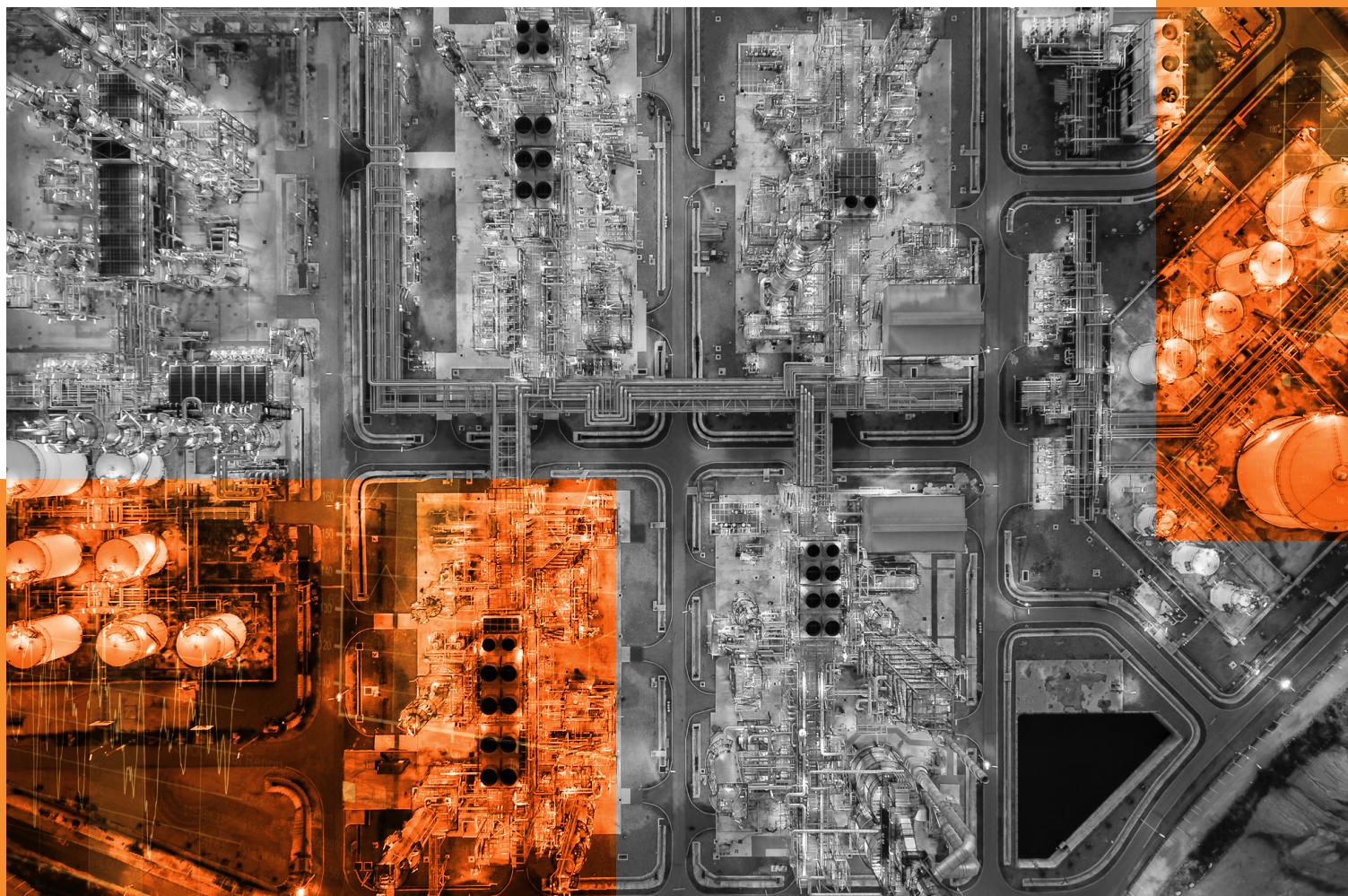
ENVERUS Drillinginfo

WHITE PAPER

SHARKS IN THE WATER

Independents' Day



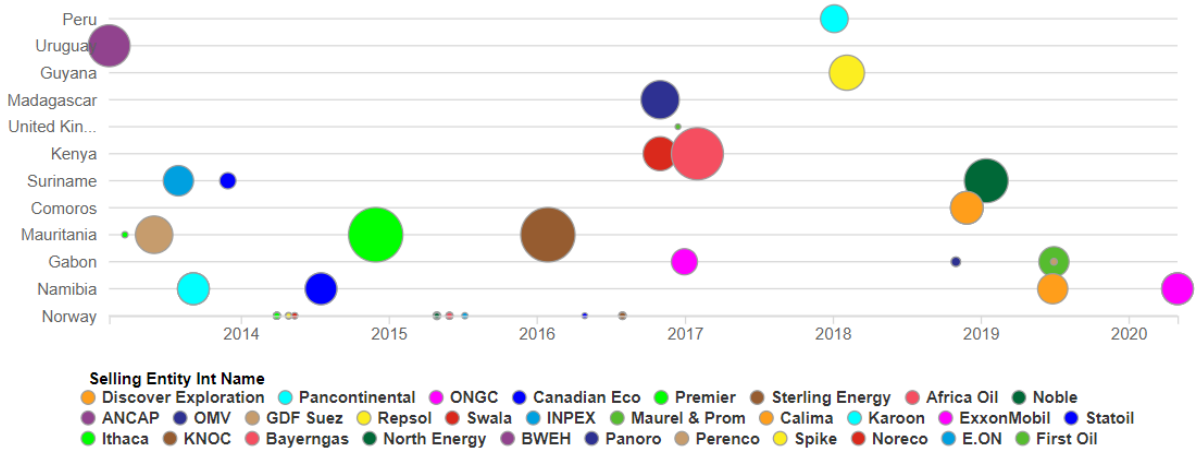
Following our recent **three-part series** highlighting supermajors,we'll next turn our attention to independent "sharks" - companies with solid balance sheets, long-term growth strategies, and cash to spend on acquisitions from stressed rivals. But first, we'll offer our best guess as to where the remains of beleaguered Tullow Oil wind up in the feeding frenzy.

Whence Tullow?

When your CEO and Exploration Director both resign "by mutual agreement," your latest high-profile exploration wells offer heavy sour oil instead of the light sweet crude your neighbors found, high debt and low commodity prices force the suspension of your dividend, you lay off 35% of your staff, and your stock drops 20-fold in a 100-day span, all is not well.

Unfortunately, we believe Tullow may not be long for this world, at least not as we had grown to know it: a pre-eminent global exploration firm with special expertise in the Atlantic conjugate margin and a resume that included the world-class Jubilee field development in Ghana. Now, following disappointing results in Guyana where the company is "thinking carefully about how to proceed," a write-down of all value in a Jamaican exploration license it is likely to relinquish in July, its Ugandan assets selling to French supermajor Total, a Mauritania exit, dilution or sales of Namibia, Suriname, and Kenya assets in the works, and declarations of force majeure in Kenya and Côte d'Ivoire, Tullow's admirable exploration portfolio seems to be unraveling.

Figure 1 - Tullow Asset Acquisitions 2013-2020, Sized by Area

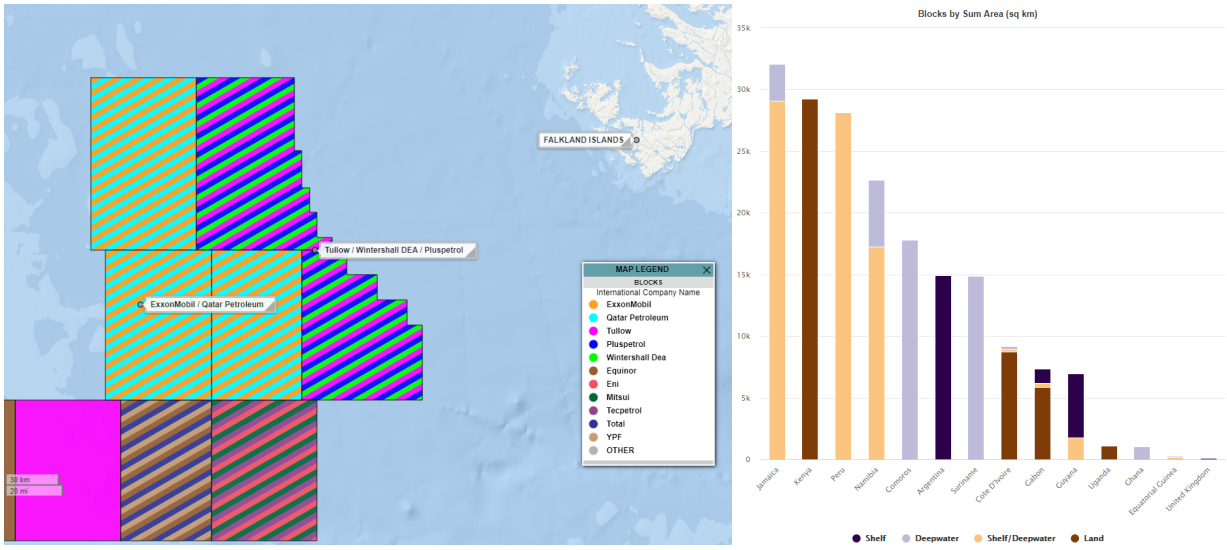


Source | Enverus

This is not a game. Real people with kids and spouses, mortgages, and hopes and dreams will be impacted. We would be sad to see the famed explorer go. But with it seeming only a matter of time before the dreaded announcement that the company has engaged an international investment bank "to assist in evaluating strategic alternatives," we asked ourselves some questions: Who will buy Tullow? Will it be taken out in one great shark swallow, perhaps by a supermajor or dark-horse big boy? Or will it be torn to pieces and its portfolio disassembled piecemeal?

We see ExxonMobil or Total as most likely and able to execute a corporate takeover of Tullow. Either would have a full appreciation for and understanding of the explorer's specialized expertise in playing the Atlantic conjugate margin, and both would be keen to take on great assets as well as great people. Between the two of them ExxonMobil and Total have interests in 1,847 contracted blocks, but only eight in which Tullow also has interest. Of those eight, seven in Uganda are already destined for Total's portfolio in a $575 million deal set to close in the second half of 2020. Beyond Uganda there seems to be little block overlap (and thus synergy) between the potential acquirers and Tullow, but at a country-level things look brighter, with ExxonMobil already in seven and Total in nine of Tullow's 14 countries (see **Figure 2** – chart). Total, however, has been the more aggressive buyer in Africa where the bulk of Tullow's portfolio resides, completing nine deals in the past three years to ExxonMobil's four. If there's to be a corporate transaction, our money's on Total as even the biggest sharks are looking to focus, not dilute, their efforts at the moment.

Figure 2 - Tullow-Operated and Neighboring Malvinas Basin Blocks (Map); and Number of Blocks in Each of the 14 Countries Where Tullow is Active, Colored by Operating Environment (Chart)



Source | Enverus

We see separate asset transactions as more likely, though. With 91 blocks, 51 operated, in Latin America, the Caribbean, and Africa – plus a decommissioning effort at the UK Thames gas field and satellites – Tullow is a bit like a buffet line with something for everyone. Its stated goal of raising a billion dollars to reduce net debt, strengthen the balance sheet and secure a more conservative capital structure will be more than halfway met by the sale of its Uganda assets to Total, leaving a route for Tullow to survive by strategically shedding assets. Here's how we think that would play out.

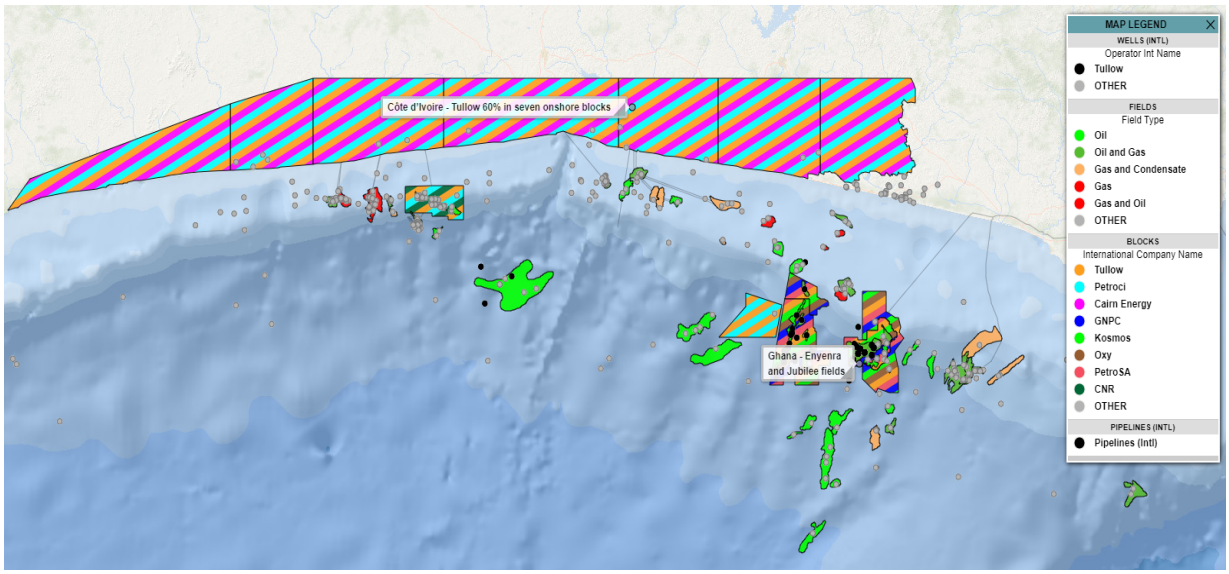
In Suriname and Guyana, we don't see a clear buyer. Eni is our favorite, as the Italian supermajor must want to plant a flag in an easier Latin American asset than its Venezuelan Perla oil field. But if the oil price drop has blunted Eni's appetite, an entry here may not rank high compared to its active exploration and production ventures in Mexico, Trinidad & Tobago, and Argentina's Malvinas Basin. Total, a partner in one operated and one non-operated Tullow block in Guyana, will likely be gun-shy following the disappointing Jethro and Joe exploration results and had already re-focused its efforts on Suriname just ahead of Apache's Maka-1 discovery. Tullow's Suriname blocks don't seem to be prime acreage yet, leaving Equinor or Cairn Energy as long-shot candidates to take on additional interest there.

Tullow operates three offshore Argentina blocks, two in partnership with Pluspetrol and Wintershall (see **Figure 2** – map). Total, ExxonMobil, Eni, and Equinor all have assets in the area. Though we've already tagged Total as a "great white" in the acquisition waters, our money is on ExxonMobil and Qatar Petroleum, its partner in three adjacent exploration blocks. Qatar Petroleum would be keen to keep close to the supermajor, in the ongoing hope that relationship leads to further investment in its home country. Beyond that, we see Wintershall potentially picking up interest in the two Tullow blocks where it is already a 27% partner, especially this early in the exploration cycle. The German explorer demonstrated its appetite for Latin American exploration opportunities by picking up four blocks in Brazil's Potiguar and Ceará basins in 2018, marking its debut in the country.

In Peru, Tullow is unlikely to have suitors following operator Karoon's disappointing dry hole Marina 1 on Block Z-38, which will probably lead to the block being relinquished within a year. Tullow's other three blocks in the country are caught up in various stages of political football and probably worthless. Offshore Jamaica, we see Eni as a potential buyer for Tullow's large Walton Morant license and its undrilled Colibri prospect, though a rank exploration asset such as this will get a low valuation.

Moving now to Africa, we assume Tullow will strive to keep its highest-yielding projects, mostly producing fields in Gabon and Côte d'Ivoire. In Côte d'Ivoire, Tullow confirmed it is looking to farm out more equity in its seven onshore blocks where it holds 60% (**Figure 3**). It's not inconceivable that 30% partner Cairn, with operating experience in Senegal, might take on more equity or even operatorship from Tullow. Since majors are likely to balk at buying onshore assets with an incomplete 2D seismic survey (contracted to Sinopec Geophysical but suspended due to COVID-19), other interested parties will probably have to be deep-pocketed independents or Chinese explorers, potentially making for a small field and a tough sale.

Figure 3 - Tullow Côte d'Ivoire and Ghana Assets



Source | Enverus

Tullow always prized its Ghanaian assets, even as it struggled recently to meet production targets. We can't see the firm pulling out of Ghana completely, but making equity available in any of these countries would help meet the billion-dollar sales target. If so, we would not see Total as a bidder. Despite its apparent interest in Occidental's assets in Ghana as part of a larger deal that fell apart earlier this year, Total CEO Patrick Pouyanné recently asserted that the explorer was never really that interested in getting involved in the Ghana licenses.

With Total looking to farm out some of its 25% equity in its Kenya licenses with Tullow, it won't want any more interest. Again, Chinese companies are the best bet for Tullow here, with various ones, including CNOOC, rumored to have been sniffing around the Total opportunity.

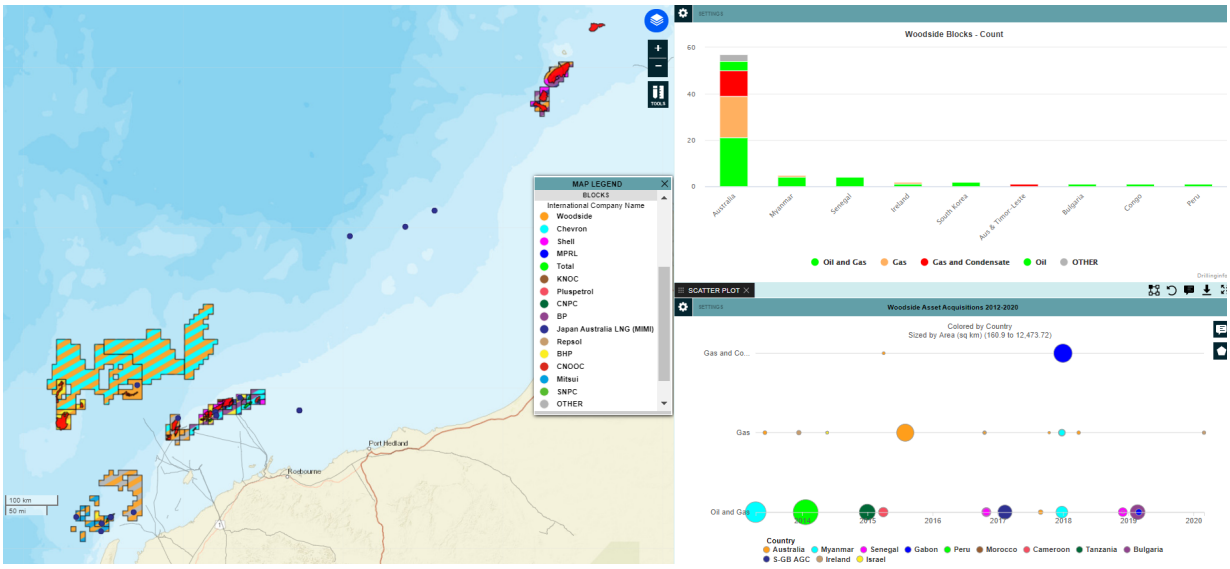
In the Comoros, it is anyone's guess what will happen on Tullow's three frontier exploration blocks. With its appetite for risk at an all-time low, the firm will choose its strategy here based on the results of 3D seismic acquired in late 2019. The other operators and non-operated participants in the Comoros are all junior companies, none capable of operating and funding a deepwater well should Tullow decide to withdraw. It will take a new entrant to keep things going here.

Lastly, Tullow's assets in Namibia will surely be on the block and should garner some interest thanks to the country's IOC-friendly government and good fiscal terms. The Cormorant 1 well, drilled on Tullow's Block PEL 37 in 2018, came up dry, prompting India's ONGC to withdraw from the block, which remains highly exploratory. If Total finds oil in its very large deepwater Venus prospect later this year, there will be plenty of suitors willing to take up Tullow's interest, likely including ExxonMobil and Portugal's Galp.

Woodside Petroleum

Sometimes a shark needs to bide its time, circling in the water and waiting for just the right moment to strike. Australian operator Woodside, thus far, seems content to wait with $4 billion in cash and $7 billion of liquidity according to CEO Peter Coleman, meanwhile delaying expenditures and adding hedges. But sometime in the second half of 2020, we expect this fish to get hungry. What to eat? We believe Woodside will stick with its upstream strategy, including expertise in exploration and production of deepwater clastic reservoirs, as well as a competitive advantage in complicated LNG operations and close ties with Asia-Pacific customers.

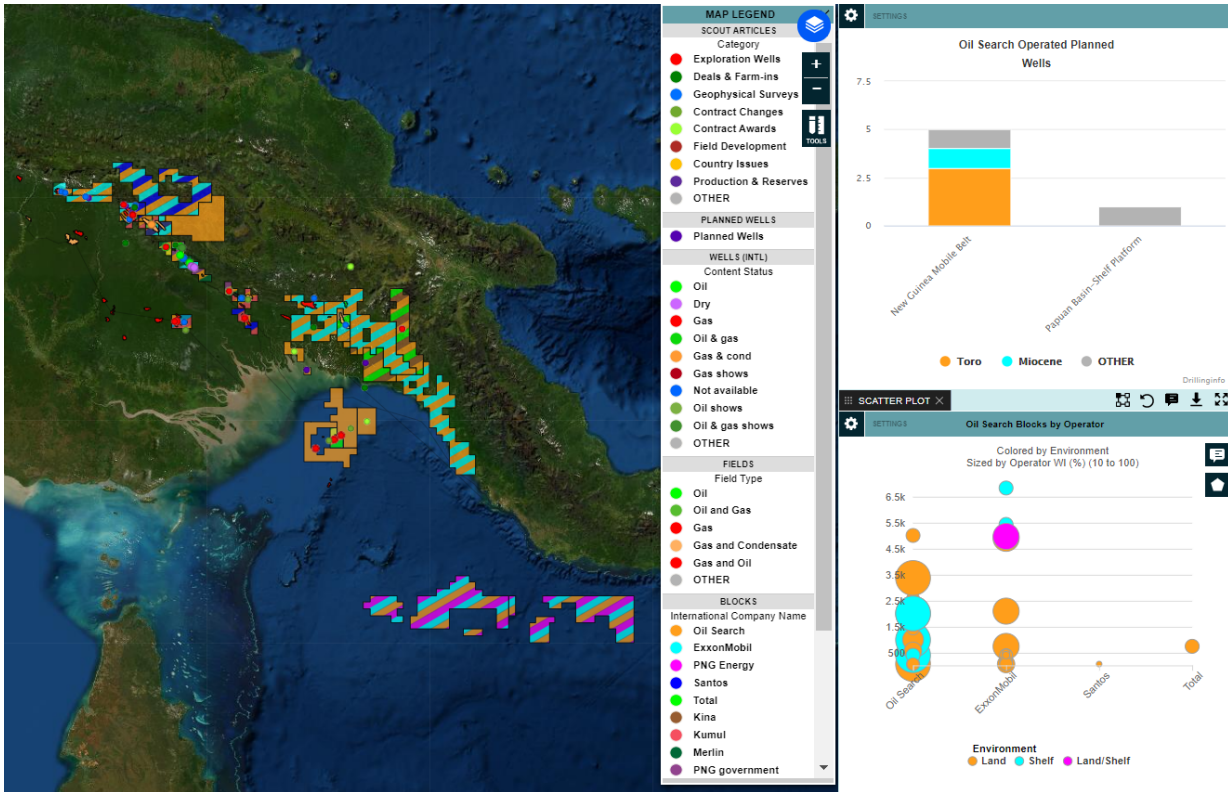
Figure 4 - Woodside Petroleum: Assets in Australia's North West Shelf Region (Map); Current Blocks (Top Chart); and Asset Acquisitions 2012-2020, Emphasizing the Company's Natural Gas Orientation



Source | Enverus

Woodside might revisit an acquisition of Oil Search, a partner in two multi-billion-dollar LNG projects in Papua New Guinea (PNG) (**Figure 5**). Woodside attempted to acquire the storied PNG explorer in the 2015 downturn, but its offer was spurned as too low. Oil Search has a target on its back: its share price is down 50% this year, it executed a capital raise of discounted shares up to $700 million to support ongoing opex and not capex, and it likely retains a high cost structure despite staff reductions. Oil Search's initial 2017 farm-in and subsequent increase of interest in the Pikka/Horseshoe field in Alaska somewhat muddies the rationale for another bid from Woodside (or almost any other suitor). In the event of a corporate sale, the Alaska assets would be valued low and quickly divested to a more interested party, possibly Armstrong Oil or ConocoPhillips. Armstrong might relish buying back the assets at a much lower price than it received. ConocoPhillips might be eager to buy given its recent success to the west at Willow oil field, although in late 2019 it announced plans to scale back capital spend in Alaska and spread risk by selling down interest. CEO Ryan Lance recently outlined the firm's M&A approach, describing three buckets, including ". . . high-return bolt-on assets or acreage deals, and they could be larger in size. They also make good sense. We're always on the lookout for these kinds of opportunities and we executed a few last year." Lance's reference to the company's 2019 acquisitions of Alaskan interests from Anadarko and BP indicate that a Woodside-Oil Search-ConocoPhillips trifecta is most likely here.

Figure 5 - Oil Search Blocks and Wells in Papua New Guinea



Source | Enverus

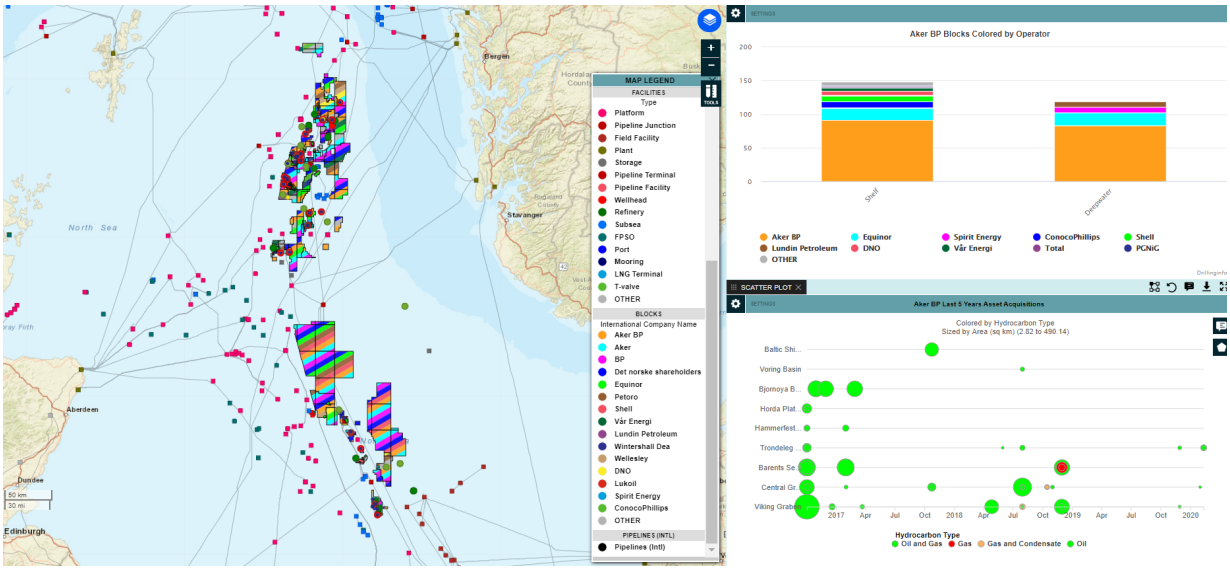
Once the smoke from the COVID-19 pandemic and low prices has cleared, Woodside will return to its growth plans in Australia by adding a second train to its Pluto LNG plant for processing gas from the Scarborough field. In addition, the firm will complete the negotiation and build-out process to ensure that Browse Basin gas resources are processed through the Northwest Shelf LNG project. As for domestic exploration, to meet its financial objectives and reverse dropping oil production Woodside would need oily opportunities that have shorter timelines and smaller investments, and thus deliver higher returns, than its massive LNG projects. A lack of quality domestic options here will probably have it looking elsewhere.

Senegal is firmly on Woodside's menu, at least for capital expenditures at the offshore Sangomar oil field development, where its 35% of Phase I costs now appear to be roughly $300 million. Joint venture partner FAR recently began the farm-down process for its 15% stake in the Woodside-operated development, a move spurred by a collapse in debt financing for the project because of the COVID-19 oil price implosion. Although Coleman previously stated his preference that FAR remain a partner, unless other participants Cairn (40%), Petrosen (Senegal's national oil company, 10%), or a new entrant move faster, Woodside will snap up FAR's interest.

Aker BP

Aker BP is the third-largest explorer in Norway and holds interests in more than 19,000 square kilometers in the North, Norwegian, and Barents Seas (**Figure 6**). Since 2010 the firm (and predecessors) has been producing from a Paleocene injectite play at Volund, with 75 MMbo originally in place, and more recently found 100-200 MMboe in the same play in the Frosk/Froskelår area. The injectites formed from deepwater sands that were quickly buried underneath shales, inhibiting water expulsion. The fluidized sands subsequently destabilized, likely due to earthquakes associated with volcanism, and injected through fractures upward into the shale, creating very high-quality reservoirs with porosity over 30%, multi-darcy permeability, and recovery factors as high as 70%. Aker BP developed an enviable expertise in the play, including the use of ultra-far-angle seismic amplitudes as direct hydrocarbon indicators, and the firm has expressed an interest in expanding its North Sea presence, especially in the UK continental shelf (UKCS).

Figure 6 - Aker BP: North Sea Blocks, Wells, and Planned Wells (Map and Top Chart); Asset Acquisitions Last Five Years, by Basin (Bottom Chart)



Source | Enverus

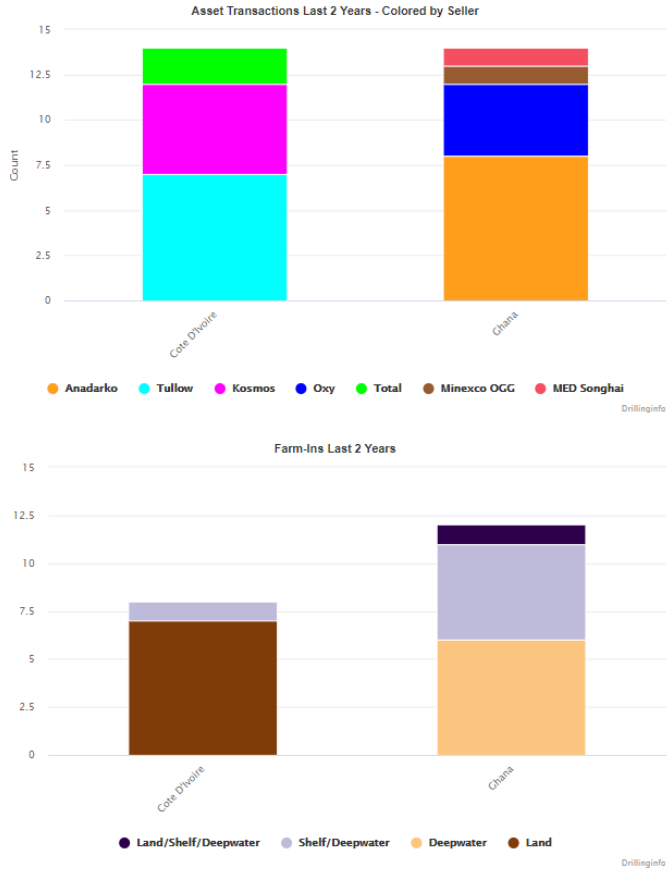
Apache's 2015 injectite discoveries in the Beryl field area in the UKCS are thought to hold mean case reserves of 43 MMboe (understood to be 95% oil), with potential for as much as 119 MMboe (P10). Despite its best-in-class $15/boe cash operating cost, Apache has indicated it would consider selling its high-margin North Sea assets. Aker BP's investments include the recently sanctioned NOAKA development, for which Enverus RS Intelligence estimates a $55/bbl breakeven oil price, despite innovative cost-saving technology such as an unmanned processing platform. At current long-term price expectations, this screens as a marginally economic development, underscoring a fit for Apache's profitable assets in Aker BP's portfolio. Although a joint venture is not out of the question, we see an outright asset transaction as a more desirable outcome from both parties' perspectives – especially Apache, which suffers from a relatively high debt-to-earnings ratio and had none of its production hedged when oil prices cratered after OPEC's disastrous meeting in early March.

Canadian Natural Resources (CNR)

One would think that CNR must be looking well beyond Canada's borders for new investment, given low and volatile commodity prices and increasing scrutiny of its historically prodigious domestic oil sands from environmental activists, government regulators, and even shareholders. Having built a UK North Sea position via several acquisitions of mature assets over the last three years, CNR is well situated to further expand its presence there and continue to leverage its expertise in controlling operating costs.

But it is in Africa, where according to CNR's website "Projects in Côte d'Ivoire provide some of the highest return on capital . . ." and spin off nice cash flow, that we see CNR most likely to splash out for additional assets. Despite President Tim McKay stating on the 1Q20 earnings call that ". . . we're quite happy with the assets we have," CNR could be a buyer due to its strong liquidity position and stated intent to hold high working interest international assets, assuming bid-ask spreads narrow sufficiently to allay McKay's stated concerns. With 45 potential and reported farm-ins and other asset transactions over the last two years in Côte d'Ivoire and neighboring Ghana, as well as five Côte d'Ivoire bid blocks recently put on offer and a second licensing round forthcoming in Ghana, there is sufficient deal flow that CNR should be able to find something for its portfolio (**Figure 7**).

Figure 7 - Côte d'Ivoire and Ghana Asset Transactions and Farm-In Opportunities, Last Two Years



Source | Enverus

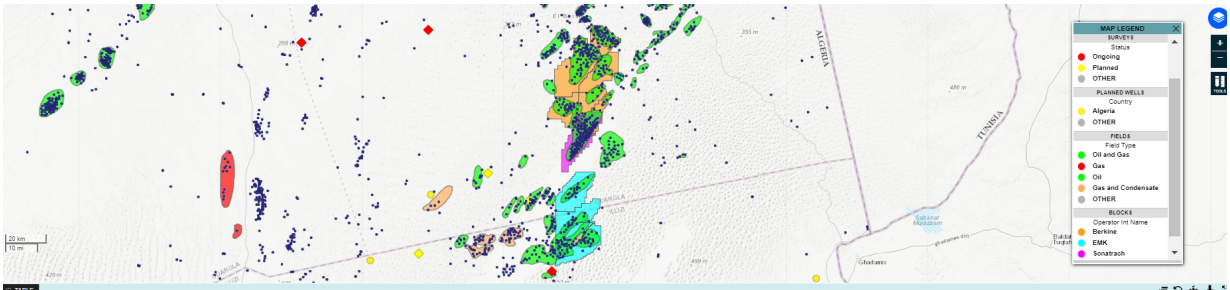
Suncor

Suncor must also be looking beyond oil sands. In keeping with a trend among financially strong explorers in recent months, the firm increased liquidity by over 50% to nearly $2.7 billion by issuing bonds and securing additional credit facilities. Said to be for repaying short-term debt and "general corporate purposes," the cash could certainly be used for acquisitions as well.

Outside Canada, Suncor already owns assets in the North Sea, Libya, and Syria. Ongoing conflict in Libya almost certainly prevents Suncor from acquiring more acreage there, but it would seem a shame to waste the regional expertise and connections it has established along the Mediterranean. If the company were to retain a liquids focus, then onshore eastern Algeria's oily Ghadames Basin, Hassi Mesaoud Ridge, and Illizi Basin regions might look attractive for at least two reasons. First, Algeria's December 2019 Hydrocarbons Law reduced royalty and petroleum income tax rates, as well as introducing or reinstating several contract types. Unfortunately, the Algerian fiscal regime is still widely perceived as onerous and not reflective of the country's overall exploration risk. A primary concern remains the requirement of minimum 51% state participation in any development. Exploration companies anecdotally responded positively, but it remains to be seen whether new investors like Suncor will be attracted by the revised terms as they apply to new blocks only.

Second, French supermajor Total recently failed to obtain Occidental's assets there (**Figure 8**) after nearly a year of negotiation. Algerian state oil company Sonatrach instead chose to exercise its pre-emption right, perhaps in a desperate bid to maintain hydrocarbon revenue to prop up the government's plummeting foreign currency reserves. It's not entirely clear how Sonatrach could afford the roughly $2 billion price tag, since its 2020 expenditure has been slashed 50% to $7 billion and it also pre-empted Energean's bid for EDF's Edison E&P assets in the country. It appears, at least for now, that the music has stopped, and Occidental retains but does not want the prize: 12 blocks covering 2,000 square kilometers, nearly 100% operated, with gross production of 260,000 barrels per day – a tasty morsel that could be much more likely to close if not driven by an ex-colonizer of Algeria.

Figure 8 - Occidental Petroleum Blocks in Algeria, with Block Details



Block Name	Area (sq	Contract Type	Operator Local Name	Operator Int	Operator WI	Participant 1 Local Na	Particip	Partici	Participant 2 Local Name	Participant	Particip	Participant 3 Local Nar	Partic	Partic	Participant 4 Local Na	Participant	Parti	Participant 5 Local Name	Participant	Parti	Participant 6 Local Nar	Participant	Parti	Hydrocarbon Type	Expiry Date
Berkine Est	24.04	Production	Groupement Berkine	Berkine	0	Anadarko Algeria Co	Oxy	24.5	Eni Algeria Ltd Sarl	Eni	12.25	Maersk Algerie SpA	Total	12.25	Sonatrach SpA	Sonatrach	51							Oil and Gas	06-22-2023
Berkine Nord Est	152.33	Production	Groupement Berkine	Berkine	0	Anadarko Algeria Co	Oxy	24.5	Eni Algeria Ltd Sarl	Eni	12.25	Maersk Algerie SpA	Total	12.25	Sonatrach SpA	Sonatrach	51							Oil and Gas	06-22-2023
El Kheit-Et Tesselkha	226.1	Production	Groupement El Merk	EMK	0	Anadarko Algeria Co	Oxy	18.1	PT Pertamina Algeria EP	Pertamina	16.9	Eni Algeria Ltd Sarl	Eni	9.1	Maersk Algerie SpA	Total	9.1	Talisman (Algeria) BV	Repsol	9.1	Sonatrach SpA	Sonatrach	37.7	Oil and Gas	06-22-2023
El Merk	128.72	Production	Groupement El Merk	EMK	0	Anadarko Algeria Co	Oxy	18.1	PT Pertamina Algeria EP	Pertamina	16.9	Eni Algeria Ltd Sarl	Eni	9.1	Maersk Algerie SpA	Total	9.1	Talisman (Algeria) BV	Repsol	9.1	Sonatrach SpA	Sonatrach	37.7	Gas and Condensate	06-22-2023
El Merk Est	181.27	Production	Groupement El Merk	EMK	0	Anadarko Algeria Co	Oxy	18.1	PT Pertamina Algeria EP	Pertamina	16.9	Eni Algeria Ltd Sarl	Eni	9.1	Maersk Algerie SpA	Total	9.1	Talisman (Algeria) BV	Repsol	9.1	Sonatrach SpA	Sonatrach	37.7	Gas and Condensate	06-22-2023
El Merk Nord	193.8	Production	Groupement El Merk	EMK	0	Anadarko Algeria Co	Oxy	18.1	PT Pertamina Algeria EP	Pertamina	16.9	Eni Algeria Ltd Sarl	Eni	9.1	Maersk Algerie SpA	Total	9.1	Talisman (Algeria) BV	Repsol	9.1	Sonatrach SpA	Sonatrach	37.7	Oil and Gas	06-22-2023
Hassi Berkine Nord	127.86	Production	Groupement Berkine	Berkine	0	Anadarko Algeria Co	Oxy	24.5	Eni Algeria Ltd Sarl	Eni	12.25	Maersk Algerie SpA	Total	12.25	Sonatrach SpA	Sonatrach	51							Oil and Gas	12-24-2023
Hassi Berkine Sud	335.37	Production	Groupement Berkine	Berkine	0	Anadarko Algeria Co	Oxy	24.5	Eni Algeria Ltd Sarl	Eni	12.25	Maersk Algerie SpA	Total	12.25	Sonatrach SpA	Sonatrach	51							Oil and Gas	06-22-2023
Hassi Berkine Sud Est	187.93	Production	Groupement Berkine	Berkine	0	Anadarko Algeria Co	Oxy	24.5	Eni Algeria Ltd Sarl	Eni	12.25	Maersk Algerie SpA	Total	12.25	Sonatrach SpA	Sonatrach	51							Oil and Gas	06-22-2023
Ourhoud	256.56	Production	Sonatrach SpA	Sonatrach	36.15	CEPSA Algerie	CEPSA	39.76	Eni Algeria Ltd Sarl	Eni	4.59	Maersk Algerie SpA	Total	4.59	Anadarko Algeria Co	Oxy	9.18	PT Pertamina Algeria EP	Pertamina	3.73	Talisman (Algeria) BV	Repsol	2	Oil and Gas	06-23-2033
Qoubba Nord	42.19	Production	Groupement Berkine	Berkine	0	Anadarko Algeria Co	Oxy	24.5	Eni Algeria Ltd Sarl	Eni	12.25	Maersk Algerie SpA	Total	12.25	Sonatrach SpA	Sonatrach	51							Oil and Gas	06-22-2023
Rhourde Berkine	117.31	Production	Groupement Berkine	Berkine	0	Anadarko Algeria Co	Oxy	24.5	Eni Algeria Ltd Sarl	Eni	12.25	Maersk Algerie SpA	Total	12.25	Sonatrach SpA	Sonatrach	51							Oil and Gas	06-22-2023

Source | Enverus

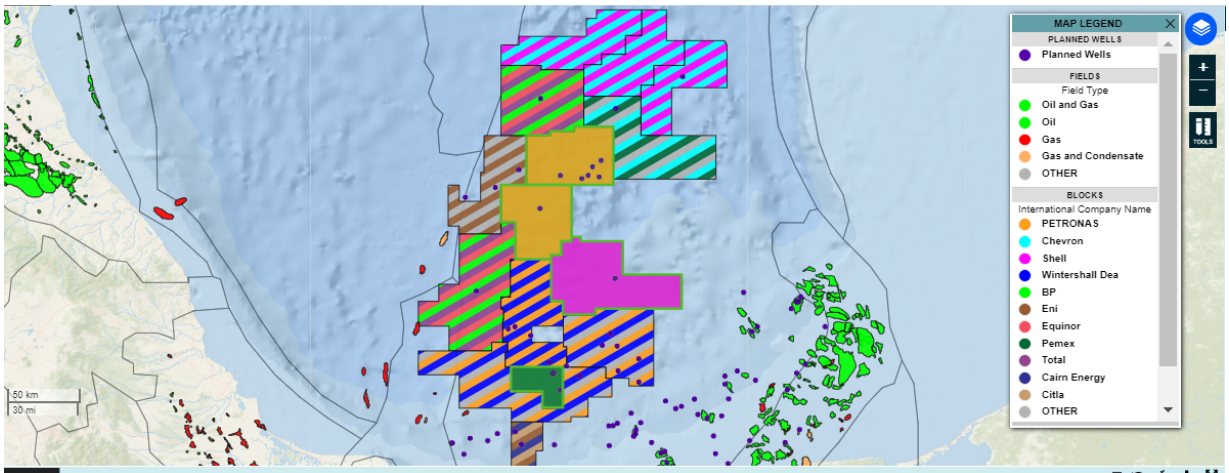
The Egyptian Western Desert also may also fit Suncor's bill. In October of 2019, Shell announced plans to sell its entire asset base with gross production of 120,000 boe/d. An international consortium consisting of Cheiron Petroleum, Cairn Energy, and Pharos Energy as well as a separate Egyptian entity were reportedly invited to join the second round of bidding. However, Pharos withdrew due to low oil prices, and Shell pushed the offer deadline back to July to give late entrants a chance to jump in.

Hess

Hess will keep focusing on its crown jewel, Guyana, while trying to find another elephant soon. With a 30% interest in the ExxonMobil-operated Stabroek Block and the Liza development, Hess is deferring some capital spend there. It is also making even bolder moves in its Williston Basin acreage, the company's largest operated asset. There, Hess will drop from six rigs to one and charter three oil tankers to store six million barrels of near-term production for sale in Asia later this year. The company signaled it will generally hold steady on its U.S. Gulf of Mexico (GOM) assets, deferring discretionary capex and incurring minor production declines as a result. Having thus positioned itself to get through 2020 nicely, what could a very focused Hess do with its cash and undrawn revolver if presented with compelling growth opportunities?

Despite its stated conservative GOM plans, we see Hess actively prowling the waters – but not in the U.S. Instead, Hess will seek to reprise its Guyana success by partnering to find another giant in Mexican territory, possibly lurking in the Salina del Istmo Basin, beneath the waves of Campeche Bay. We see several ways for Hess to pick up non-operated acreage here. One is in blocks where operators still have 100% working interest but are likely to mitigate risk by selling down. Even in the most prospective areas this is almost inevitable in a country like Mexico due to uncertainties in the fiscal regime. In the deepwater, Petronas holds two 100% blocks and Shell and state-run Pemex one each (**Figure 9**).

Figure 9 - Deepwater Blocks and Block Details in the Salina Del Istmo Basin, Mexico; Potential Targets for Hess Outlined in Green on Map and Highlighted in Table



Contract Name	Operator Local Name	Operator Int N	Ope	Participant 1 Local Name	Participant 1 Int	Partici	Participant 2 Local Name	Participant 2 Int	Partic	Parti
Round 2.4 Block 26	PC Carigali Mexico Operations SA de CV	PETRONAS	100							
Round 2.4 Block 25	PC Carigali Mexico Operations SA de CV	PETRONAS	100							
Round 2.4 Block 28	Shell Exploracion y Extraccion de Mexico SA de ...	Shell	100							
Han	Pemex	Pemex	100							
Round 2.4 Block 24	Eni Mexico S de RL de CV	Eni	65	QPI Mexico SA de CV	Qatar Petrole...	35				
Round 2.4 Block 20	Shell Exploracion y Extraccion de Mexico SA de ...	Shell	60	Chevron Energia de Mexico S de RL de CV	Chevron	40				
Round 2.4 Block 23	Shell Exploracion y Extraccion de Mexico SA de ...	Shell	60	Chevron Energia de Mexico S de RL de CV	Chevron	40				
Round 2.4 Block 21	Shell Exploracion y Extraccion de Mexico SA de ...	Shell	60	Chevron Energia de Mexico S de RL de CV	Chevron	40				
Salina Deep Water 4	PC Carigali Mexico Operations SA de CV	PETRONAS	50	Sierra Coronado E&P S de RL de CV	Wintershall Dea	50				
Round 2.1 Block 7	Eni Mexico S de RL de CV	Eni	45	Capricorn Energy Mexico S de RL de CV	Cairn Energy	30	Citla Energy B7 SAPI de CV	Citla	25	
Salina Deep Water 5	Murphy Sur S de RL de CV	Murphy	40	PC Carigali Mexico Operations SA de CV	PETRONAS	30	Sierra Offshore Exploration S de RL de CV	Wintershall Dea	30	
Round 2.4 Block 22	Chevron Energia de Mexico S de RL de CV	Chevron	37.5	Pemex Exploracion y Produccion	Pemex	27.5	Inpex E&P Mexico SA de CV	INPEX	35	
Salina Deep Water 3	Equinor Upstream Mexico SA de CV	Equinor	33.4	BP Exploration Mexico SA de CV	BP	33.3	Total E&P Mexico SA de CV	Total	33.3	
Salina Deep Water 1	BP Exploration Mexico SA de CV	BP	33.3	Equinor Upstream Mexico SA de CV	Equinor	33.4	Total E&P Mexico SA de CV	Total	33.3	
Round 2.4 Block 29	Repsol Exploracion Mexico SA de CV	Repsol	30	PC Carigali Mexico Operations SA de CV	PETRONAS	28.33	Sierra Nevada E&P S de RL de CV	Wintershall Dea	25	PTT

Source | Enverus

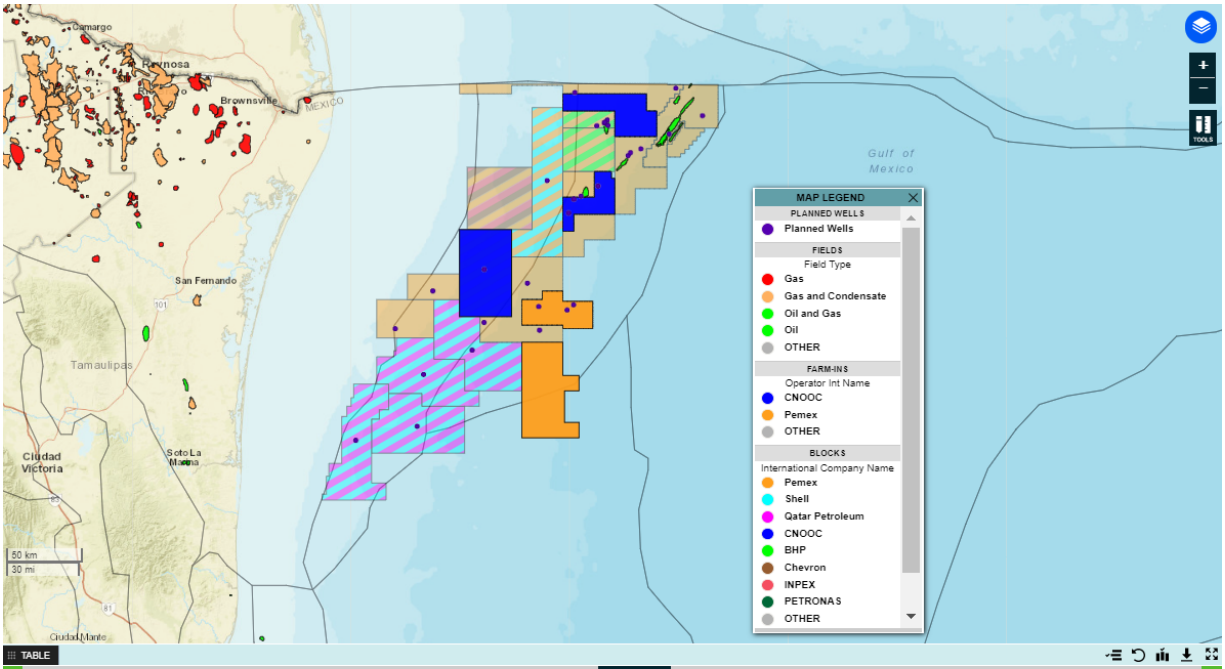
Petronas used its wide-azimuth Schlumberger 3D seismic to target its best prospect with the $40 million Huracan-1 new-field wildcat, scheduled to spud in late 2020. The well aims to test Lower Miocene and Eocene reservoirs with estimated resources of 1.19 Bboe and 613 MMboe, respectively, and 21% and 15% possibilities of geologic success. A delay in drilling is a very real possibility, but Petronas and other international participants in Mexican exploration blocks will try to remain active to demonstrate their level of commitment to the government. The companies want to prevent Mexican officials from concluding that foreign companies just come in and grab licenses without undertaking any activity. This would likely result in a retrenchment on terms and a return to the effective banishment of foreign exploration companies that was only recently overcome. In any event, Petronas should be motivated to farm out some interest here, and Hess should take a look.

Shell has no concrete plans to drill on its block, leaving Pemex's Block 18 as the only other 100% operated target in the Salina Basin, but this brings up a whole new kettle of fish. Pemex's 2017-2021 Business Plan clearly stated the firm's intent to seek partners in areas where it lacked expertise, fostering expectations that it would offer working interest in a number of deepwater blocks to international exploration companies while "riding shotgun" to gain more experience. However, the current administration of President Andrés Manuel López Obrador wants any growth in Mexican oil production to be "a Pemex story," keeping the farm-outs for these blocks officially on the back burner. If Hess were willing to chase gas and could pull a political rabbit out of the hat, Block 18 might be of interest; Pemex's Block 5 in the oil-prone Perdido Fold Belt could also be of interest.

Hess could look at the 33% interest Total is said to be offering in the BP-operated Salina Deep Water 1 and Equinor-operated Salina Deep Water 3 blocks. Total will stay active in the country, but to free up cash for its Suriname development, it would like to reduce its Mexican commitments to a more leisurely pace. In Block 1, BP has named the Serrano 1 lead, with objectives in the Oligocene sequence, and Equinor's Block 3 reportedly has a dozen identified opportunities in the Miocene and Eocene sequences. At this point, Hunab is the named lead from among "structurally similar" prospects near the southeast flank of the block, targeting median unrisked resources of about 397 MMboe with a 15% probability of geologic success.

In the Perdido Fold Belt, CNOOC is offering 30-50% in three deepwater blocks (**Figure 10**). CNOOC's Xakpun 1 new-field wildcat targets a sub-salt prospect in the Eocene sequence (Wilcox trend) in Block 4, where Petronas saw enough potential to pick up 30% from CNOOC last year. Drilling here and on the Ameyali prospect in Block 1 is likely to be delayed as CNOOC reviews its two-well contract with deepwater driller Valaris. The $100 million Ameyali also targets Wilcox sands at depths of 5,375-6,100 meters, with a potential of over a billion barrels of oil. With mostly tire-kicking reported so far, Hess might have a relatively easy time coming to terms with the Chinese operator and helping reduce its commitments in the blocks, if the U.S.-based producer can stomach the scheduling uncertainty.

Figure 10 - Reported and Potential Farm-In Opportunities in Mexico's Perdido Fold Belt.



Contract Name	Contract Type	Area (sq km)	Hydrocarbon Ty	Available Equity	Farm-in Comments	Opportunity Date	Opportunity Type	Operator Local Name
Perdido Deep Water 1	Exploration	657.57	Oil and Gas	CNOOC looking for a partner	Offering 50%	03-19-2019	Reported	China Offshore Oil Corpora
Perdido Deep Water 1	Exploration	1036.56	Oil and Gas	CNOOC looking for a partner	Offering 50%	03-19-2019	Reported	China Offshore Oil Corpora
Perdido Deep Water 4	Exploration	1896.33	Oil and Gas	CNOOC looking for a partner	Offering 30%	04-15-2019	Reported	China Offshore Oil Corpora
Round 2.4 Block 5	Expl/Prod	863.4	Oil and Gas	Analysts and industry sources urged Pemex to re-start the process (Nov2019)	Pemex holds 100% WI	11-15-2019	Potential	Pemex Exploracion y Produ
Round 2.4 Block 5	Expl/Prod	1898.56	Oil and Gas	Analysts and industry sources urged Pemex to re-start the process (Nov2019)	Pemex holds 100% WI	11-15-2019	Potential	Pemex Exploracion y Produ

Source | Enverus

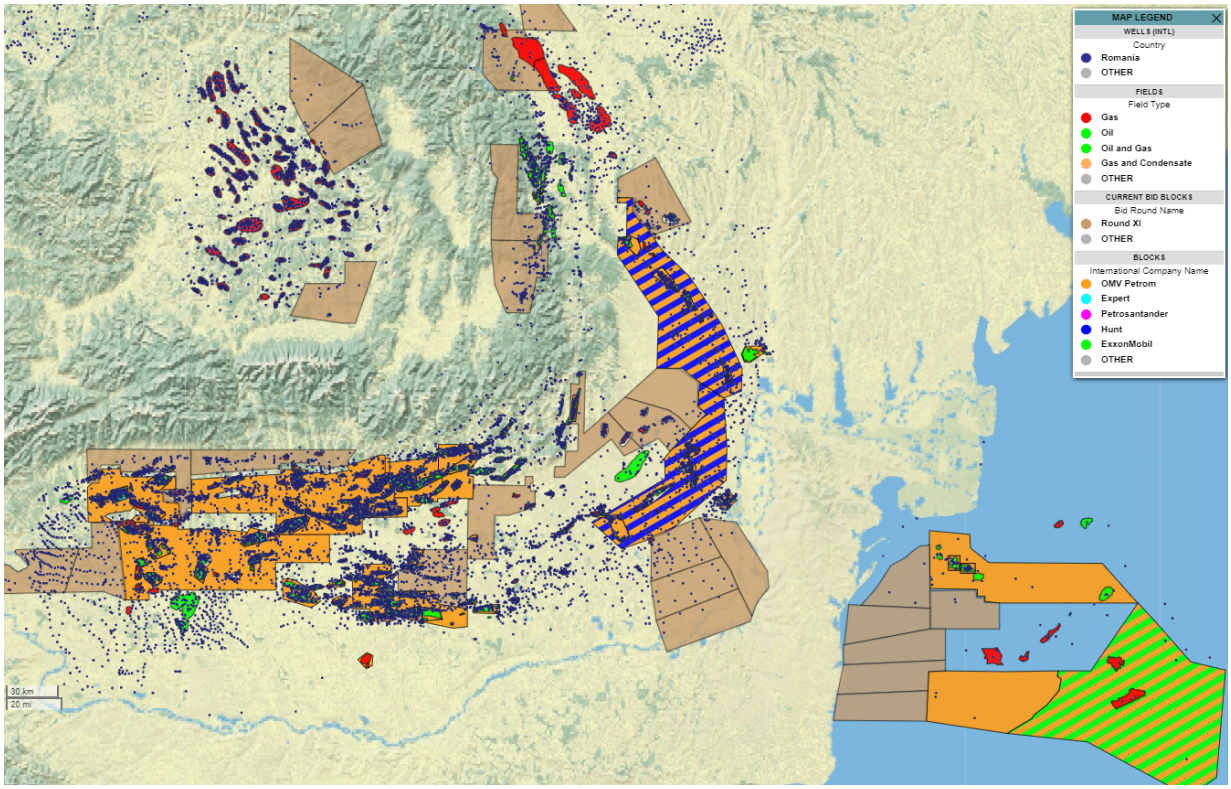
Hunt Oil

We suspect notoriously difficult to analyze, privately held and legendary global explorer Hunt Oil will be looking at the Round XI offering in Romania, where it has enjoyed moderate success since farming into OMV Petrom's Urziceni Est and Adjud blocks in 2011. Hunt would probably focus any bids onshore in the thrust-fold belt, where several Round XI blocks surround old Romanian gas and oil fields in the general area of Hunt's current interests (**Figure 11**). But since little immediate investment is required in bid rounds, and if Hunt wanted to splash out now in Romania, we see it cozying up further to current partner OMV Petrom.

OMV is an explorer of some renown itself, with feathers in its cap from decades of successful ventures at home in Austria and in countries as far-flung as Bulgaria, Libya, Tunisia, and Australia. Like Hunt, OMV has excellent technical staff and an appetite for rank exploration, making the two companies a good match. We could easily imagine Hunt joining OMV Petrom's ventures in the Black Sea, either in its 100% operated Istria block where farm-in potential is thought to exist, or in its Neptun West block, where a farm-in opportunity was reported in 2018. Alternatively, Hunt could try to join the already-crowded party in Neptun Deep. OMV Petrom currently holds 50% here but could wind up with a greater share and even operatorship alongside PGNiG and Romgaz if the group's bid for operator ExxonMobil's 50% share goes through.

Having executed two impressive entries in the last 12 months, Hunt is now proud owner of six blocks in Morocco's offshore Essaouira Basin and a further two onshore Tunisia. The latter acreage remains underexplored despite private operators Serinus, Mazarine, and Perenco producing oil, gas, and condensate from adjacent fields on the shores of the endorheic salt lake Chott el Djerid. The Moroccan lands are riskier still, with the country lacking any commercialized discoveries in its vast, underexplored offshore Atlantic Margin. That said, we think Hunt has its African plate full and is more likely to slowly build on these operated positions than it is to farm in additional interest.

Figure 11 - Hunt and OMV Petrom Blocks in Romania, with Round XI Current Bid Blocks in Light Brown



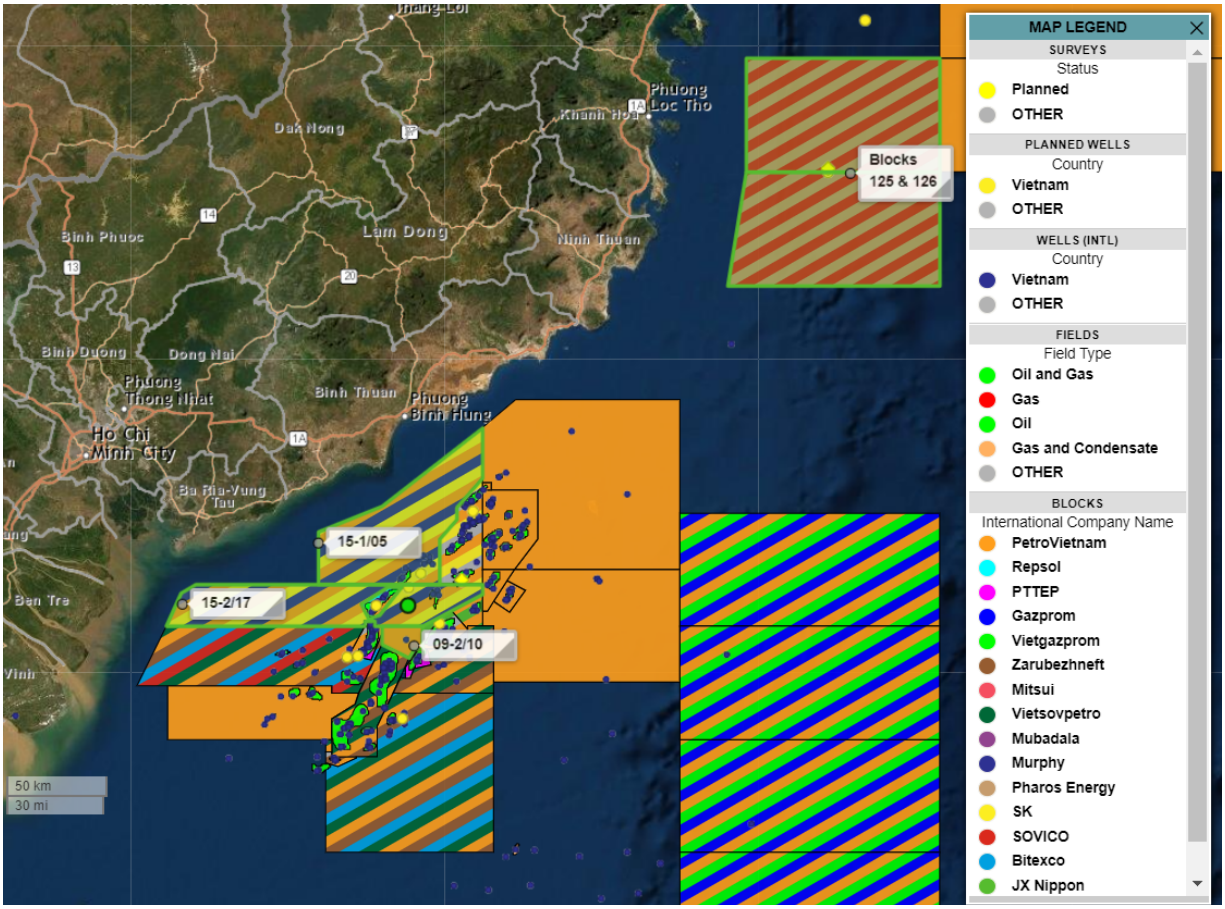
Source | Enverus

Murphy Oil

Current economic conditions resulted in Murphy doing the almost unthinkable in early May: it announced the move of its headquarters from El Dorado, Arkansas, which had been the company's home for 75 years, to Houston. Despite the optics of the move, Murphy is in good shape to sail through the rest of 2020 with enough liquidity to consider strategic acquisitions, thanks to manageable debt gearing and maturities as well as healthy hedges.

Having closed its Perth office, exited Malaysia, and put its Brunei assets on the block, Murphy will now focus its attention in Asia on its very promising prospects in Vietnam (**Figure 12**). Since 2012, the firm has steadily assembled what is now the third-largest foreign-owned acreage position in the country (23,627 square kilometers) through a series of farm-ins and equity purchases. At present it operates two deepwater exploration blocks in the South China Sea and two promising shelf blocks in the Cuu Long Basin. In fact, such has been Murphy's good fortune in Vietnam that in late 2019 it became the first international company to be directly awarded a contract in the Cuu Long – traditionally reserved exclusively for PetroVietnam (PVEP) or PVEP-headed JV entities. Murphy received the 3,134-square-kilometer shelf Block 15-2/17 with 40% equity for an initial 20-year period. Murphy had already enjoyed exploration and development success on Cuu Long Block 15-1/05, where it first acquired interest in 2015, and now estimates the combined remaining resource potential of the two blocks at greater than 400 MMboe. Everything Murphy needs is here, and it will move quickly to further appraise and develop the assets, taking advantage of ready infrastructure to feed a hungry new market in Vietnam, establish some cash flow, and continue to expand.

Figure 12 - Murphy Blocks 15-2/17 and 15-1/05 in Vietnam's Cuu Long Basin and Other Blocks of Potential Interest



Source | Enverus

If Murphy were to accelerate things further, it might consider ExxonMobil's 63.75% interest in the Block 118 Development Area in the South China Sea, which has been rumored to be slated for divestment. However, with its deepwater blocks already at risk of being caught up in the Chinese nine-dash line dispute, Murphy may want to steer clear of controversy and look instead at Pharos Energy's as-yet-unexplored Phu Khanh Basin shelf/deepwater Blocks 125 and 126, still in the South China Sea but much closer to shore. Although Pharos postponed the acquisition of 500 square kilometers of 3D seismic data until next year, prospective areas for the seismic are said to be confirmed. Lastly, shelf Block 09-2/10 in the Cuu Long Basin has been languishing since last year's announcement that 50% of PVEP's 100% interest was available. In a region where Murphy has planted a flag, this block may be worth a second look.

Coming in at long-but-not-impossible odds are Africa and the US GOM. Murphy currently has no footprint in Africa, but we suspect it to be sniffing around in the current climate, having previously explored in the likes of Congo, Cameroon, and Tunisia. Murphy already has a strong position in the GOM, with 89 deepwater blocks and two more on the shelf in the Apalachicola Basin. ExxonMobil is likely to restart its GOM divestment process to raise funds for a second floating production storage and offloading facility (FPSO) in Guyana (estimated at $1.5 billion pre-pandemic), and Murphy may cautiously consider adding to its GOM portfolio if it can cherry-pick the supermajor's assets while other potential suitors remain shell-shocked and on the sidelines.

As usual, here at the end of each Sharks article we open it up to you. Send your comments, telling us what A&D activity you foresee in your area and reach out to our team of specialist if you'd like to get on a call and chat about any of this. With our extensive international database and team of 27 international scouts, we're always game to engage on these and other topics!

CLICK HERE TO
TALK TO AN EXPERT