RECONAFRICA RESEARCH REPORT

ReconAFRICA

July 2020

MARK HEIM CFA

Summary

Reconnaissance Energy Africa (ReconAfrica) is a junior oil and gas company currently engaged in the acquisition, exploration and potential development of oil and gas mineral leases in the Republics of Namibia and Botswana. Its predecessor private company was granted Petroleum Exploration License (PEL) 73 in 2015, which covers a contiguous area of 6.3 million acres in the northeast corner of onshore Namibia. The block has never had seismic or a well drilled on it, but ReconAfrica's strong technical team took advantage of the high quality aero-magnetic database to define depositional basin configuration of the licensed property. The immediate observation was that this was a deep basin that looked to have a 9,000 meter (30,000 feet) sedimentary column in parts. Bill Cathey, CEO of Earthfield Technologies, who interpreted the entire aero-magnetic survey of PEL 73 has stated "Nowhere in the world is there a sedimentary basin this deep that does not produce hydrocarbons". The recent addition of a 2.45 million contiguous license in Botswana that is attached to the Namibian license adds further potential running room for the Company.

ReconAfrica's geologic interpretation on PEL 73 is the deeper Kavango Basin should see a significant thickening in the Permian shales, setting up both potential conventional and unconventional opportunities. The Company is moving from the early concept phase to exploration via 1 stratigraphic test and 2 delineation wells later this year, which, if successful, could go a long way to proving up a significant resource.

Sproule International Limited, an independent engineering firm, completed an estimation of the prospective resources on PEL 73. They calculated a potential P50 un-risked recoverable resource of 923.6 MMBbls of oil or 39.7 Tcf of natural gas (RECO 90% working interest). Incorporating prorated values for the newly granted Botswana acreage, increases the unconventional estimates to ~1,283 MMBbls of oil or 55.2 Tcf of natural gas (1,103 MMBbls of oil or 47.4 Tcf of natural gas if the farm out option is exercised by Renaissance Oil Corp). The upside to ReconAfrica is significant, given we compute a potential PV10 BT net asset value implication ~C$0.12/sh for every 1 MMBbls of recoverable crude oil from a conventional discovery and ~C$0.67/sh for every 10 MMBbls from a resource play. **For more details on potential net asset value impacts see pages 32-34.**

Exhibit 1. Unconventional PV10 BT Potential NAV per share (C$/sh) – Brent US$50/Bbl

		Development Costs (US$/Bbl)			
		$3	**$5**	**$7**	**$10**
Reserves (MMBbl)	5	$0.75	$0.63	$0.52	$0.34
	10	$1.49	$1.26	$1.03	$0.69
	50	$7.46	$6.31	$5.17	$3.44
	100	$14.93	$12.63	$10.33	$6.89
	500	$74.63	$63.15	$51.67	$34.44
	924	$137.86	$116.65	$95.44	$63.63
	1,283	$191.50	$162.04	$132.58	$88.39

Note: Based on current fully diluted share count of 105.1 million shares

Source: ReconAfrica, author estimates

Investment Highlights

- **Strong Technical Team.** ReconAfrica has assembled a strong technical team from the management level to the board. The group has a combined ~150 years of experience working unconventional and conventional plays, primarily in North America, as well as ~60 years in Africa.

- **High Impact Exploration.** Namibia has attracted attention over the past decade being sandwiched in between OPEC producer Angola to the north and resource rich South Africa to the south. While, thus far the lion's share of activity has been directed towards the offshore from large multi-national energy companies such as Exxon, Shell and Total, the onshore has been woefully underexplored and has significant potential from a Permian aged unconventional play, which may be analogous to the Main Karoo in South Africa, and the Midland Basin in West Texas. A conventional play in the Permian to Jurassic is also being mapped by ReconAfrica, which could double the potential size of the prize. The additional acreage on the Botswana side of the border adds further running room to both the conventional and unconventional opportunities.

- **Large Prospective Resource Assessment.** In 2018 Sproule International conducted a prospective resource assessment of PEL 73. The independent report came up with a best case (P50) 13.4 billion barrels of crude oil or 118.4 Tcf of natural gas in place with a P50 recoverable estimate of 923.6 MMBbls of crude oil or 39.7 Tcf of natural gas (RECO 90% working interest). Sproule's analysis was solely on the unconventional opportunity in the Jurassic to Permian aged Karoo Super Group, and does not include the potential upside from conventional targets. Corporate modelling points to the potential of over 30 billion barrels of oil in place between the conventional and unconventional, with the newly granted Botswana license.

- **NAV Leverage is high.** Given the low government burden, and expectation of relatively low operating and transportation costs, we estimate a potential net asset value implication ~C$0.12/sh for every ~1 MMBbls of recoverable crude from a conventional discovery and C$0.67/sh for every 10 MMBbls from a resource play.

- **Short Waiting Period.** ReconAfrica has an opportunity to significantly de-risk the play with a relatively quick, and low cost program. Subsequent to purchasing and refurbishing its own rig, the Company is targeting the drilling of 1 stratigraphic test and 2 delineation wells in H2/20 for a cost ~US$9 million to US$11 million. The primary purpose of the program is to prove up an active petroleum system, which goes a long way to de-risking Sproule's prospective resource assessment. ReconAfrica is targeting 100 to 120 days to complete the 3 wells, which could commence as early as October if Covid-19 restrictions ease up.

- **The Place(s) to Be.** The Republics of Namibia and Botswana are both amongst the least dense countries on earth, with relatively low populations. They are stable, multi-party parliamentary democracies that hold English as the sole official language. In 2013 Bloomberg Markets magazine named Namibia as the top emerging market economy in Africa, and the 13th best in the world. The country is actively seeking foreign investment and is striving to cut bureaucratic red tape as well as being open and transparent. Botswana has been ranked as the least corrupt place to do business in Africa, and boasts thriving mining and tourist industries.

- **Favorable Terms.** Namibia has actively attempted to court foreign investment, especially for energy. The fiscal terms are favorable, with a low 5% royalty, and a 35% corporate tax rate. There is an additional profits tax which has 3 potential tiers, but only kicks in with an inflation adjusted, after tax rate of return above 15%. The low royalty structure provides opportunity for ReconAfrica to not only chase a large manufacturing resource play, but also provides upside potential for shareholders from even a relatively small, conventional discovery. In the case of Botswana the terms are potentially even more attractive, with a negotiated royalty expected to be on the lower side of a 3% to 10% scale, and a corporate tax rate of 22%.

- **Region of High Demand Growth.** Africa is home to ~16% of the world's population, but only consumes 6% of its energy (broken further its only 5% of global crude consumption and 4% of natural gas. It disproportionately consumes 31% of the world's biomass/waste, which includes animal dung). After India, it is expected to see the highest global demand growth between 2017 and 2040, increasing by 67% (100% for crude oil and 133% growth for natural gas) according to ExxonMobil's 2019 Outlook for Energy. Thus, while we have focused on commerciality of crude oil, a significant onshore gas find could also be of large value both domestically and continentally.

History and Background

Reconnaissance Energy Africa (ReconAfrica) is a junior oil and gas company currently engaged in the acquisition, exploration and potential development of oil and gas mineral leases in the Republic of Namibia. The Company's play was largely put together back in 2013 by Craig Steinke, the sole shareholder of the predecessor, Reconnaissance Energy Corporation (REN). It had purchased an IHS worldwide shale study, which was used as a platform for locating source rock with significant upside potential. This combined, with a strong group of technical consultants led the Company to seek opportunities in Namibia. In January 2015 REN was granted a 90% interest in an exploration license covering 6.3 million acres in the north eastern portion of the country.

Subsequent to the grant, the Company acquired a high resolution geomagnetic survey of the license in 2015, and began a detailed analysis of the data as well as other available information related to the property, which included reprocessing and reinterpretation of all geological and geophysical data.

Given the ensuing selloff in global energy markets, and a perception that capital markets would be closed, the Company took a pause through 2016 and 2017. With a more promising backdrop in 2018, activities resumed with an environmental impact assessment, which is needed to support the granting of permits necessary for exploration drilling.

In 2019 the Company went public under a reverse takeover arrangement between Lund Enterprises Ltd. and the shareholders of 1163631 BC Ltd, which was completed on August 30th, 2019. Reconnaissance trades on the TSXV under the symbol RECO.

Most recently, ReconAfrica announced on June 11, 2020 that it has been awarded a 2.45 million acre exploration license in Botswana that is contiguous with PEL 73 in Namibia. Internal geological modelling had pointed towards a continuation of the unconventional and conventional resource potential into the Botswana license.

The Team

J. Jay Park, CEO and Director. Mr. Park is a lawyer by background, and has over 40 years of experience in international oil and gas legal advisory. He has advised companies, governments, state companies and investors on upstream oil and gas transactions, contracts, laws, and regulations in over 50 countries. Mr. Park has served as a director or officer or both of a number of oil and gas companies with operations in Africa, including: chairman and director of Voyageur Oil and Gas Corporation, which explored the Borj El Khadra Sud block in Tunisia, and farmed it out to Anadarko; and as a director of Caracal Energy Inc. which had oil producing assets in the Doba Basin of Chad, and was acquired by Glencore International. In addition to these 2 countries, he has advised oil and gas companies in 11 other African states. From 2013 to the present Mr. Park's principal occupation was as Managing Partner of the law firm Park Energy Law, with offices in London, UK and Calgary, and Petroleum Regimes Advisory Ltd. (London), which positions he continues to hold.

Scot Evans, COO. Mr. Evans is a geologist with over 35 years of experience, primarily with Exxon and Halliburton, where most recently he was Vice President Integrated Asset Management and Technical Consulting organizations. He is an expert in developing unconventional and conventional resources, and has worked on several US shale plays in addition to being involved in a variety of international opportunities. He has been part of the Technical team for ReconAfrica, and recently expanded his role in the organization by taking on the Chief Operating Officer position.

Carlos Escribano, CFO. Mr. Escribano became the CFO of ReconAfrica in January 2020. He has previously served as CFO for publicly traded multi-national corporations in the resource sector, and has over 14 years' experience in senior level financial management. Mr. Escribano is a Chartered Professional Accountant.

Nick Steinsberger, SVP Drilling & Completions. Mr. Steinsberger is the latest major addition to the team, joining on June 25, 2020. He is a petroleum engineer with over 32 years of industry experience, primarily in unconventional drilling. Mr. Steinsberger began his career with Mitchell Energy, one of the pioneers of the unconventional energy space, where he was in charge of drilling and completing the first 25 horizontal wells drilled into the Barnett Shale. In July 2003 he began Steinsberger Gas Consulting and has been involved in over 700+ horizontal shale wells in the US and Canada. He is now considered a world leader in completions and well design, and has supervised over 1,500 well programs in North American conventional and unconventional plays.

Anna Tudela, Corporate Secretary. Ms. Tudela brings over 30 years of experience working with public companies in the securities and corporate finance areas, both in the United States and Canada. Most recently she was the Vice-President, Diversity, Regulatory Affairs and Corporate Secretary of Goldcorp (2005-2019) and was actively involved in the subsequent acquisitions/mergers with Wheaton River Minerals and Goldcorp Inc.; Placer Dome Canada; Glamis Gold Ltd. and many other post acquisitions and dispositions culminating with the takeover of Goldcorp by Newmont Mining Corporation (April 2019). She is a recipient of numerous personal awards, and helped Goldcorp receive recognition for governance practices.

Technical Team:

ReconAfrica has an experienced technical team which includes:

Daniel Jarvie, Geochemist. Mr. Jarvie retired from EOG Resources as the Chief Geochemist. He is an industry veteran that is well recognized as a leading analytical and interpretive organic geochemist, and has analyzed conventional and unconventional petroleum systems around the world over the past 40 years. He was among those at the forefront of the US shale revolution as he worked on the development of the Barnett Shale with Mitchell Energy.

Bill Cathey, Geophysicist. Mr. Cathey is the President & Chief Geoscientist of Earthfield Technologies, and has over 25 years of potential fields interpretational experience. He is world-renowned for aero-magnetics, and has performed analysis for numerous oil and gas companies including super majors and international oil and gas companies. Mr. Cathey performed the aero-magnetic analysis over the entire block of the Kavango Basin for ReconAfrica.

Dale Mitiska, Geologist. Mr. Mitiska is a geologist with over 30 years of experience, largely focused on North American plays. He has been involved in geologic investigations including regional basin analysis, 2D and 3D seismic acquisition and interpretation, prospect development for clastic and carbonate reservoirs, and geological and geophysical computer modelling and mapping.

In addition to the technical team, the two other members joining Jay on the Board of Directors also have a technical background:

Shiraz Dhanani, Director. Mr. Dhanani has over 40 years of experience, including BP and ExxonMobil. His expertise was concentrated on new country access, initiating new field oil and natural gas plays, project and executive management, with a strong focus in Africa, including being the Technical Director of BP in Libya.

Dr. James Granath, Director. Dr. Granath, a PhD in Geology, is a structural geologist with extensive knowledge in African petroleum exploration. He has advised many companies on structural geology and tectonics as applied to exploration problems, and has worked on projects in some 40 countries around the world. His expertise lies in seismic interpretation and integration with structural analysis, fracture analysis, regional synthesis, and prospect and play evaluation. Dr. Granath spent 18 years with Conoco Inc. in research, international exploration, and new ventures.

Namibia

The Republic of Namibia is an arid country in the southwestern portion of Africa, with Angola and Zambia bordering to the north, Botswana to the east, and South Africa to the south. The Namib desert (the oldest desert in the world), covers a huge portion of the country, and is a large reason for Namibia's relatively low population ~2.6 million, which is one of the least dense on earth (there are only 7 countries with a lower density on earth). Although the country is the driest country in sub-Saharan Africa, receiving ~14 inches of rainfall annually, importantly, there is access to groundwater, which covers ~80% of the country.

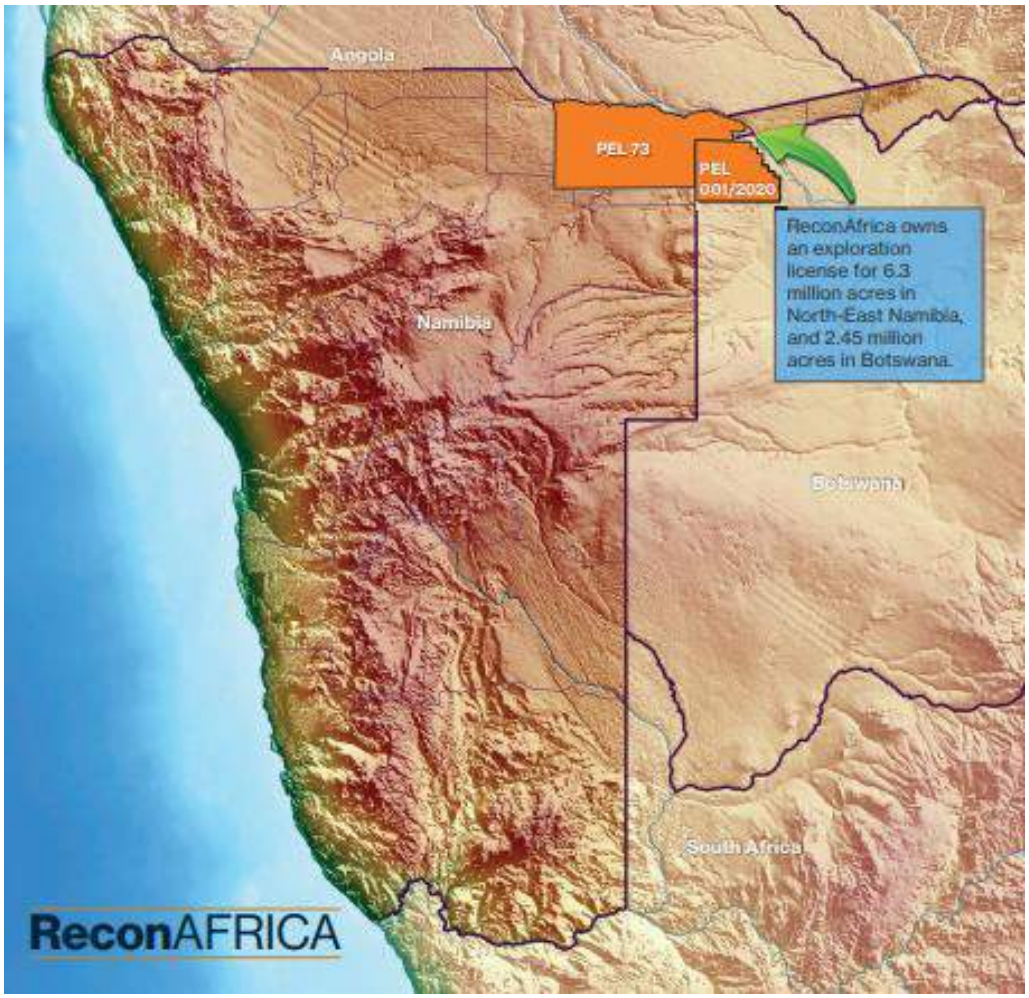
Namibia is a stable, multi-party parliamentary democracy. Since the late nineteenth century it has been a colony of the British and Germans, before falling under the control of South Africa after World War I. The country gained full independence from South Africa in 1990 after the Namibian War of Independence. It is a member state of the United Nations, the Southern African Development Community, the African Union, and the Commonwealth of Nations. Namibia is one of the most free and democratic countries in Africa, with a government that maintains and protects basic human rights and freedoms. English is the official language, and it holds a literacy rate of 91.5%.

The economy of Namibia is relatively strong for Africa, with a GDP per capita ~US$11,500, placing it as 10th highest among the 47 countries on the continent. In 2013, Bloomberg Markets magazine named Namibia as the top emerging market economy in Africa and the 13th best in the world. Ratings focused on primary concerns for foreign investors, namely: the ease of doing business, and the perceived level of corruption and economic freedom. In an effort to be attractive to foreign investment Namibia has reduced red tape from excessive regulations, making Namibia one of the least bureaucratic places to do business in the region.

Services represents the largest sector contribution to GDP, followed by industry, including a large component of mining for diamonds, uranium

(Namibia produces ~8.4% of the world's supply), gold, silver, and base minerals. Agriculture and herding are the remaining, smaller components. A new promising sector for the country is energy, as Namibia is bordered by OPEC producer Angola to the north, with significant offshore oil production, and hydrocarbon rich South Africa to the south. Since independence, interest has continued to grow for energy exploration in the country.

Exhibit 2. Namibia and Botswana Topographical Map



Source: ReconAfrica

Energy is a focus for Namibia, and one it is actively trying to court. The country's source of electricity is primarily hydro, and only services around 34% of the country's inhabitants. With a commercially viable natural gas discovery at Kundu, it is one form of energy being looked towards as a means of growing power generation in the country. There is currently no domestic crude oil production or refining in country, with all of the country's ~26,000 Bbl/d of crude oil demand,

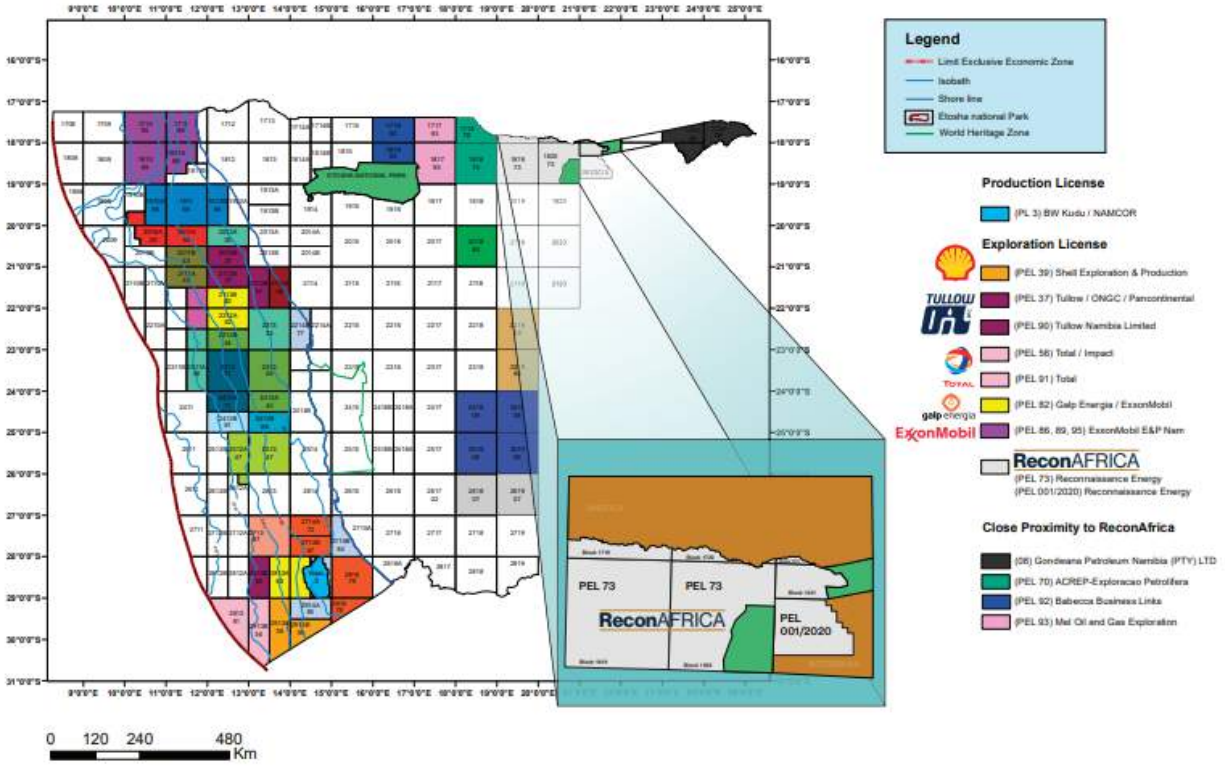
being imported as refined products from South Africa through Walvis Bay. The country is proposing to build both an oil terminal and refining complex at Walvis Bay.

Prospectivity

Namibia is a country that has a well-established upstream oil and gas licensing regime. Conditions for granting petroleum licenses are set out in the 1991 Petroleum (Exploration and Production) Act and the Model Petroleum Agreement (MPA). Namibia has a policy objective to attract and sustain investment in Namibia's upstream oil and gas sector, with its Policy statements of P9 geared to: a) strengthen the national investment climate, to ensure certainty, stability and competitiveness through favorable commercial, legal and fiscal terms; b) facilitate private sector investments, and support the development of necessary expertise in the exploration and development of the country's oil and gas resources; c) continue to promote investments in the oil and gas sector at international, regional and national events; and d) encourage collaboration between existing license holders to carry out joint exploration programs.

As a newly formed country in the early 1990s, Namibia made use of a bidding system for oil and gas exploration licenses. This changed in 1999 as the country adopted an open licensing system that led to an increase of exploration activities from 2008 onward, and has resulted in the undertaking of both 2D and 3D seismic surveys, and several offshore exploration wells being drilled. Namibia has been able to attract several major international oil companies like Shell, BP, Tullow and Exxon. Of significance, in 2013, the Wingat-1 well proved the presence of an active petroleum system capable of generating both oil and gas. The Kudu gas field was discovered in 1974, and is the country's first commercially viable discovery and has been going through the planning phase on how to bring onto production.

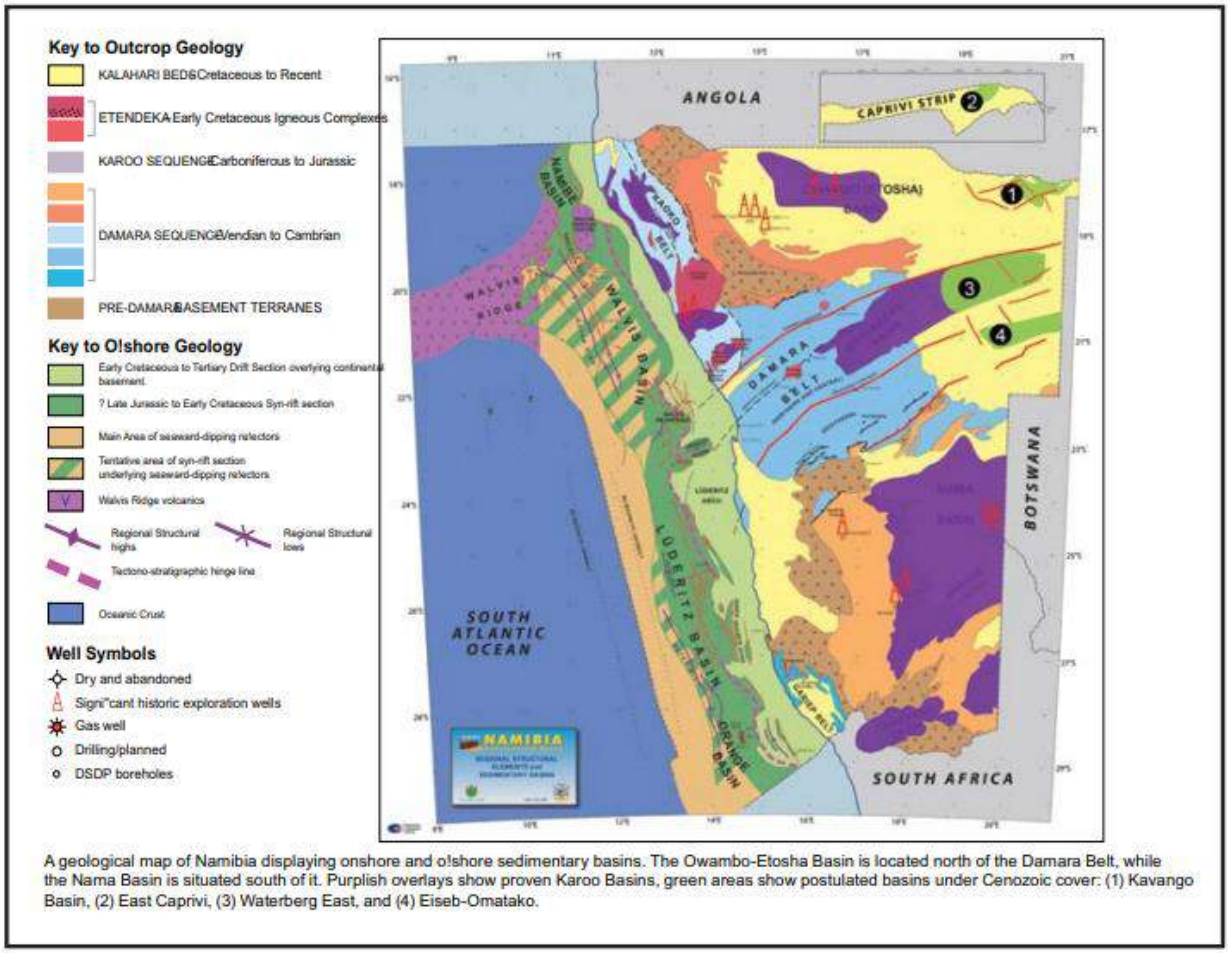
Exhibit 3. Namibia Hydrocarbon License Map



Source: Namibia Ministry of Mines and Energy, ReconAfrica

The country has 37 active exploration and 3 reconnaissance licenses, with over 20 offshore wells drilled since independence. In addition, over 10 exploration wells have been drilled onshore. The work completed so far has enabled the country to develop tremendous geological and geophysical data. The country holds offshore 2D seismic in excess of 147,000 km, and 3D of over 40,000 km^2. Since 1998 over 28,000 km of aeromagnetic data was acquired, covering the entire offshore, and a significant portion of the onshore. The country has 10 identified Basins, four offshore (Namibe, Walvis, Luderitz, and Orange) and six onshore (Hauk, Waterberg, Owambo, Nama, Kavango and Karasburg).

Exhibit 4. Namibia Geological Map



A geological map of Namibia displaying onshore and offshore sedimentary basins. The Owambo-Etosha Basin is located north of the Damara Belt, while the Nama Basin is situated south of it. Purplish overlays show proven Karoo Basins, green areas show postulated basins under Cenozoic cover: (1) Kavango Basin, (2) East Caprivi, (3) Waterberg East, and (4) Eiseb-Omatako.

Source: GEOExPro Volume 16, Number 5

Offshore

The offshore has been the area of the most activity in the country, attracting the likes of supermajors Exxon, Shell, and Total. The first commercial discovery was the Kudu gas well in 1974, drilled into the Orange Basin, and has associated reserves of more than 1 Tcf. NAMCOR has been looking at bringing the field into production to generate electricity at an onshore combined cycle gas turbine power plant. The other significant well was the Wingat-1 drilled in the Walvis Basin in 2013. While the well was uncommercial, the presence of the source rock in the oil window confirmed the source potential of the basin. There are currently over 30 exploration license holders in Namibia, including some well-known large entities including: Exxon, Repsol, Tullow, Shell, and Total.

Onshore

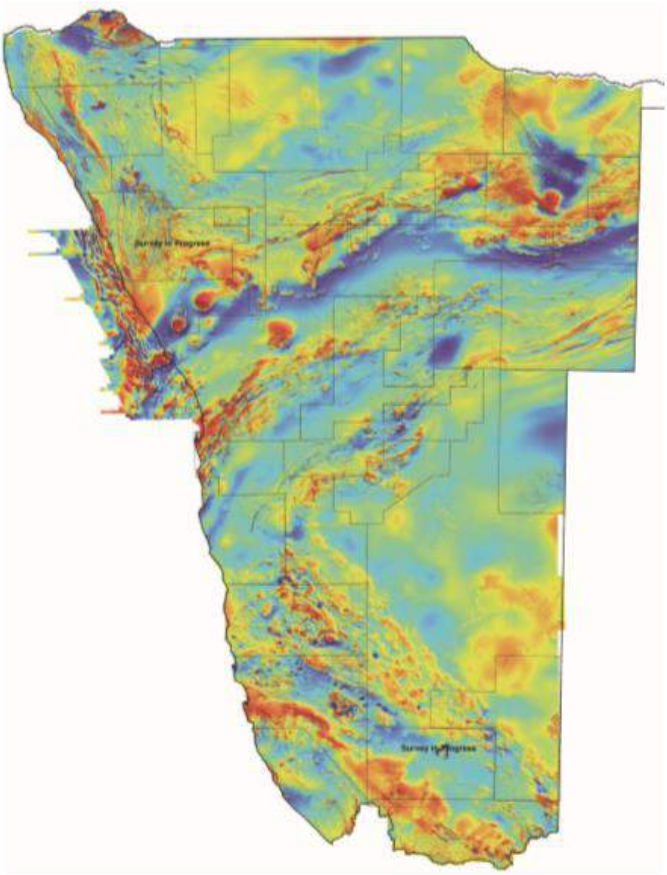
Onshore exploration began in Namibia with the Berseba-1 well in the southern Nama Basin. The well was drilled in 1928 by South West Africa Petroleum based on surface geology studies, which included the visibility of bitumen veins in outcrops, but was uncommercial.

The Owambo Basin in the north saw activity initiated in the early 1960's with a focus on early vintage potential fields data, including gravity and magnetic data, surface geology and outcrop mapping, soil gas geochemical sampling, augmented with limited 2D seismic acquisition and interpretation, and the drilling of four critical deeper wells.

A key well for ReconAfrica, was the Stratigraphic Test 1 well drilled by Etosha Petroleum in 1964 (exhibit 26 in appendix) 375 km (233 miles) west of PEL 73. The well was drilled to a depth 1,878 meters (6,163 feet) in the deepest part of the Owambo Basin, and encountered ~189 meters (~620 feet) of shale within the Karoo Super Group. ReconAfrica believes the deeper Kavango Basin should see a significant thickening of the Karoo Super Group that was seen in the ST-1 well, that is potentially closer to the Karoo Basin in South Africa, which has a maximum gross thickness ~700 meters (2,300 feet).

Between 1994 and 2009 the Ministry of Mines and Energy acquired in excess of 25 million line km of high quality aeromag data flown on tight 200 meter line spacing. ReconAfrica was the first to acquire and interpret the data for PEL 73, which led them to propose a work program.

Exhibit 5. High Resolution Airborne Geophysical Survey Program of Namibia



Source: ReconAfrica

ReconAfrica PEL 73

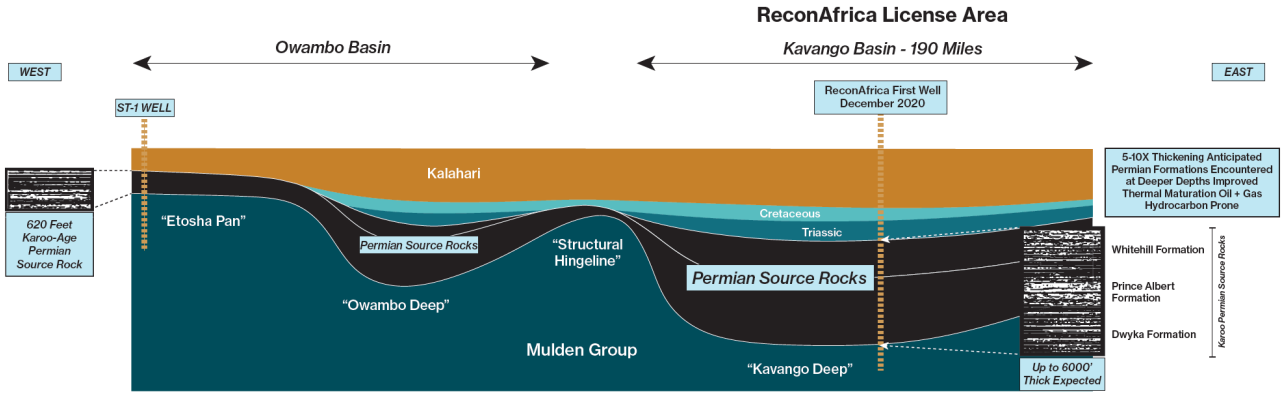
In 2015 ReconAfrica was granted an exploration permit, PEL 73, which covers 6.3 million acres. The block is in the northeast corner of Namibia, with Angola bordering the north and Botswana bordering a portion of the southeast.

Subsequent to the grant in 2015 ReconAfrica purchased additional high resolution aeromagnetic data covering the Licensed Property and conducted a detailed analysis of the resulting data and other available data related to the block, including reprocessing and reinterpretation of all existing geological and geophysical data. This led to the identification on the Licensed Property of the Kavango Basin.

The Company's skilled technical team took advantage of the high quality aero-magnetic database to define depositional basin

configuration of the licensed property. The immediate observation was that this was a deep basin that looked to have a 9,000 meter (30,000 feet) sedimentary column in parts. Bill Cathey, CEO of Earthfield Technologies, who interpreted the entire aero-magnetic survey of PEL 73 has stated "Nowhere in the world is there a sedimentary basin this deep that does not produce hydrocarbons".

Exhibit 6. ReconAfrica Mapping of Owambo versus Kavango Basins

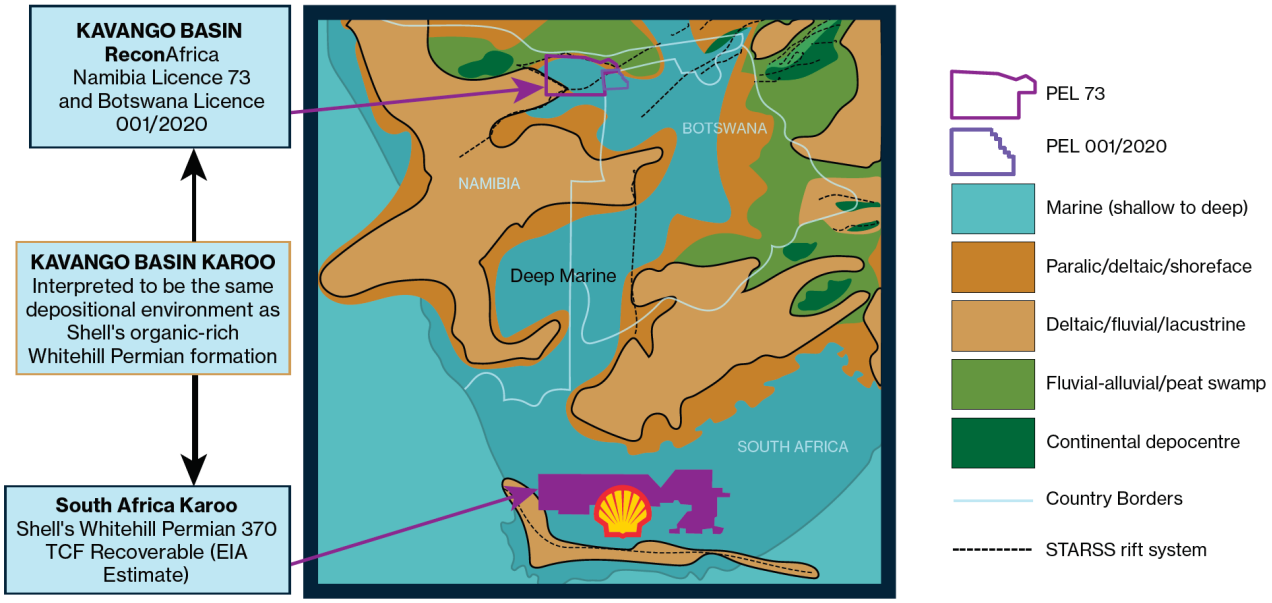


Source: ReconAfrica

To date, the License has no historical drilling or 2D seismic acquisition, with the closest subsurface well control being the aforementioned ST-1 well drilled 375 km to the west. That well had encountered Kalahari Sequence (tertiary/late Cretaceous), Karoo Super Group (Jurassic to Permian) – Etjo and Prince Albert formations and Damara Sequence (Pre-Cambrian) – Otavi and Mulden Groups. ReconAfrica's geologic interpretation is the deeper Kavango Basin should see a significant thickening in the Permian shales, setting up both potential conventional and unconventional plays.

This interpretation is based on regional geologic investigations of the Permian Karoo Seaway, including the Main Karoo Basin in South Africa, the Botswana Kalahari Basin and Namibian basins Karasburg, Nama, Waterberg, Huab, and Kavango and support potential for adequate thickness of resource-prone sediments. Furthermore, preliminary analyses indicate basin depths supportive of oil and gas thermal maturation levels.

Exhibit 7. ReconAfrica Geological Interpretation of the Regional Karoo Permian Seaway



Source: ReconAfrica

The Main Karoo Basin is considered an active petroleum system based on oil and gas shows seen within well reports and published literature. An exploration well CR1/68, was drilled in 1968 and yielded a gas flow rate of 1.83 MMcf/d from the fractured Fort Brown shale.

The southern main Karoo Basin of South Africa is considered prospective for shale gas exploration. Currently the Permian Whitehill Formation is thought to be most favorable target owing to the high total organic content (TOC) averaging 5%, favorable maturities (Ro = 1- 4 %), thickness (30m average), depth (>1500m) and regional continuity of this formation. Furthermore, given the relatively high TOC and it proximity to the Whitehill Formation, the underlying and overlying Prince Albert and Collingham Formations are also of commercial interest. The internal estimate of recoverable gas in place is 205 Tcf from the Petroleum Agency of South Africa with ranges of 30 Tcf to 485 Tcf.

Of tremendous concern in South Africa is water, a significant requirement for unconventional plays requiring fracture stimulation. Shell is looking at conservation, recycling, and brackish water as to not compete with locals for fresh water resources. ReconAfrica's situation is significantly better in that surface rights and access are held by the government, and abundant ground water supplies should be a source of building, not breaking, relationships with the local population.

Exhibit 8. South Africa Permian Analog to Kavango Basin

	SOUTH AFRICA	NAMIBIA
Formation	Whitehill	Lower Karoo
Geologic Age	L. Permian	L. Permian
Depositional Environment	Marine	Marine
Thickness (Gross Ft)	200	200 *
Thickness (Net Ft)	100	100 *
Depth Interval (Ft)	5,500- 10,000	6,000- 12,000 *
Depth Avg (Ft)	8000	9,000 *
Reservoir Pressure	Moderate Overpressure	Normal to Moderate Overpressure *
Average TOC (wt %)	6%	4 to 10%
Thermal Maturity (% Ro)	3	0.8 to 1.4 *
Clay content	Low	
Hydrocarbon Phase	Dry Gas	Oil to Wet Gas*
OGIP (TCFG)	390	116*
OOIP (BBO)	0	12 *

Source: EIA International Shale Gas

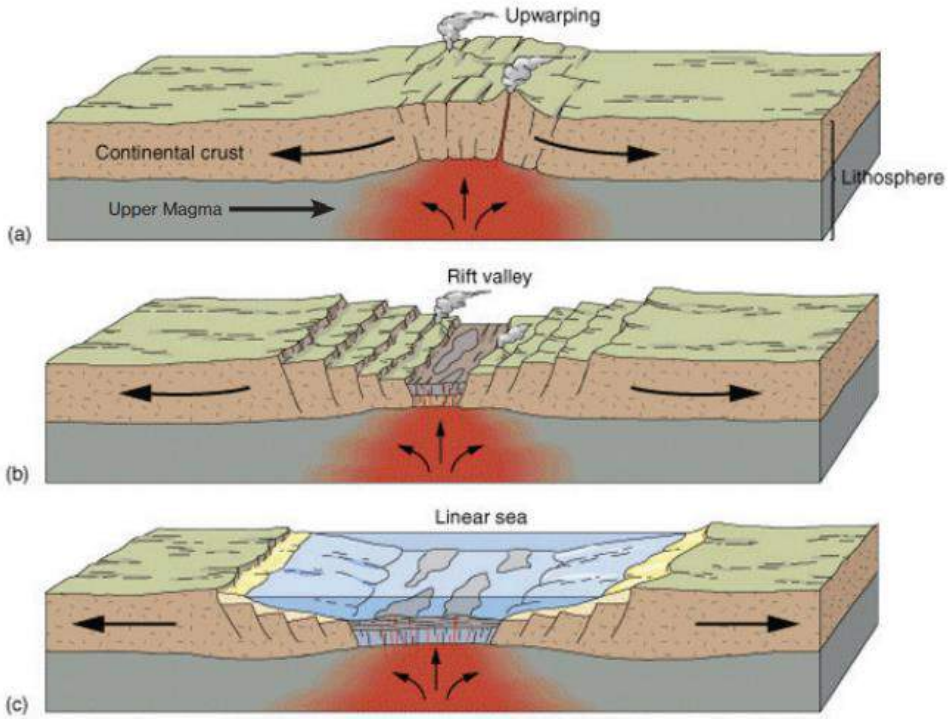
** Reconnaissance estimate*

Source: ReconAfrica

Conventional Opportunities

As modeled by ReconAfrica, the Kavango Basin sits on the southern extent of the Southern Trans-African Rift & Shear system (STARSS), which controls the development of the basin and the potential for hydrocarbon accumulations. A rift basin forms when the earth's lithosphere (the rigid crust and upper mantle of the earth) is stretched - by plate tectonic forces, for instance - and starts to thin. The lower part of the earth can deform plastically like putty, but the upper part is brittle and develops faults. The resulting sedimentary basins can be several kilometers deep. In Africa rift basins define the major oil and gas fields on the continent. The East Africa Rift System, which is northeast of the Kavango Basin, is estimated by the United States Geological Survey (USGS) to contain conventional resources of 13.4 billion barrels of oil and 3.6 Tcf of natural gas.

Exhibit 9. Formation of Intercontinental Rift Basin

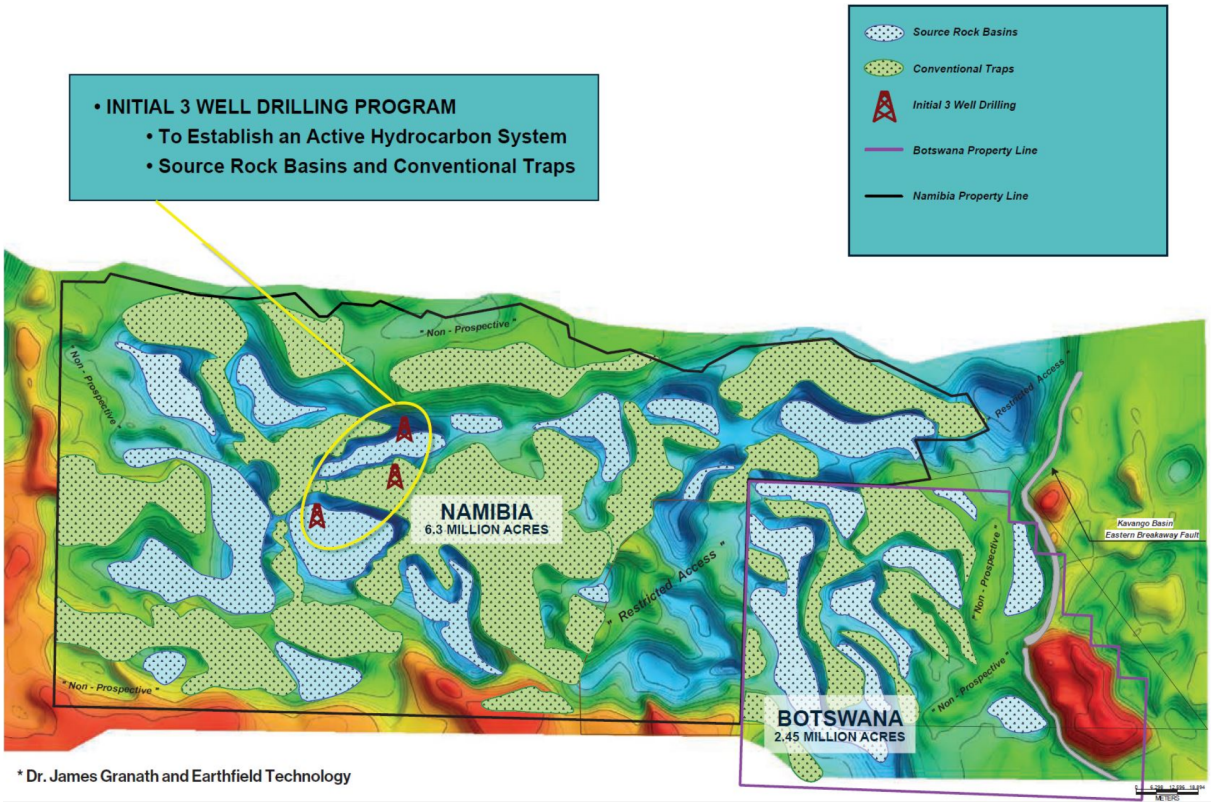


Source: ReconAfrica

While central and eastern Africa are primarily Cretaceous plays, STARSS is composed of Basins developed at least during the late Paleozoic to Triassic, if not with earlier precursors. In addition to an unconventional opportunity in the Karoo Super Group shales, the Company also sees a simultaneously developed conventional opportunity.

ReconAfrica's technical team, especially related to Dr. Granath's work, has sourced, gathered and integrated all this regional data to better understand both unconventional and conventional horizons that will be targeted with the initial drilling program. The main purpose of the 2020 drilling program is proving an active petroleum system that is capable of producing economic quantities of hydrocarbons.

Exhibit 10. Namibia and Botswana Conventional



Source: ReconAfrica

ReconAfrica 2020 Program

When initially going through a costing of a potential program, ReconAfrica calculated it could shoot meaningful seismic, log and core 2 to 3 wells for a cost ~US$40 million. Alternatively, the Company saw an opportunity to reduce these costs by ~60% by purchasing and refurbishing its own rig.

On February 4th, ReconAfrica announced the acquisition of a Crown 750 drilling rig for US$1.8 million, with another US$1.2 million budgeted for refurbishment. These costs are to acclimate it for the Kalahari Desert and improve the top drive to increase drilling speed. The rig has incurred the majority of the improvements with around another month estimated to complete. It is currently in Houston and as the Covid-19 restrictions are relaxing, the Company will look to ship the rig to Namibia (~US$0.6 million cost). The Crown rig holds 1,000 horse power and is capable of drilling to 3,600 vertical meters (12,000 feet). The objective is to begin a program in H2/20 where the Company plans to consecutively drill and core 1 stratigraphic test and

2 delineation wells with a primary goal of proving an active petroleum system. While the initial target is an unconventional play in the lower Permian aged Karoo shales, the potential of shallower conventional targets will also be tested. The wells will be logged with the core sent to Core Labs in Houston for detailed analysis. Costs to complete the 3 well program are estimated between US$9 to US$11 million.

As already mentioned Namibia is in a better situation given the relative access of ground water. ReconAfrica has come up with a socially responsible plan to drill onsite independent ground water supply and be made available for use by the locals as well as the Company when needed. There are good water yields typically in the 300 meter (1,000 feet) to 400 meter (1,200 feet) depths.

Work Commitment for PEL 73

Initial Exploration Period (4 years)

The initial exploration phase is a 4 year term with a one year extension, with two potential renewal exploration extensions each of which are two years plus with an additional year extension. The spending commitment for the first phase was originally US$5 million plus an additional US$50,000 per year for the purpose of training and educating Namibians. In lieu of shooting a minimum 500 km of 2D seismic data, ReconAfrica had elected for a minimum two test wells to the base of the Karoo Super group. General market conditions allowed the Company to postpone the original program.

First Renewal Exploration Period (2 Years, subject to possible one year extension)

Last December the Company announced that its exploration license had been approved for the First Renewal Exploration Period, which continues until January 25, 2022. During this period the Company must spend US$10 million, in addition to the US$50,000 per year for training and education for Namibians. The work program must acquire 250 kilometers of 2D seismic data and see the drilling and evaluation of either 2 stratigraphic or exploration wells. ReconAfrica's H2/20 program will satisfy the lion's share of the commitments.

The Second Renewal Exploration Period (2 Years, subject to possible one year extension)

The second renewal period holds similar capital requirements and social programs to the first, with a requirement to acquire 200 km^2 of 3D seismic and drill and evaluate an initial delineation test.

Fiscal Terms for a Commercial Discovery

Namibia's White Paper on Energy Policy in 1998 served as the country's first energy policy for 20 years. Updates were made in 2017 with an eye to the future and attracting more investment. Since 2010 the Ministry of Mines and Energy (MME) adopted the principle that for every petroleum license to be issued, Namibian entities should hold at least 10% interest, which resulted in NAMCOR acquiring an average of 10% interest in all petroleum licenses issued since then.

If ReconAfrica's exploration work leads to an economically viable project, the Company may apply for a 25 year production license, which should be granted within 6 months of the date of application. The terms of the production license are a 5% royalty, and a 35% corporate tax rate. In addition, a three-tiered Additional Profits Tax (APT) is payable on the after tax net cash if certain after tax, inflation adjusted rates of returns are met. The first hurdle rate is 15%, with the second and third tiers at 20% and 25%. Exploration, development and operating expenditures, as well as royalty and corporate income tax, are all fully deductible in the year they are paid in the computation of the APT net cash flow for the year. The first tier rate of APT is established in the legislation (through a formula) at 25%. The incremental second and third tier APT rates are determined in the Petroleum Agreement, and in the case of Reconnaissance, are 28% and 29% respectively.

Exhibit 11. Summary of Namibia Fiscal Regime

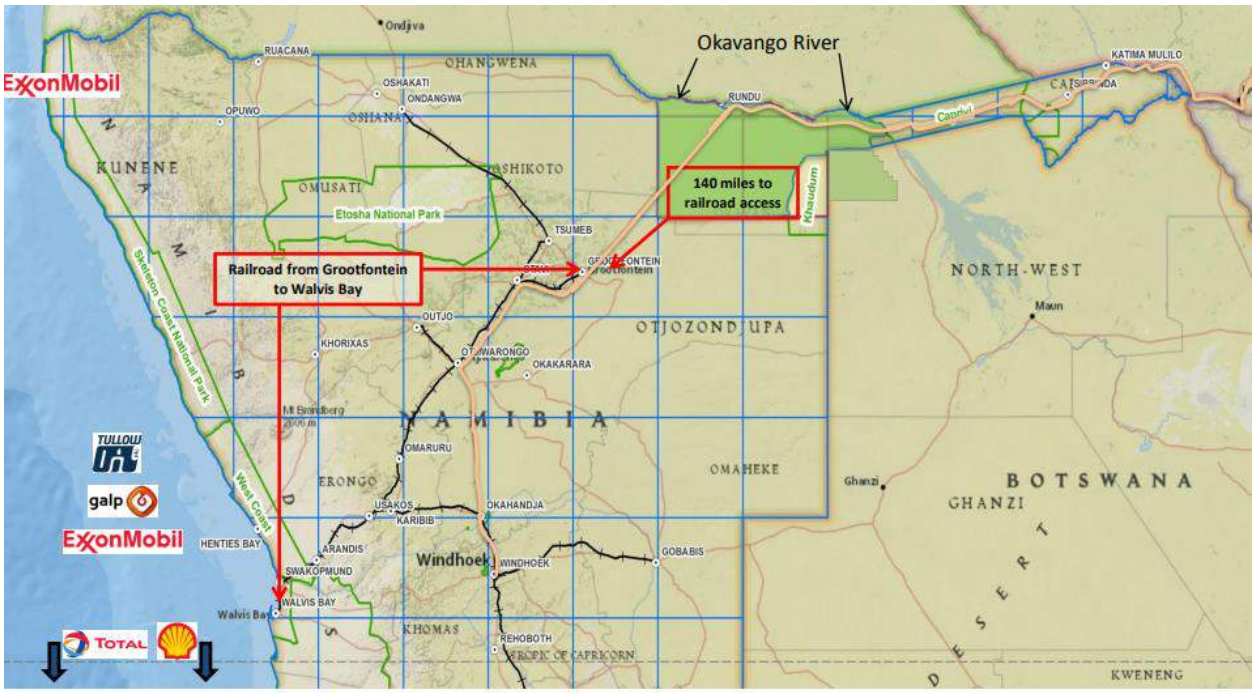
Work Program	Negotiable
Type	Royalty/tax regime
Recoverable Costs	N/A
Cost Carry Forward	Losses may be carried forward indefinitely for tax purposes.
Profit Oil/Gas	N/A
NOC Participation	10% NAMCOR, carried on costs to the development stage
Carried Positions	N/A
Training/Other Fees	US$50,000 per year
Import/Other Duties	N/A
Royalty	5%
Domestic Market Obligations	N/A
Other	Annual licensing fee ranging from $60 to $150 Namibian Dollars per km^2
Tax	Corporate tax is set at 35%. Furthermore, there are 3 tiers of Additional Profits Tax (APT) that are only applied if the property earns an after tax, inflation adjusted rate of return of 15% at the first level, 20% at the second level, and 25% at the third level.

Source: Namibia MME, ReconAfrica.

Markets and Infrastructure

There currently isn't a domestic market for crude oil in Namibia as no refining capacity exists, although that could change in the not too distant future if a proposed refining complex in Walvis Bay moves forward. At any rate, Walvis Bay would be the most likely destination for any commercial product. Initially production would likely be trucked the 225 km (~140 miles) to Grootfontein, where railway access to Walvis Bay is available. We have assumed around a ~US$5/Bbl transportation cost from the field to Walvis Bay.

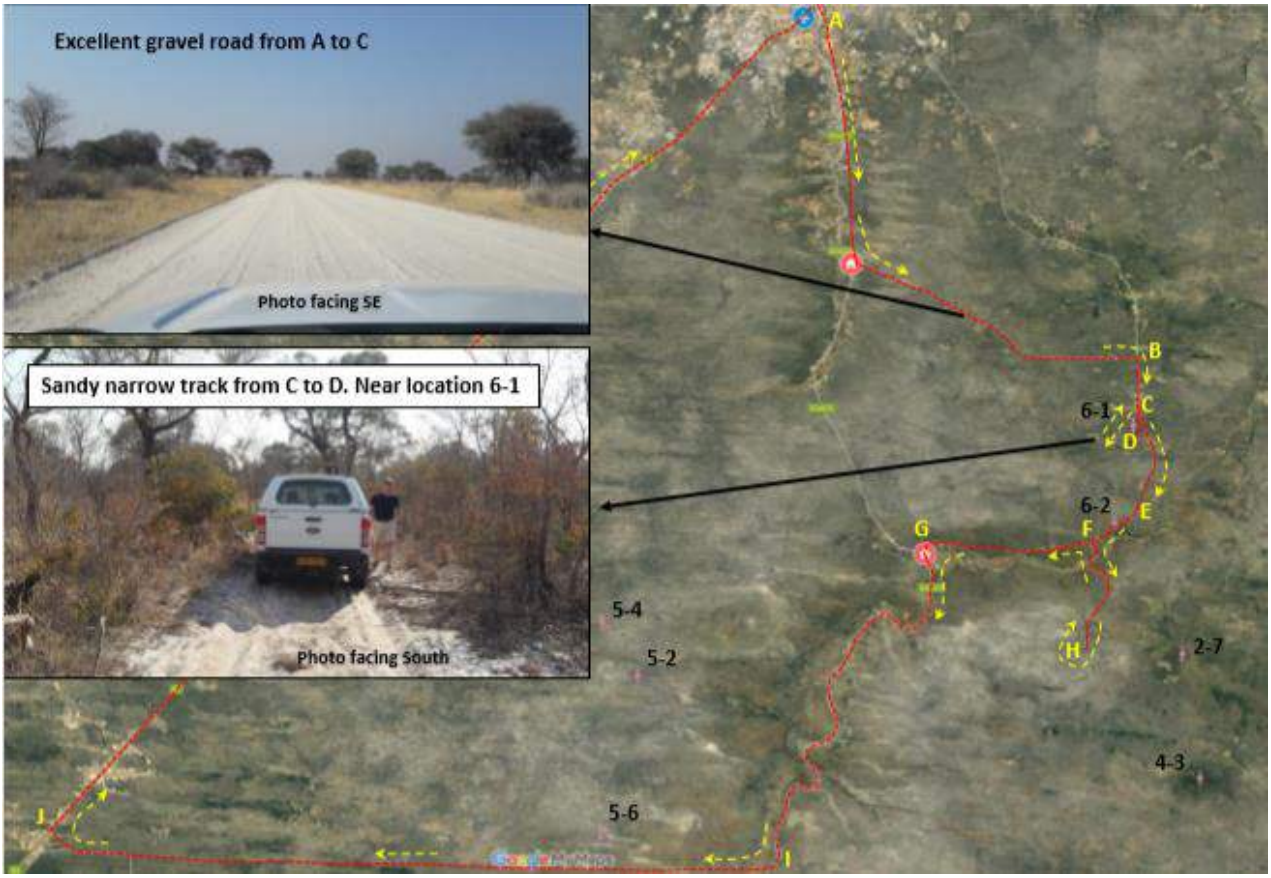
Exhibit 12. Transportation PEL 73 to Walvis Bay



Source: ReconAfrica.

As highlighted from pictures (exhibit 13) on a recent field trip, there is a combination of good gravel and sandy roads on the license, with relatively flat topography. As such, site access shouldn't be a significant issue for either rig mobilization or trucking in and out. The 6-2 location on the map is the likely first location to be drilled, as it combines both one of the better prospects with good surface access. The following two wells to be drilled are in the process of being determined from 6 potential locations.

Exhibit 13. Roads on PEL 73



Source: ReconAfrica.

Botswana

The Republic of Botswana is a land locked country in the southern portion of Africa, with Namibia bordering to the west, South Africa to the south, Zambia to the north, and Zimbabwe to the east. Similar to Namibia, the country is largely covered by desert, with the Kalahari Desert covering around 70% of this largely flat country. The population is ~2.3 million, putting its population density among the lowest on earth.

The country is formerly the British protectorate of Bechuanaland, and adopted its new name upon independence in 1966. It is a representative republic with a consistent record of uninterrupted democratic elections and progressive social policies. English is the official language, and it holds a literacy rate above 83%.

Botswana holds the lowest level of perceived corruption in Africa since at least 1998, and significant capital investment has created one of the most dynamic economies in Africa. Mineral extraction, principally diamond mining along with tourism, dominates economic activity. The economy of Botswana is very strong for Africa, with a GDP per capita ~US$18,000, placing it as 5th highest among the 47 countries on the continent.

Botswana's energy consumption is largely tied to fossil fuels. Electricity is generated primarily from locally sourced coal. Biomass is used in a large amount of residential homes and accounts for ~30% of primary energy consumption. Oil accounts for ~50% of total energy consumption and are imported from South Africa. The country has a severe energy shortage and generally relies on expensive imported power and diesel generation to deliver its requirements.

The energy market in Botswana is underdeveloped and will continue to suffer from a deficit of supply in the medium term. The current energy crisis is a major impediment to Botswana's economic growth plans, and with this in mind, the government is highly supportive of new energy projects, creating very favorable terms to encourage exploration and development.

Botswana Program

On June 11, 2020 ReconAfrica announced it had been awarded a contiguous 2.45 million acre petroleum license in Botswana. The block is adjacent to PEL 73 in Namibia, providing better logistics for both exploration and subsequent development if a commercial discovery is made. The Company has committed to a 4 year work initial work program with a relatively low total spending commitment

~US$500,000, including US$25,000 per year in local education spending. The Company has three potential extensions, adding an additional 10 years. Upon a commercial discovery the license holder has a right to enter into a 25 year production license with a 20 year renewal period. Similar to Namibia, Botswana is a tax/royalty system, which could be even more advantageous in the event of a commercial discovery, given royalties to be negotiated are expected at the low end of a 3% to 10% scale, and corporate taxes are 22%.

ReconAfrica also negotiated a three year farm out option for an upfront cash payment of C$100,000. Under the terms of the agreement, Renaissance Oil Corp, an exploration company focused in Mexico, has the option to acquire a 50% working interest in the Botswana acreage with a payment of C$1 million in the first 18 months of the license grant (December 2021), or C$1.5 million if exercised in the remaining 18 months of the option life (June 2023).

Work Commitment for PEL 001

Initial Exploration Program (4 years)

The initial exploration phase is a 4 year term with potential for 3 renewal periods, the first of which is another 4 years, and the subsequent 2nd and 3rd renewal periods of 3 years each. The spending commitment for the first phase is a minimum ~US$432,000 as follows:

Year 1 - conduct desktop studies, acquire and interpret high resolution aeromagnetic data, identification of basin and epicenter framework, development and configuration.

Year 2 - conduct regional geological studies, conduct regional access report, and conduct groundwater feasibility studies.

Year 3 - carryout environmental impact studies, pre-drill operational environmental assessment studies, identification of all necessary regulatory permits and approval.

Year 4 – carryout detailed soil geochemical sampling for identifying hydrocarbon plumes, supporting drill selection.

A significant amount of learnings on Botswana are expected to occur in the next year from the 3 well drill program conducted next door on the Namibian side.

Exhibit 14. Summary of Botswana Fiscal Regime

Work Program	Negotiable
Type	Royalty/tax regime
Recoverable Costs	N/A
Cost Carry Forward	Losses may be carried forward indefinitely for tax purposes.
Profit Oil/Gas	N/A
NOC Participation	N/A
Carried Positions	N/A
Training/Other Fees	US$25,000 per year
Import/Other Duties	N/A
Royalty	3% to 10%
Domestic Market Obligations	N/A
Other	Annual licensing fee is 7 Botswanan Pula per km^2
Tax	Corporate tax is set at 22%.

Source: GOV.BW, ReconAfrica.

Balance Sheet

At the end of the first quarter, ReconAfrica had positive working capital of $0.4 million, with no long term debt.

Exhibit 15. ReconAfrica Balance Sheet ($millions)

	Mar 31/2020
Current Assets	$1.9
Exploration Assets	$6.1
Equipment	$3.6
Total Assets	**$11.5**
Current Liabilities	$1.5
Shareholders Equity	$10.0
Liabilities and Equity	**$11.5**

Source: ReconAfrica

Capital Structure

Currently ReconAfrica has ~71.1 million common shares outstanding. In addition, there are 26.7 million warrants (21.7 million with an exercise price of $0.50/sh and expiring in H2/2025, and 5.0 million warrants with an exercise price of $1.00/share, expiring in Q1/2025), 7.0 million options (exercise price of $0.35/sh) and 0.4 million broker warrants ($0.20/share exercise). If fully exercised this would result in proceeds to the company of $18.5 million and fully diluted shares outstanding of 105.1 million.

Exhibit 16. ReconAfrica Capital Structure

		millions
Shares Outstanding		71.1
Warrants ($0.60/sh)		26.7
Options ($0.35/sh)		7.0
Broker Warrants ($0.20/sh)		0.4
Total (Fully diluted)		**105.1**

Note: numbers do not add due to rounding

Source: ReconAfrica

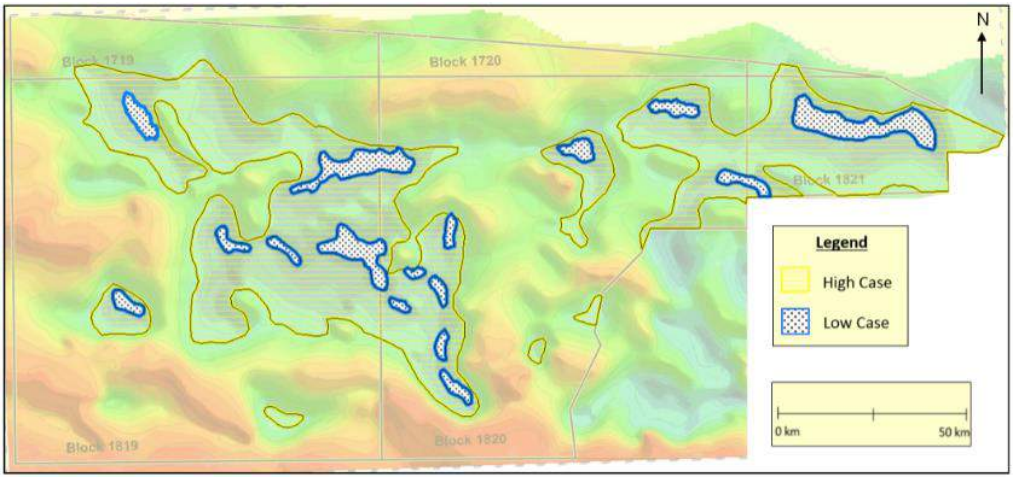
Sproule Resource Assessment

In 2018, an independent engineering company, Sproule International, completed an analysis of the prospective resource for ReconAfrica. Given that the Kavango Basin is in the early phases of exploration, with limited data available, Sproule relied on analogue data from several sources for their analysis, as well as the strip log from the ST-1 well drilled 375 km west of the property.

Sproule's analysis of PEL 73 focused only on the unconventional opportunity and does not include any of the potential upside from the conventional. The report honed in on ReconAfrica's interpretation of high-resolution aero-magnetic data, and its resulting conclusion of a very deep untested sub-basin (Kavango) that holds optimal conditions for thick, organic-rich marine shales in the Karoo Super Group, which could bare similarities to the Main Karoo Basin in South Africa.

Sproule noted ReconAfrica's interpretation of an analogous unconventional play to South Africa was based not only on aero mag analysis, but structural and geological interpretations of magnetic inversion profiles, backfilling the basin with stratigraphic section of Precambrian, Permian and Cretaceous sediments. *After reviewing the available data and literature, Sproule found this concept to be reasonable.*

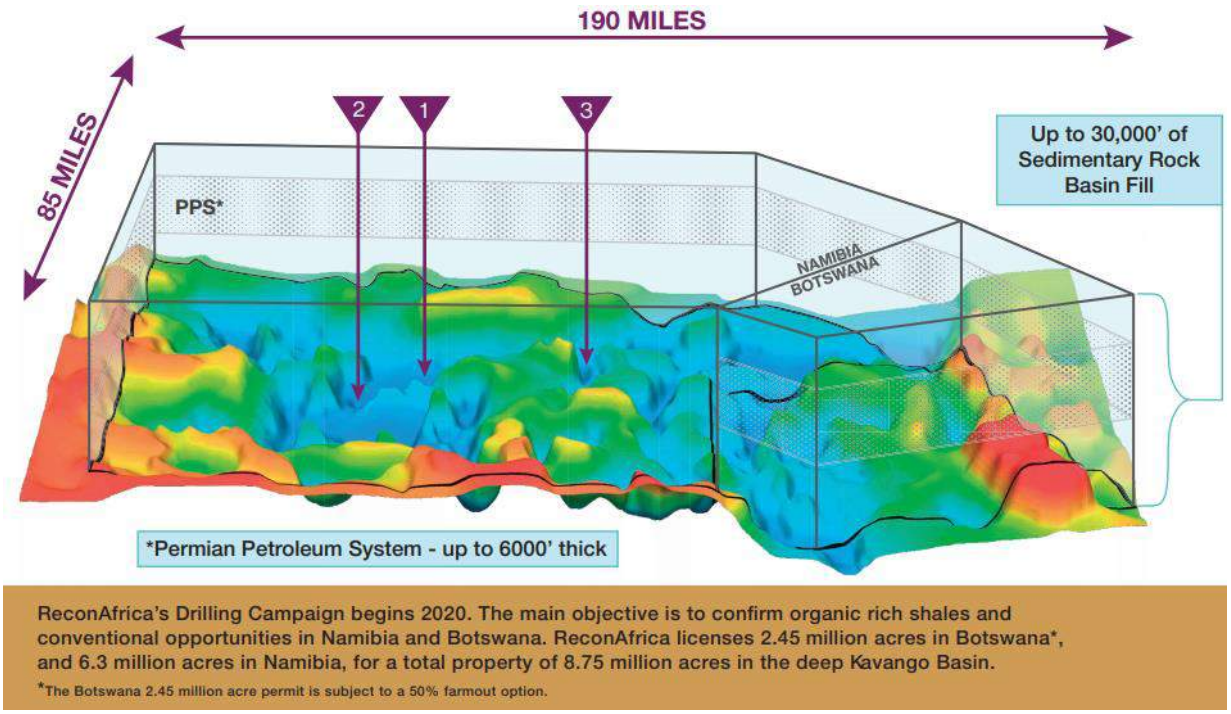
Exhibit 17. Map of Sproule Resource Assessment Coverage on PEL 73



Source: Sproule, ReconAfrica

Sproule used Reconnaissance's interpretation of the aeromagnetic data to estimate the aerial extent of the resource coverage (exhibit 17). The deepest parts of the basin (dark blue color) were assumed to be the low case, and the shallower parts (shaded) to be the high case. The high case scenario had a coverage of just over 5,000 km^2 (~20% of total acreage in PEL 73), while the low case was 203 km^2 and the best case was 2,062 km^2 (~8% of total acreage).

Exhibit 18. Kavango Sedimentary Basin



Source: ReconAfrica

Gross Reservoir Thickness

For reservoir thickness Sproule honed in on the ST-1 well to the west in the Owambo Basin, the closest analogue for the Kavango Basin. They claim the data supports that the ST-1 well was drilled into the deepest point of the Owambo Basin, where it intersected over 600 feet in the Karoo Super Group. Sproule used this for the maximum gross thickness in its resource computation. ReconAfrica believes the deeper Kavango Basin should see a significant thickening that is potentially closer to the Karoo Basin in South Africa, which has a maximum gross thickness ~2,300 feet (~700 meters).

Porosity

The Karoo Super Group shales are expected to be very tight based on several different sources. Sproule found porosity ranges in the literature between 0.4% and 3.7% (Claire Geel at el, 2013; Claire Geel at el, 2014). They utilized a range of 1% to 8% to account for rocks that are a mix of shale as well as more conventional deposits.

Sproule's gross (RECO 90% w.i.) un-risked prospective recoverable resource is 9 MMBbls of liquids on the low end to 1.7 billion barrels on the high end or 567 Bcf of natural gas on the low to 79 Tcf on the high end. The P50 or best case scenario is 924 MMBbls of crude oil or 39.7 Tcf of natural gas.

Exhibit 19. Sproule Un-risked Recoverable Prospective Resources

	Low	Best	High
Oil (MMBbl)	9	924	1,711
Gas (Bcf)	567	39,725	79,060

Source: Sproule (Note these are gross PEL 73 estimates, RECO holds a 90% working interest)

The potential of the Kavango as outlined by Sproule's estimates is in the realm of the Eagle Ford in Texas (exhibit 21), both in size and recoverable resource. Furthermore, Sproule's estimates as of yet do not include the Botswana extension. If Botswana holds the same prospectivity on the unconventional, namely ~8% of the acreage under the P50, this would add ~359 MMBbls or ~15.4 Tcf of natural gas. Botswana does have a farm out option to Renaissance Oil which would reduce the Botswana working interest to 50%.

Exhibit 20. Namibia and Botswana Potential Un-risked Recoverable Prospective Resource

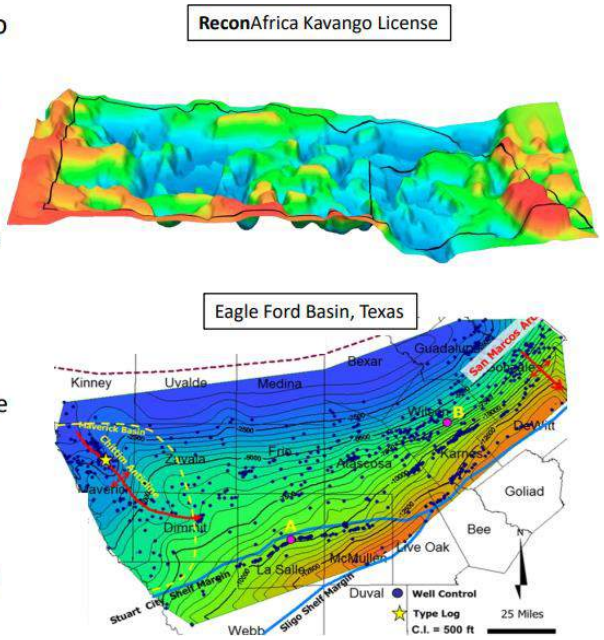
	Low	Best	High
Oil (MMBbl)	13	1,283	2,376
Gas (Bcf)	787	55,173	109,806

Source: Sproule (Note these are gross PEL 73 estimates, RECO holds a 90% working interest), Botswana has a farm out option, which if exercised, would reduce ReconAfrica's interest by 50%.

Exhibit 21. Kavango vs Eagle Ford

- **Recon**Africa holds entire Kavango Basin in Namibia with 6.3 MM acres, 25,000 km^2 and 2.45 MM acres, 10,000 km^2 in Botswana
  - Areally larger than the entire Eagle Ford shale (6.9 MM acres)
- Sproule estimate for **Recon**Africa Kavango rights (Namibia and shale only):
  - OOIP: 12 Billion Barrels, or
  - OGIP: 119 TCF
  - Technically recoverable: yet to be determined
- EIA estimate for Eagle Ford shales:
  - Technically recoverable: 50 TCF gas, 2.4 Billion Barrels oil

OOIP = Original Oil in Place
OGIP = Original Gas in Place



Source: ReconAfrica

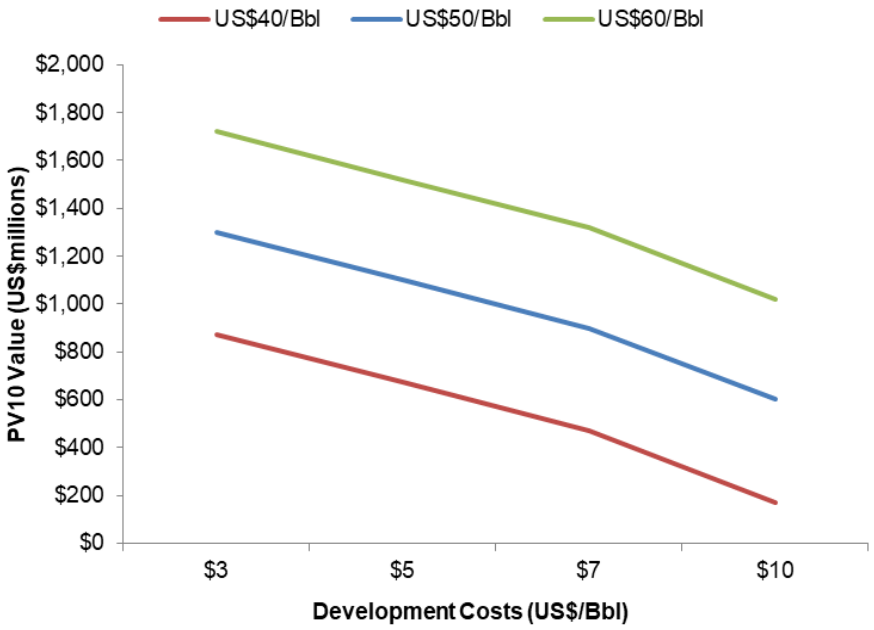
Potential Resource Value

Namibia and Botswana's preferential tax/royalty systems provide an attractive opportunity to harvest value for shareholders, even with a relatively small commercial project. For our analysis we have focused on the value of a crude oil project as the Company's geological interpretation suggests a thermal maturity in the oil window is much more likely. While we have not assigned value to the natural gas, it also has commercial opportunities within both countries. For commercial production from either country the most favorable current logistical route is through PEL 73 via truck to Grootfontein and from there rail to Walvis Bay, where world prices can be attained via the global seaborne crude market. We have assumed ~US$5/Bbl operating costs, and ~US$5/Bbl transportation costs to Walvis Bay, irrespective of which side of the border production is coming from. A US$2/Bbl quality differential to Brent was applied. Depending on the size of the play, and whether it is conventional (likely lower operating and development costs) or unconventional (likely higher costs but also likely larger scalability and resource), we could see significant variation in these estimates. Given similarly low royalty rates, under our assumptions, the before tax PV10 value is not materially different for a similar size discovery in either country. However, the after tax return could be significantly higher in

Botswana, given the lower corporate tax rate, and lack of additional profit tax hurdles.

Utilizing these estimates exhibit 22 highlights the potential value of the block at 100 MMBbls of recoverable oil. Development costs in the US$3/Bbl to US$5/Bbl range would more likely be achievable with a conventional resource. Even with higher costs and lower oil prices, 100 MMBbls offers significant potential upside to shareholders.

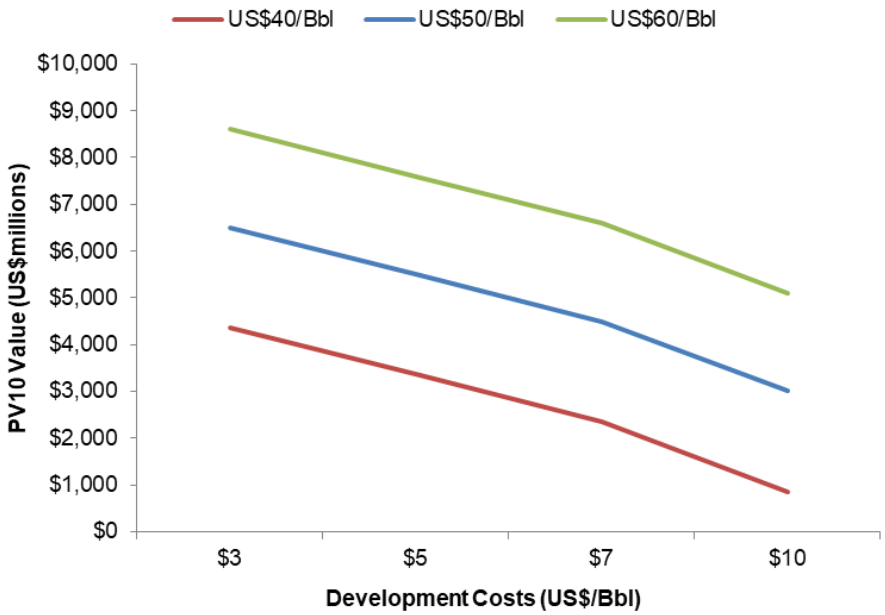
Exhibit 22. PV10 BT Potential Value of 100 MMBbls (US$millions)



Source: ReconAfrica, author estimates

In exhibit 23 we look at the potential value of a 500 MMBbl recoverable resource, which would more likely be in line with an unconventional resource. Recall the Best Case Sproule estimate was 924 MMBbls of recoverable oil for the unconventional in Namibia, which could be increased to ~1.3 billion barrels including the Botswana acreage. Under this scenario even a relatively low Brent price could still result in significant upside for ReconAfrica.

Exhibit 23. PV10 BT Potential Value of 500 MMBbls (US$millions)



Source: ReconAfrica, author estimates

Below in exhibit 24 we have simplified the potential PV10 net asset value per share for ReconAfrica's unconventional based on a flat US$50/Bbl Brent oil price. The table illustrates that even a relatively small 10 MMBbl discovery (most likely conventional) could yield significant upside from the current share price. *Note, the following estimates don't include the potential dilution from financing the exploration and development through either additional equity or a farm out*.

Exhibit 24. PV10 BT Potential NAV per share (C$/sh) – Brent US$50/Bbl

		Development Costs (US$/Bbl)			
		$3	**$5**	**$7**	**$10**
Reserves (MMBbl)	5	$0.75	$0.63	$0.52	$0.34
	10	$1.49	$1.26	$1.03	$0.69
	50	$7.46	$6.31	$5.17	$3.44
	100	$14.93	$12.63	$10.33	$6.89
	500	$74.63	$63.15	$51.67	$34.44
	924	$137.86	$116.65	$95.44	$63.63
	1,283	$191.50	$162.04	$132.58	$88.39

Note: Based on current fully diluted share count of 105.1 million shares

Source: Sproule, ReconAfrica, author estimates

ReconAfrica's mapping and technical evaluation of the two blocks results in a conventional in place estimate that is close in size to the unconventional. The current exposure to shareholders is a potential oil in place estimated above 30 billion barrels of oil.

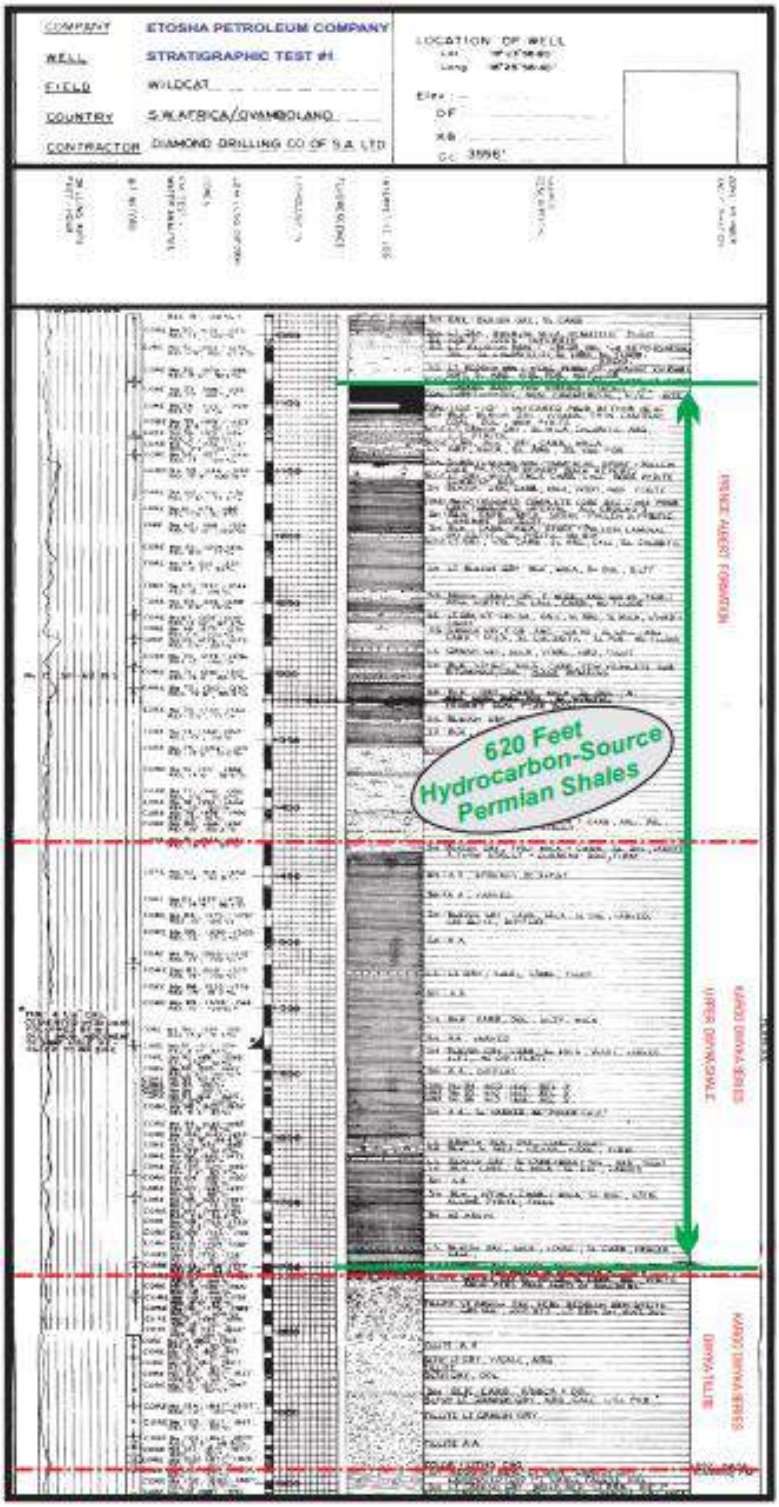
Exhibit 25. Combined Resource Potential (MMBbls)

	Best Case (P50)	
	In Place	Recoverable
Unconventional Oil (MMBbls)		
Namibia (90% w.i.)	13,354	924
Botswana (currently 100% w.i.)	5,193	359
	18,547	1,283
Conventional Oil (MMBbls)		
Namibia (90% w.i.)	12,000	1,200
Botswana (currently 100% w.i.)	3,500	350
	15,500	1,550
Total	***34,047***	***2,833***

Source: Sproule, ReconAfrica, author estimates

Appendix

Exhibit 26. Etosha ST-1 Well Karoo Super Group Log



Source: ReconAfrica

Investment Risks

There are inherent risks for oil and gas exploration companies, domestic or exploration, which include: drilling success, reservoir performance, commodity price fluctuations, and foreign exchange rates. Companies that operate internationally can also face individual uncertainties, such as geopolitical and other country-specific risks.

- **Geopolitical and economic risks.** ReconAfrica operates in Botswana and Namibia, both of which have been stable countries for the past several decades, and in the case of Namibia, has attracted large multi-national energy companies. Nonetheless, as an operator in these countries, ReconAfrica is potentially vulnerable to changes in the geopolitical environment where disruptions in government could lead to unstable economic policies, high inflation rates, exchange controls, and changing taxation policies.

- **Availability of equipment and oilfield services.** Competition for oilfield services can increase substantially during periods of high activity, creating an increasing cost environment. By purchasing its own rig, ReconAfrica has mitigated a significant part of this risk. However, completion, and tie-in activities may be delayed if services are not readily available. Unexpected events such as shipping delays generally occur more frequently for foreign producers.

- **Exploration for oil and gas is inherently risky**. Even though industry advancements have increased the probability of success, there are no guarantees of a commercial hydrocarbon discovery. Currently the Company has no proven reserves associated with its License; given there has never been a well drilled into it.

- **Technical Team**. ReconAfrica has assembled a strong technical team to develop and test this high impact concept play. The loss of key members of that team could significantly impede its exploration efforts.

- **Financing Risk**. ReconAfrica is an early stage energy exploration company with no revenues, and is dependent on external capital to fund its exploration efforts. The lack thereof could reduce or halt exploration and development efforts.

ReconAfrica outlines a more comprehensive list of risks in its Management Information Circular dated March 19, 2019 and the MD&A of its 2020 Q1 Financial Statements dated May 29, 2020, both of which are encouraged to be reviewed.

Disclaimers

I am/we are currently not long ReconAfrica Stock. This report was commissioned as an independent analysis for ReconAfrica, for which compensation was received. I wrote this report myself, and it expresses my own opinions.

This report is for informational purposes only. All opinions expressed herein are not investment recommendations and are not meant to be relied upon in investment decisions. The author is not acting in an investment advisor capacity and is not a registered investment advisor. The author recommends investors consult a qualified investment advisor before making any trade.

This article is not an investment research report, but an opinion written at a point in time. The information and data in this report is based on information available to the public, and are obtained from sources believed to be reliable, but their accuracy and completeness are not guaranteed.

Estimates and projections contained herein belong to those as referenced or the author. Any and all opinions, estimates, and conclusions are based on the author's best judgment at the time of publication and are subject to change without notice.

This report is not an offer to buy or sell or a solicitation of an offer to buy or sell the securities mentioned herein. If you have any doubt about the suitability of any designated investment(s) or designated investment service(s) which is/are the subject of this material, you should contact your financial adviser.