# Oil in the Kavango? ALL Risk, NO Reward for Namibia

### Matt Totten Jr. - M.S. Geology

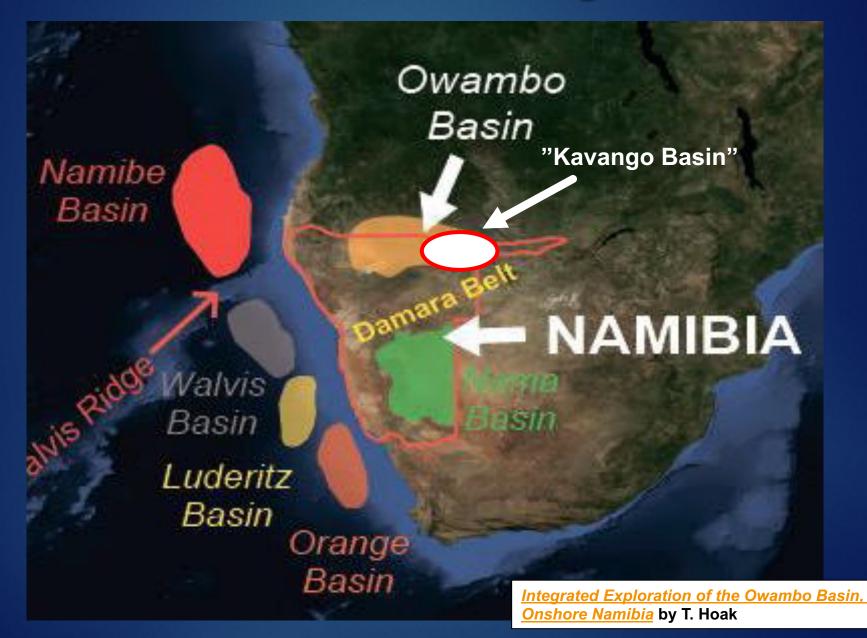
Former Exploration & Operations Geologist for BP

Namibian Scientific Society "Backyard Talk"

Tuesday 16 November, 2021 (7 – 9 PM)

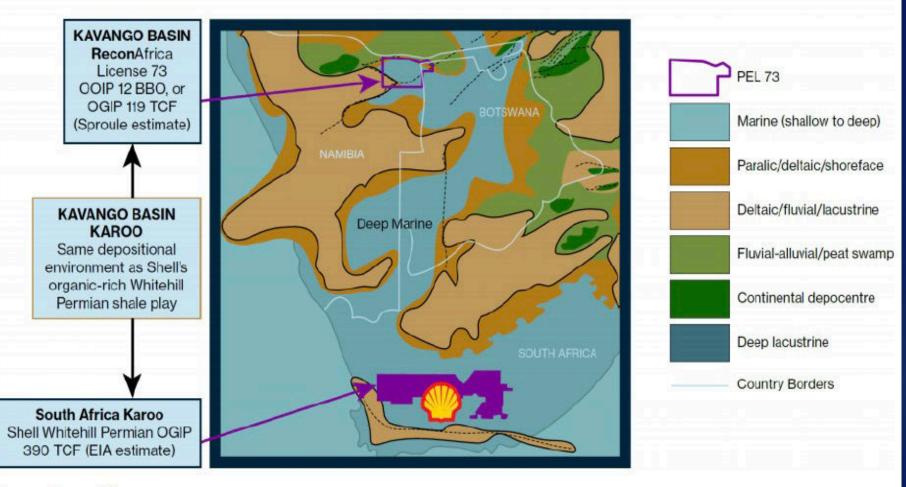
# **Background Information**

## What/Where is the "Kavango Basin"?



## Analog to Frack Play in South Africa

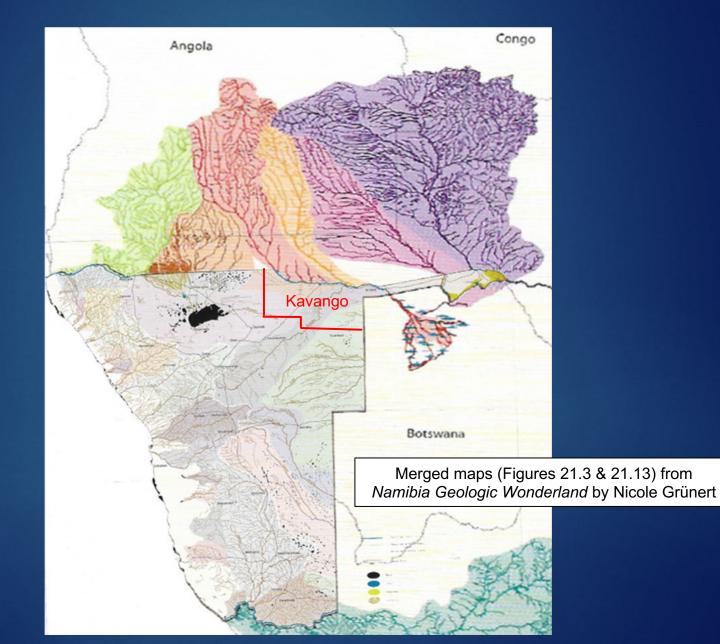
### **REGIONAL KAROO PERMIAN SEAWAY**



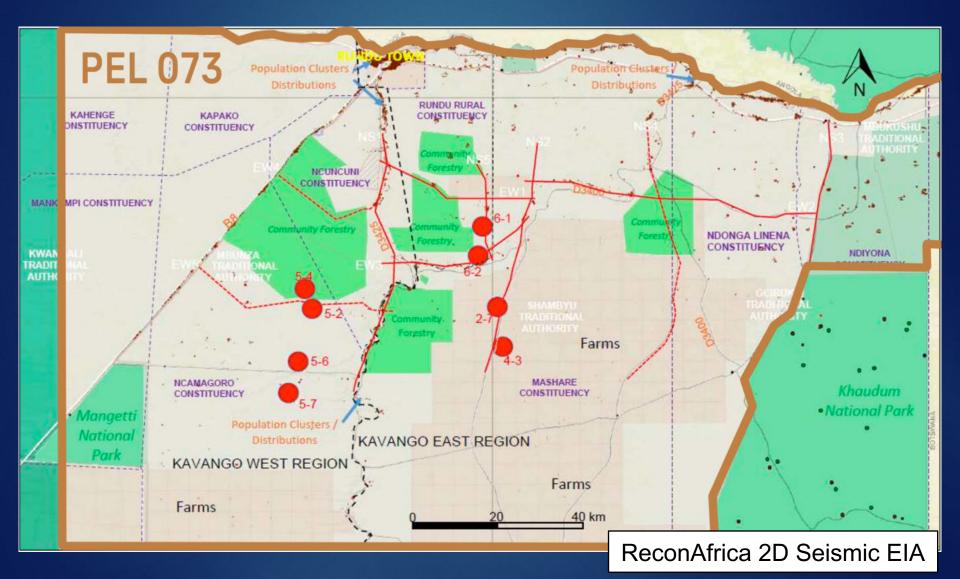
Source: ReconAfrica

ReconAfrica Research Report – July 2020

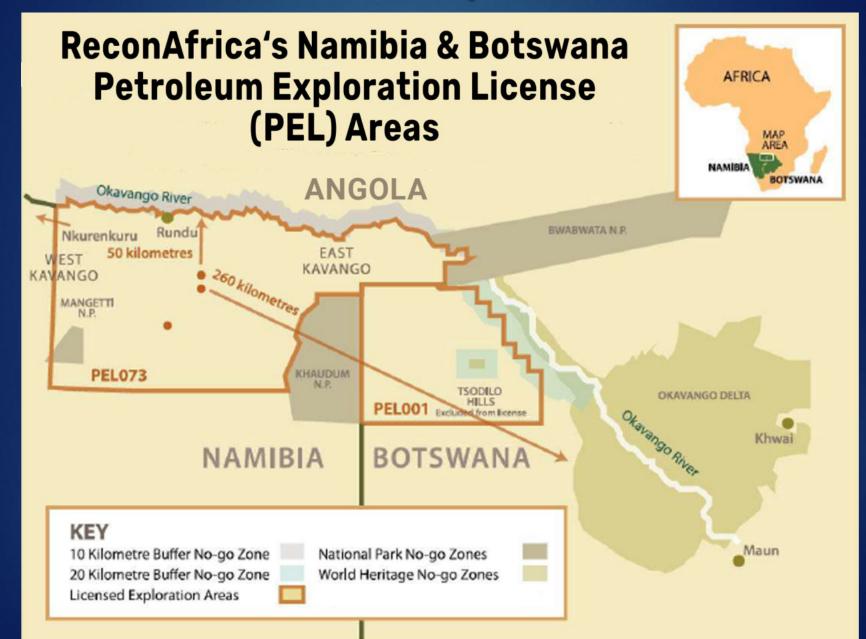
## **Critical Watersheds of Namibia**



## The Kavango Region is **RICH** in Biodiversity, Agriculture, Forestry & Conservation



## Recon's Petroleum Exploration Licenses:



## Why the **Public** is **Concerned**

#### **ReconAfrica Compares the Kavango Basin to the Eagle Ford Shale Basin in Texas, USA** AFRICA ReconAfrica frequently compares its Kavango Basin exploration areas in Namibia and Botswana to the size and potential of the unconventional Eagle Ford Shale Basin in south-central Texas. MAP AREA Here's what 20,000+ frack wells across the Kavango and Okavango River Basin would look like... NAMIBIA BOTSWANA ANGOLA BWABWATA N.P. EAST Unconventional KAVANGO **Eagle Ford Shale Basin** Texas, USA **OKAVANGO DELTA** PEL001 Otavango River d from license Khwai NAMIBIA BOTSWANA Dry Gas Oil Wet Gas **Eagle Ford Shale Basin Well Colours:** KEY Wells Wells Wells Maun 10 Kilometre Buffer No-go Zone National Park No-go Zones 20 Kilometre Buffer No-go Zone World Heritage No-go Zones Licensed Exploration Areas

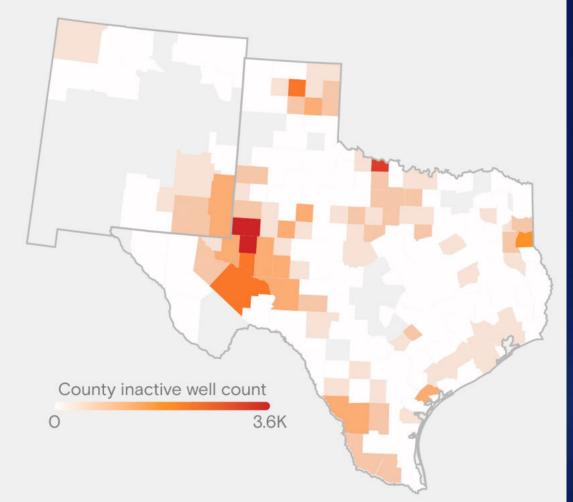
## A Taste of Things to Come...



Green River, Colorado, USA

## Texas's Growing "Zombie Well" Problem

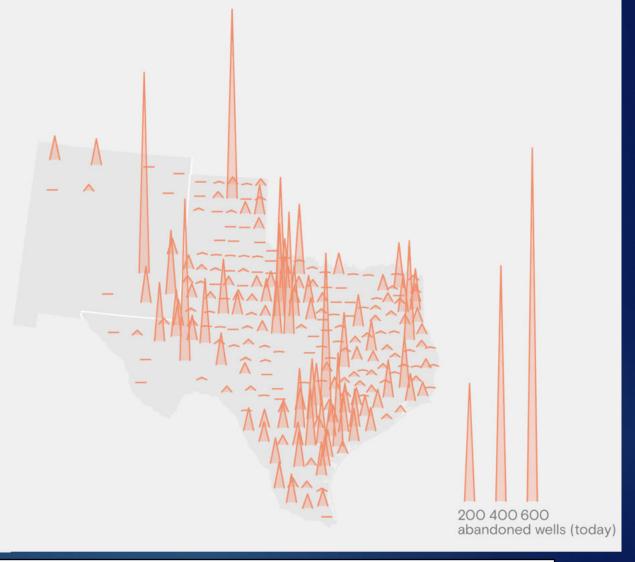
As oil and gas companies weathered volatile oil prices last year, many halted production. **More than 100,000 oil and gas wells** in Texas and New Mexico are idle.



"<u>Waves of Abandonment – The Permian Basin is ground zero for a billion-dollar surge of zombie oil wells.</u>" The Grist & The Texas Observer, April 2021

## Permian Basin "Zombie Wells"

Of these, there are **about 7,000** "orphaned" wells that the states are now responsible for cleaning up.

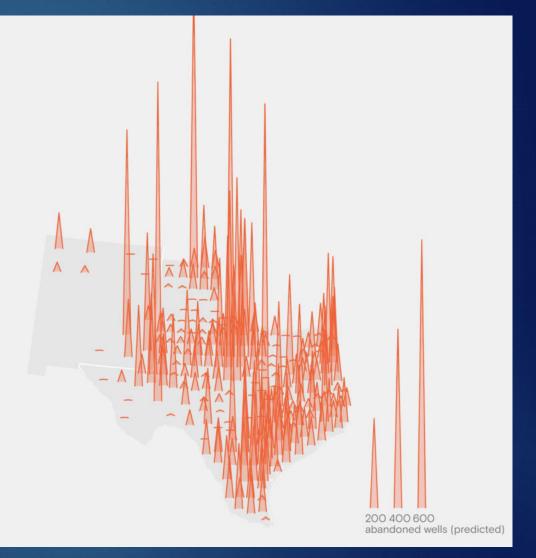


"<u>Waves of Abandonment – The Permian Basin is ground zero for a billion-dollar surge of zombie oil wells.</u>" The Grist & The Texas Observer, April 2021

## Permian Basin "Zombie Wells"

But statistical modeling by Grist and The Texas Observer suggests **another 13,000 wells** are likely to be abandoned in the coming years.

> A conservative estimate of the cleanup cost? Almost **\$1 billion**. And that doesn't consider the environmental fallout.



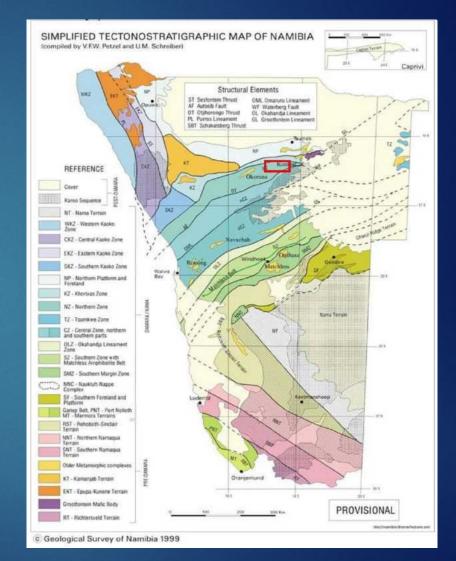
"<u>Waves of Abandonment – The Permian Basin is ground zero for a billion-dollar surge of zombie oil wells.</u>" The Grist & The Texas Observer, April 2021

# How to Explore for Oil

## **Step 1:** Map the Surface



### Satellite View

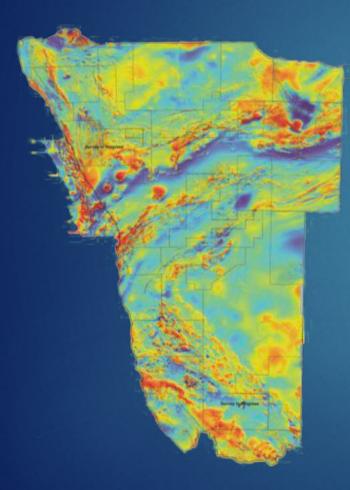


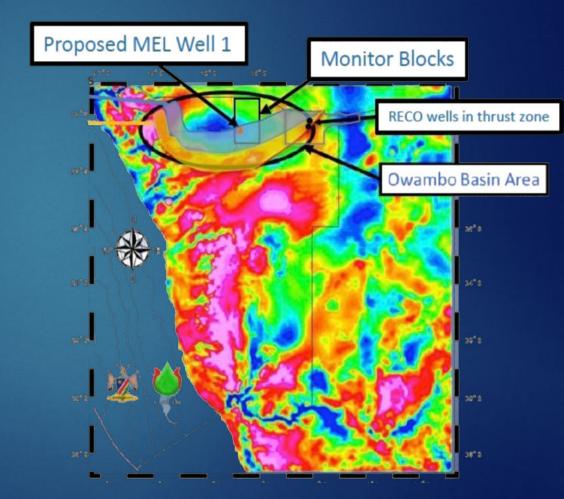
### Geologic Map

### **Step 2:** Collect Magnetic & Gravity Data

### Aeromagnetic data

## Free Air Gravity data:

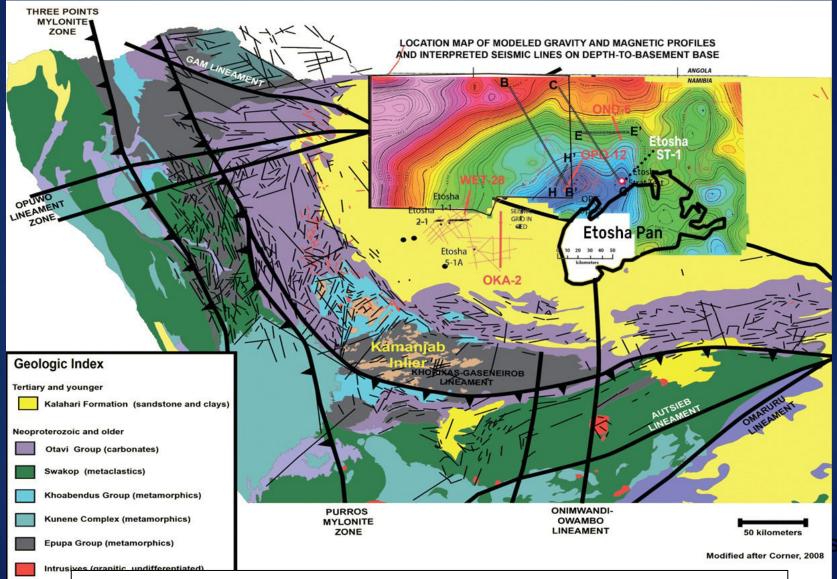




Source: ReconAfrica

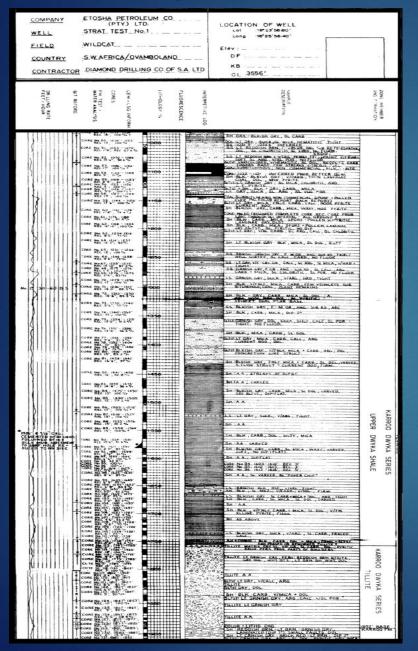
Source: Monitor Exploration

## **Step 3:** Identify a Sedimentary Basin



Integrated Exploration of the Owambo Basin, Onshore Namibia - T. Hoak, 2014

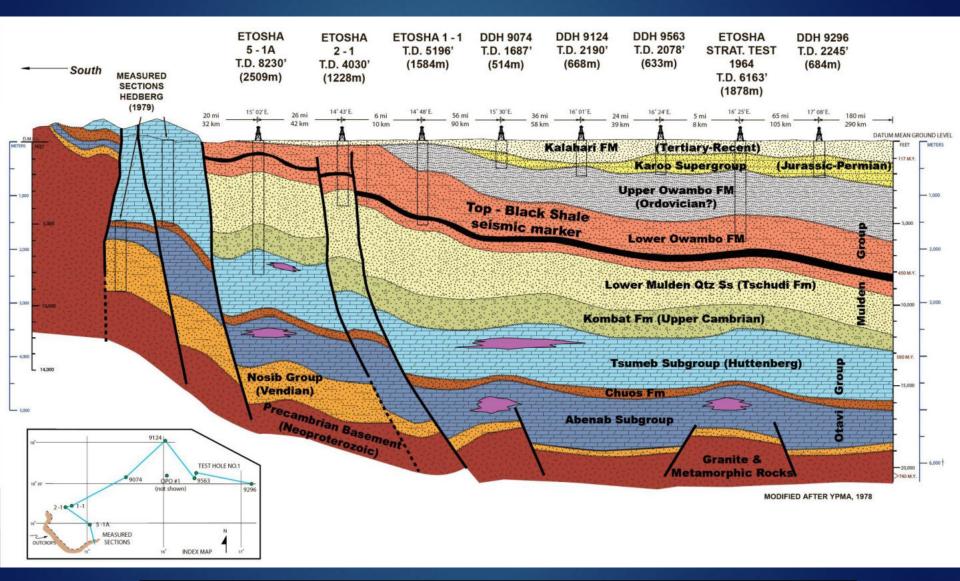
### **Step 4:** Look for nearby well data



## 1964 Etosha ST-1 Well Mud Log

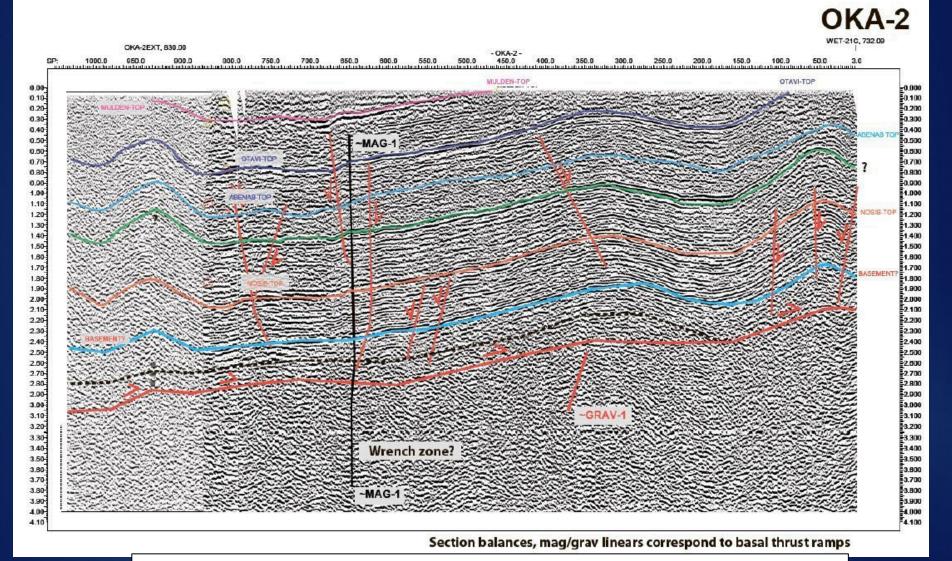
Source: ReconAfrica

### **Build a model of the subsurface:**



Integrated Exploration of the Owambo Basin, Onshore Namibia - T. Hoak, 2014

### Step 5: Acquire & interpret seismic data



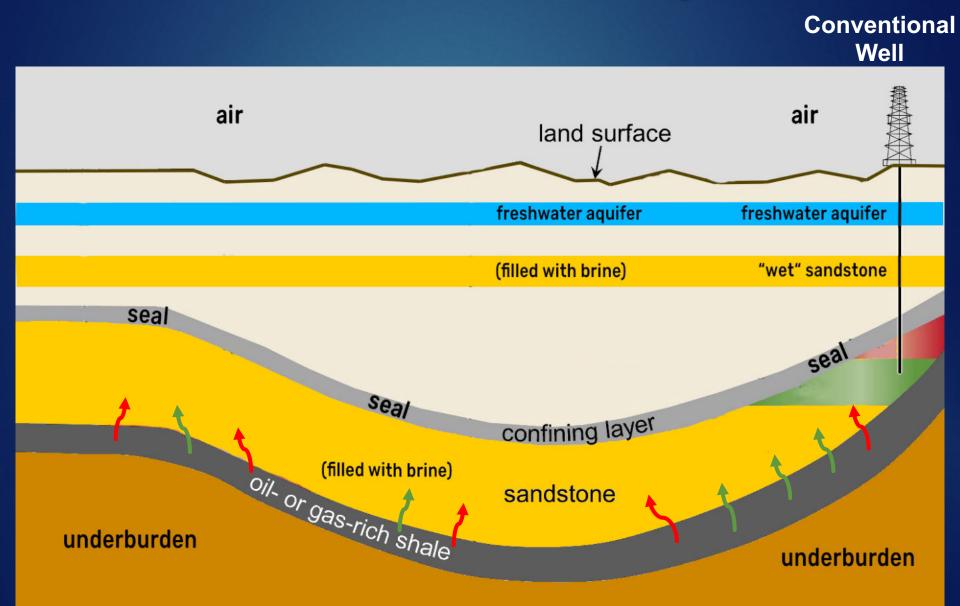
Integrated Exploration of the Owambo Basin, Onshore Namibia - T. Hoak, 2014

### **Step 6:** Select & Drill Exploration Wells



ReconAfrica drilling the Kawe Well *Photo Credit: Namibia Media Holdings* 

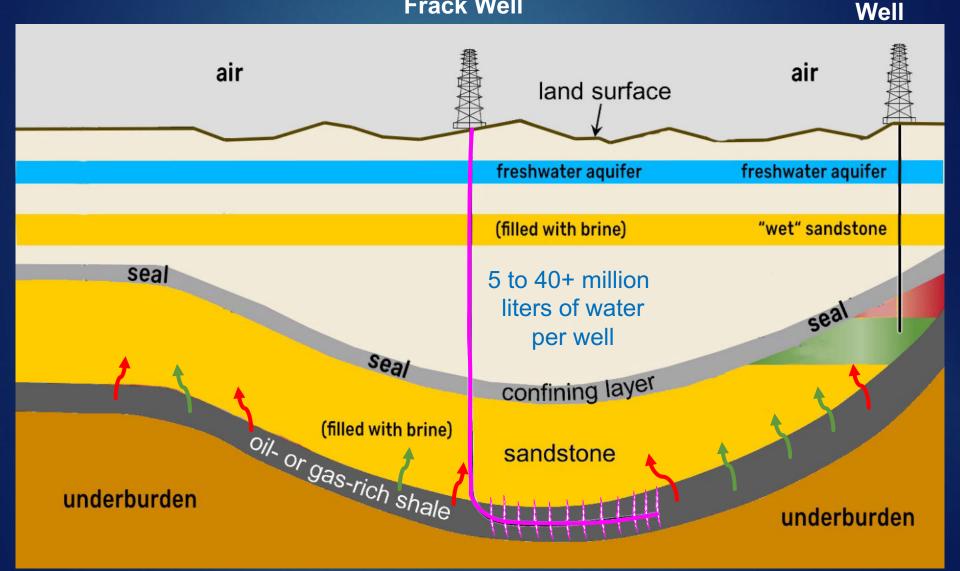
## **Conventional** Drilling



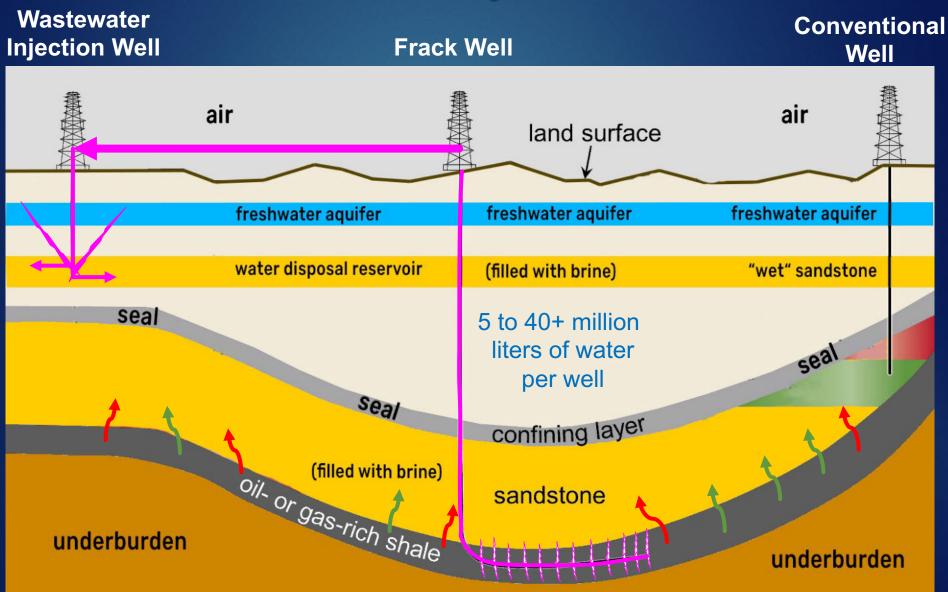
## **Unconventional or "Frack" Drilling**

Conventional

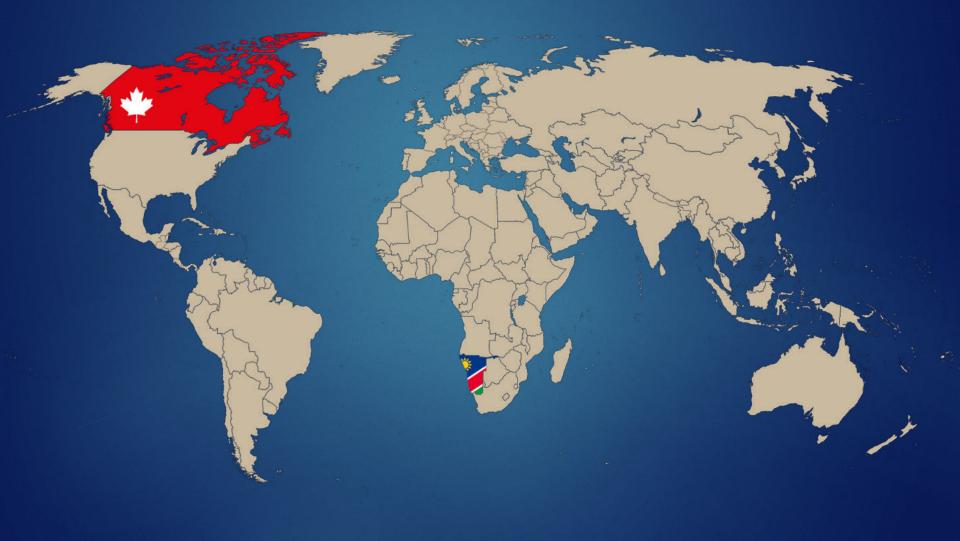
**Frack Well** 



## Wastewater Injection Wells







# Listen to Recon with Caution



"Should these results be disappointing, the downside to the stock could be substantial and the company may cease to exist."

## **ReconAfrica:** "Unconventional" *Fracking* Specialists

### **BOARD OF DIRECTORS & OFFICERS**



#### Jav Park OC

Chairman of the Board and Director Leading international oil and gas lawyer with experience in 17 African countries.



#### **Carlos Escribano** CFO, Chartered Accountant

CFO for several publicly traded multi-national resources companies with over 15 years experience.



#### Scot Evans CEO

35 years' experience in global oil and gas operations with Halliburton and Exxon.



#### Dr. James Granath **Director**, Structural Geologist Structural geologist with extensive African petroleum exploration experience having worked on projects in more than 40 countries globally.

Global energy advisor with 20

years' experience in financing,

planning, M&A, joint ventures

Mark Gerlitz

Director

and ESG.





Nick Steinsberger

#### Anna Tudela

Corporate Secretary & Chief Compliance Officer 30 years' experience with public companies in the resources sector as Corporate Secretary, Regulatory Affairs and Governance matters.



#### SVP, Corp Communications & Stakeholder Relations Extensive energy and environmental public policy experience at regional, provincial and international levels, having held various provincial cabinet positions in Alberta.





## Where's Craig Steinke?

### **TECHNICAL TEAM**



CEO, Geologist 35 years' experience in global oil and gas operations with Halliburton and Exxon.

Globally recognized leading

analytical and interpretive

People for the Petroleum

organic geochemist, awarded

"Hart Energy's Most Influential

Industry in the Next Decade,"

Aeromagnetic expertise as

President and Geoscientist

with more than 25 years of

interpretation experience.

Geologist with more than 20 years' experience,

including the head of the geology department at the University of Namibia.

of Earthfield Technology

Daniel Jarvie

Geochemist

in 2010.

**Bill Cathey** 

Geophysicist

potential field

Dr. Ansgar Wanke Geologist



#### Nick Steinsberger SVP, Drilling & Completions 33 years' experience in petroleum engineering, drilling and completions, production and facilities.



#### Claire Preece ESG & Corporate Communications 25 years' experience in Community and Environmental Impact Assessments,

environmental and socioeconomic reporting and stakeholder engagement.



#### Shiraz Dhanani Lead Geophysicist

More than 40 years' experience with BP and Exxon, focusing on new country access with a strong focus on Africa, specialized in seismic operations.







# Who is **ReconAfrica**?

Founder

ReconAfrica · Contract



# **Craig Steinke**

Founder

Storm Cat reaches deal with state over more than 2,000 wells and \$10 million in unpaid bonds





CEO Renaissance Oil Corp. Oct 2014 – Present · 7 yrs 2 mos

Nov 2013 - Present · 8 yrs 1 mo



**Co-Founder & Chairman** Realm Energy Corporation Oct 2009 – Nov 2011 · 2 yrs 2 mos Vancouver, Canada Area

Founder & Chairman StormCat Energy Corporation Apr 2004 – Apr 2006 · 2 yrs 1 mo

Rock, BC

### ReconAfrica

## Downplaying the **Risks**...



## 2018 - Sproule Unconventional Assessment



Sproule used the same methodology and reservoir

parameters (except area distribution) as for the Namibia lands for estimation of the prospective resources in Botswana. The undiscovered PIIP and prospective resources included in this report represent the unconventional (tight gas, shale gas and tight oil) resources on the Company's lands and do not include potential conventional prospective resources. (Discussion – pg. 1)

ESTIMATION OF THE PROSPECTIVE RESOURCES OF RECONNAISSANCE ENERGY AFRICA LTD. IN BOTSWANA AND NAMIBIA (AS OF JUNE 30, 2020)

sproule.com

# **Exploration Drilling First?**

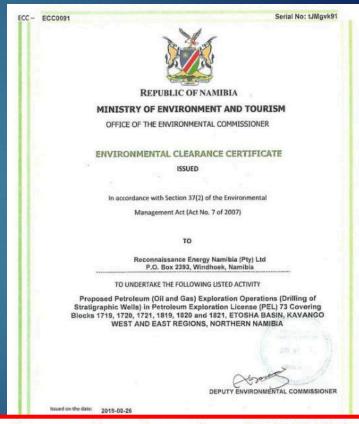
### June 2019 - EIA

### Reconnaissance Energy Namibia (Pty) Ltd

Final Environmental Impact Assessment (EIA) Report Vol. 2 of 3 to Support the Application for Environmental Clearance Certificate (ECC) for the Proposed Petroleum (Oil and Gas) Exploration Operations (Drilling of Multiple Strattgraphic Wells) in the Patroleum Exploration License (PEL) No. 73 covering Blocks 1719, 1720, 1721, 1819, 1820 and 1821, KAVANGO BASIN, KAVANGO WEST AND EAST INFORMAL MORTHERM MANUELA

> Co Pioneer Oil and Gas Consulting City View Building Unit 13. Cnr of Pasteur and Freid Street P.O. Box 2393 WINDHOEK, NAMIBIA

### August 2019 - ECC



Reconnaissance Energy Namibia (Pty) Ltd, the Proponent and operator of PEL 73 is targeting equivalent rocks to the hydrocarbon prone unconventional deposits within the Karoo Group of the main Karoo Basin in South Africa (Fig. 4.5).

## May & July 2020: THE ELEPHANT IN NAMIBIA

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. (pg. 16)



Of tremendous concern in South Africa is water, a significant requirement for unconventional plays requiring fracture stimulation. (pg. 15)



**KAVANGO BASIN RESEARCH REPORT** 



MAY 2020 MARK HEIM, CFA

(TSX-V: RECO) (OTC: RECAF) (Frankfurt: 0XD)

## May 27th, 2020: "ReconAfrica Zoom Presentation with co-founder Craig Steinke"



"It's a 30,000' sedimentary basin. Bill Cathey makes a searing point that **there's not a basin in the world this deep that doesn't produce liquid hydrocarbons**."

"So we're expecting up to 6,000' of thick, Permian petroleum system in the Kavango."

"It's a 1000 hp rig, never been used, can drill down to 12,000'. Perfect, because we believe the shales, the Permian petroleum system, we're going to encounter that between around 8,000ft to 11,000ft."

## Sept, Oct & Nov 2020: Namibia Finds Out...

...



Friday For Future - Windhoek November 7, 2020 · 🕄

The #fossilfuels are killing our Habitats in the name of greed. @recon.africa you are killing our people and our heritage. We cannot drink oil #savetheokavangodelta #frackfreenamibia #frackoff #frackupnamibia #facetheclimateemergency #fightclimateinjustice #climatejusticeisracialjustice #fridaysforfuture #fridaysforfuturemapa @recon.africa @fridays\_for\_future\_canada

@edennamibia @fridaysforfuture @fridaysforfuturemapa
@350africa @350org @350canada @shawnfoundation



### WE CANNOT DRINK OIL

TOP RECON AFRICA'S OIL AND GAS DRILLING PROJECT

#### #savetheokavangodelta



LOGIN SUBSCRIBE

 $\approx$ 

ANIMALS I WILDLIEE WATC

### Oil drilling, possible fracking planned for Okavango regionelephants' last stronghold

lundreds of oil wells could come to cover a huge expanse in Jamibia and Botswana, in what has been called possibly the "largest oil play of the decade."

Seen from space, fingers of green define Botswana's Okavango Delta. This approximately 7,000square-mile wetland amid the Kalahari Desert is fed by rains in Angola's highlands. Brimming with wild animals and plants, the delta "is what the term 'biodiversity hot spot' was... Read More PHOTOGRAPH BY SATELLITE EARTH ART, GETTY

#### BY JEFFREY BARBEE AND LAUREL NEME

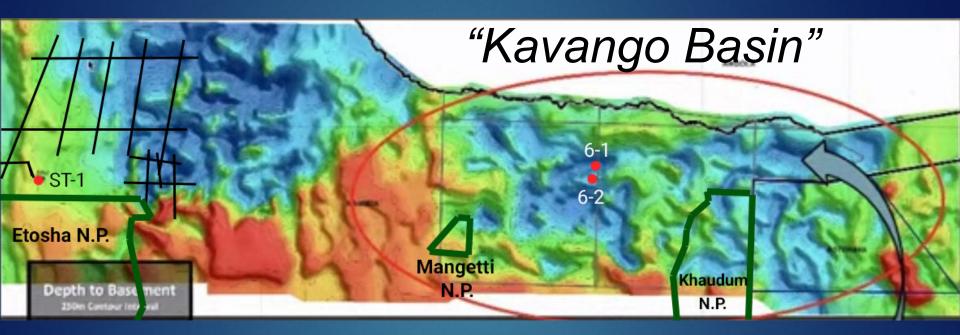
🗗 🎽 🖻

PUBLISHED OCTOBER 28, 2020 . 25 MIN READ

### November 10th, 2020: "The Opening of the **Deep Kavango Basin**" "The Basement is approximately 30,000' (9,144 m) deep. The extent is seen as quite extensive." The Opening of the Deep Kavango Basin -**Project ReconAfrica** "It is estimated that this basin has generated up to 120 billion barrels of oil. And yes that's BILLION... with a B!" Scot Evans **Craig Steinke** Dan Jarvie **Bill Cathey** OGGN & **API Houston Chapter** The target is conventional oil in the early going and we hope red to be in the position to truck conventional oil."

OGGN & API HOUSTON CHAPTER PRESENTS: The Opening of the Deep Kavango Basin

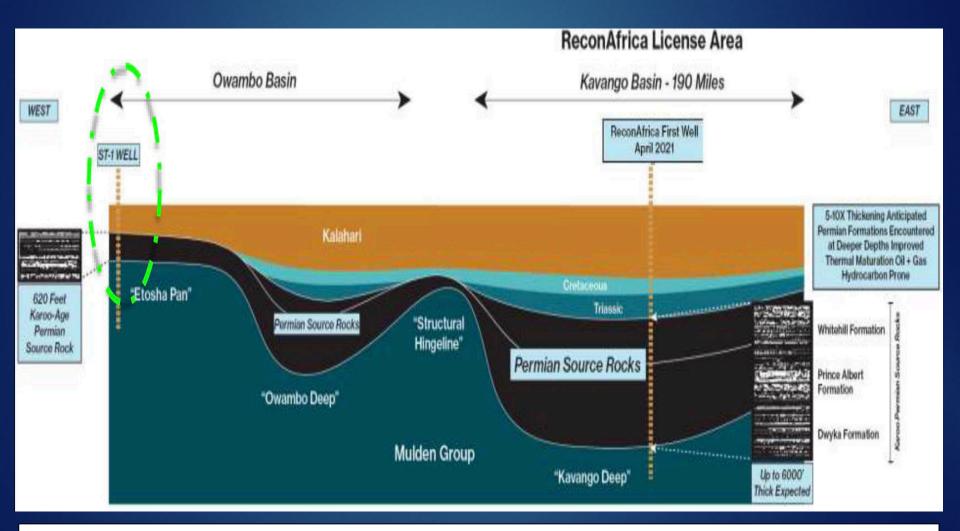
### **ReconAfrica's Depth to Basin Map**



## Where's the **deep** Basement?

ReconAfrica's Aeromagnetic Survey "Depth to Basement" Map <u>"The Opening of the Deep Kavango Basin"</u>

## Recon's "Deep Kavango Basin" Model



NOTE: ReconAfrica removed this graphic in August, 2021

# Namibians Get Involved



Dec 4<sup>th</sup>, 2020 - public protest march in Windhoek

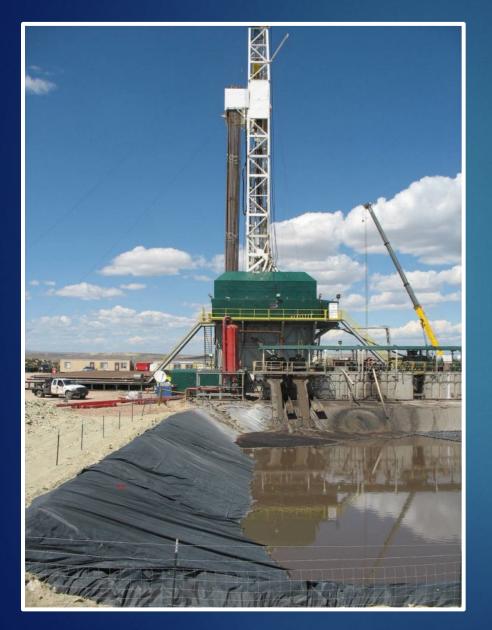
# Jan 4<sup>th</sup>, 2021 - 1st Kawe Well Spuds

• No pit liner used to protect the groundwater:



#### Photo Credit: Namibia Media Holdings

### Lined Mud Pits in the USA: It's the Law!





#### Properly lined mud pits in the USA

# **Drilling Fluid & Wastewater is Hazardous!**

- Toxic Additives
- Heavy metals

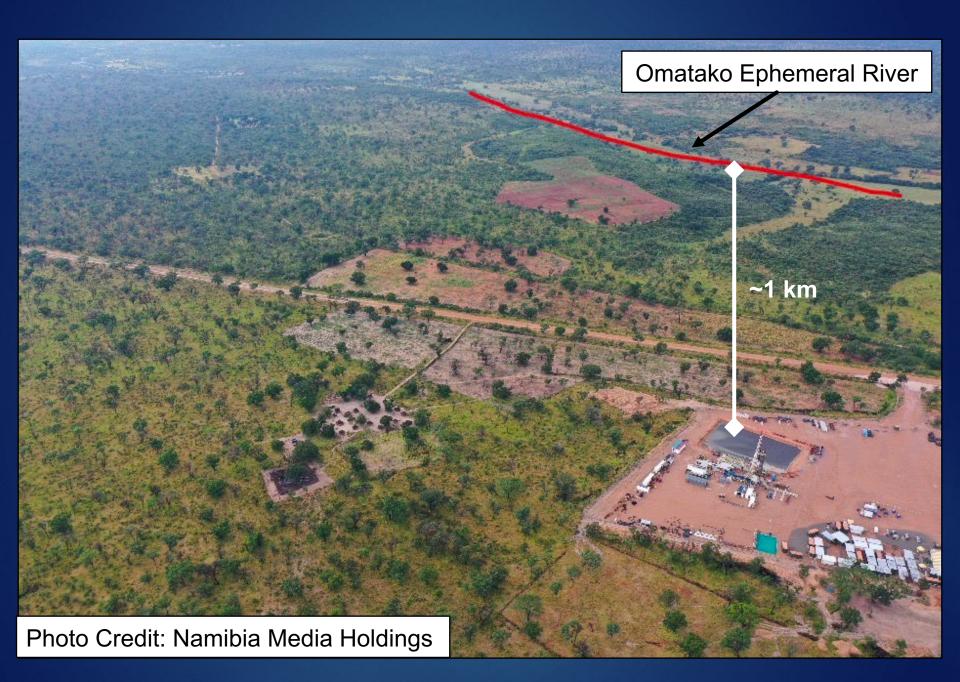
Radioactive materials

Hypersaline brines



Photo Credit: Namibia Media Holdings

Pit wastewater can contaminate waterways & groundwater



# ReconAfrica's Mbambi Well Mud Pits



## ReconAfrica's Mbambi Well Aerial Shot



# Multiply by 20,000...



Photo Credit: Namibia Media Holdings

## Feb 2<sup>nd</sup>, 2021: Public Information Session

ReconAfrica Public Information Session

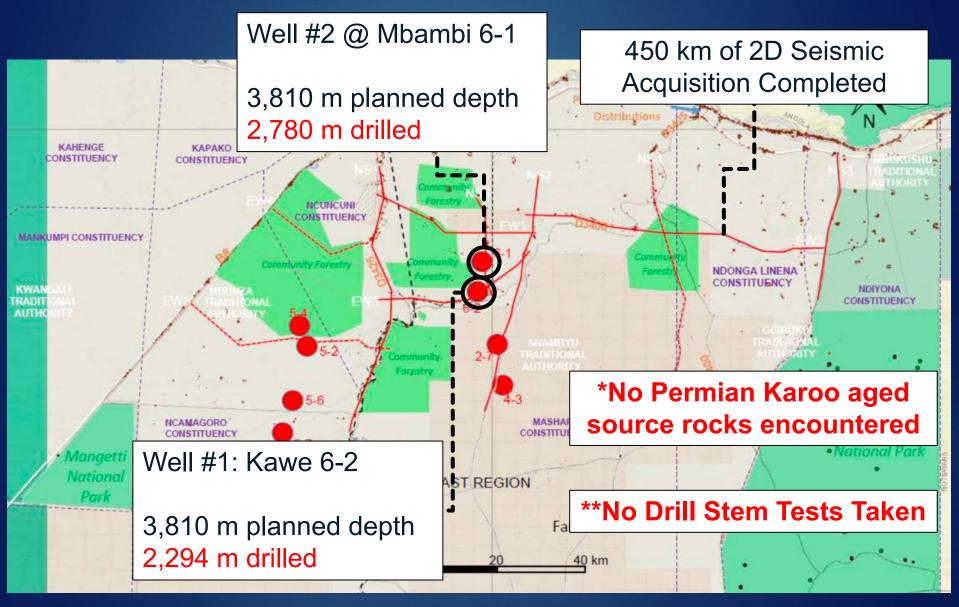
Windhoek, Namibia

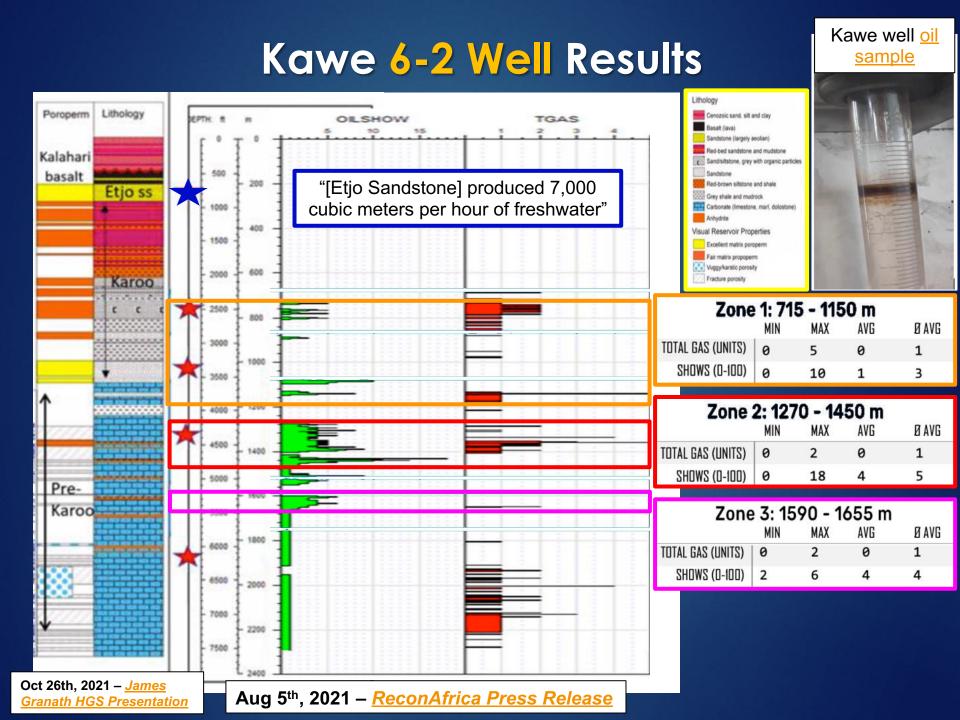


"We are going to do conventional oil."

"We launched a comprehensive regional tectonic and stratigraphic study that was **completed in March 2020** and established that conventional oil and gas and fundamentals that are the basis of our operational program.

## **Current Operations: November 2021**





# Look Familiar?

HRT Namibia, 2013

ReconAfrica, 20



<u>"Steinke, during the visit told</u> <u>Geingob the company has</u> <u>discovered oil where the drilling</u> <u>took place, and would now assess</u> <u>the commercialising of the oil."</u>

<u>"Coming from Canada, I was not</u> <u>worried that you would do</u> <u>something wrong to the</u> <u>environment."</u>

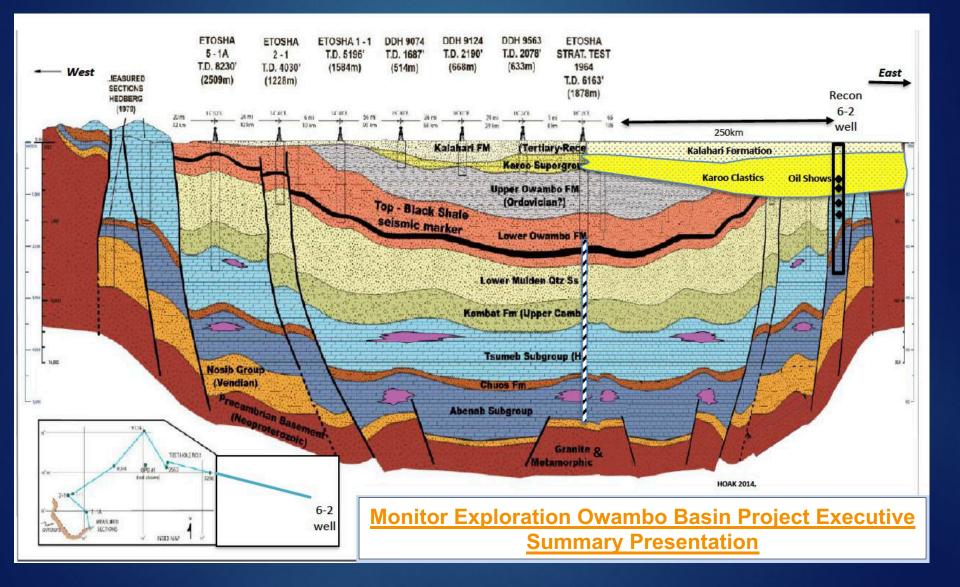
- Hon. President Hage Geingob

ReconAfrica "CEO" Craig Steinke invited to State House 10 August, 2021

#### Monitor Exploration's PEL Area



#### **Monitor Exploration's Interpretation**



# 2D Seismic Data

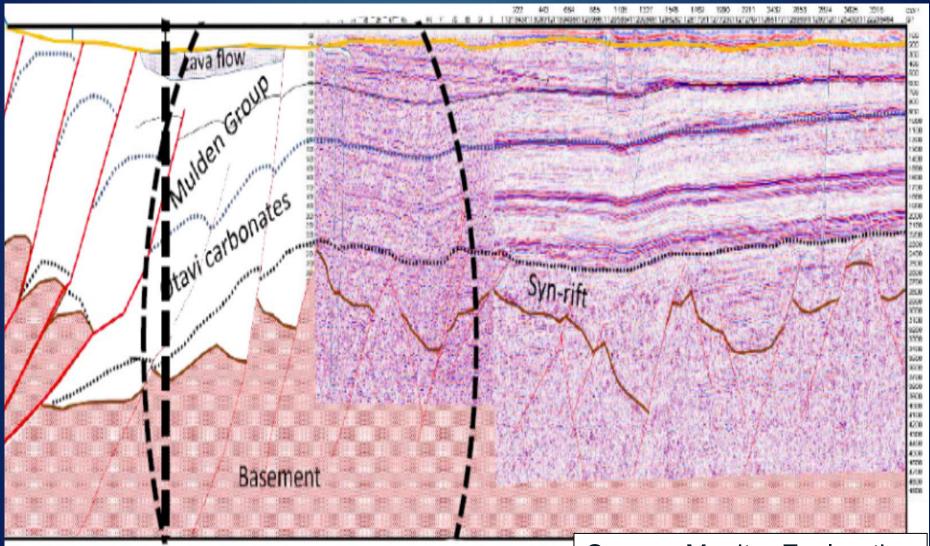
# Recon's 2D Seismic Bundu Bashing:



# Recon's 2D Seismic Bundu Bashing:



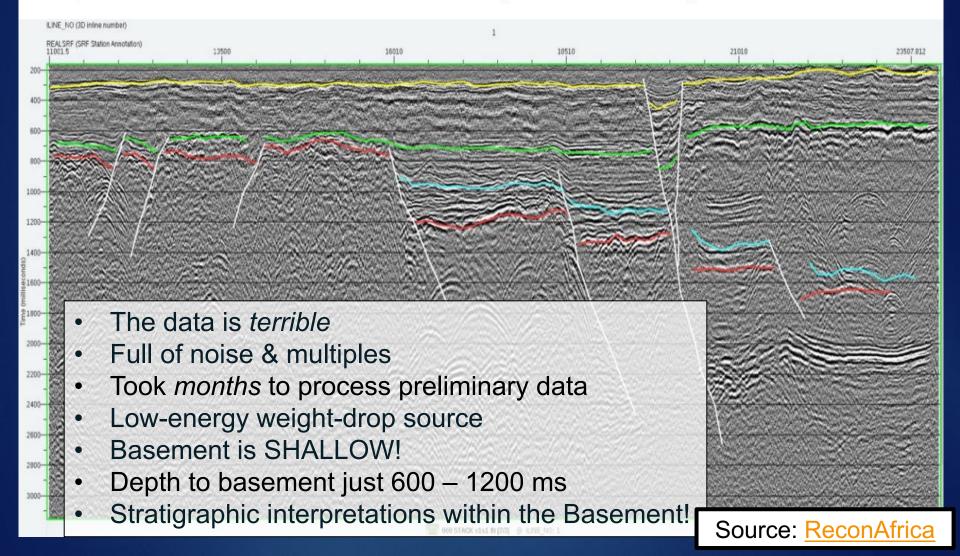
## Monitor Exploration's Seismic Data:



Source: Monitor Exploration

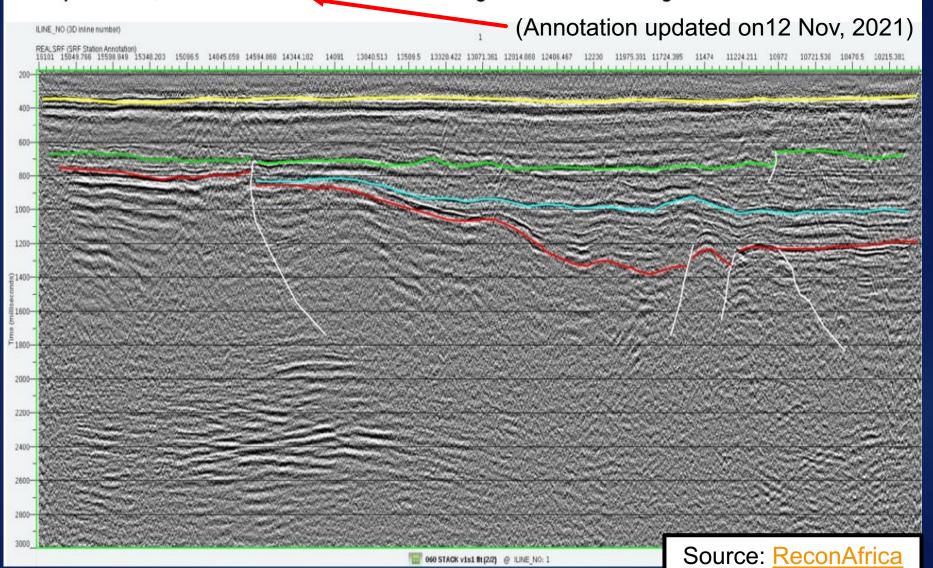
# ReconAfrica's Seismic Data

#### Example line 2; North South line, Central Kavango Basin. Line Length 64 kms.



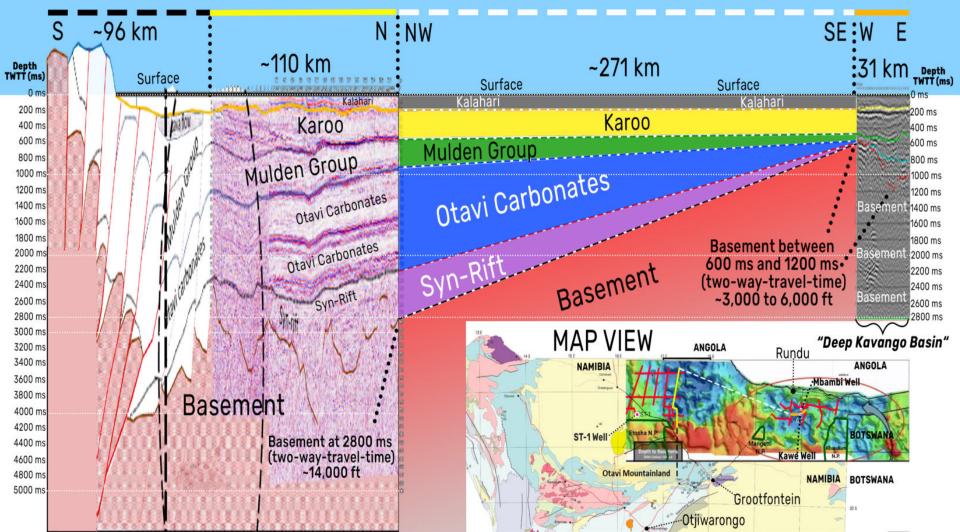
## "West to East" Seismic Line

Example line 3; West East line, Western Kavango Basin. Line Length 31 km.



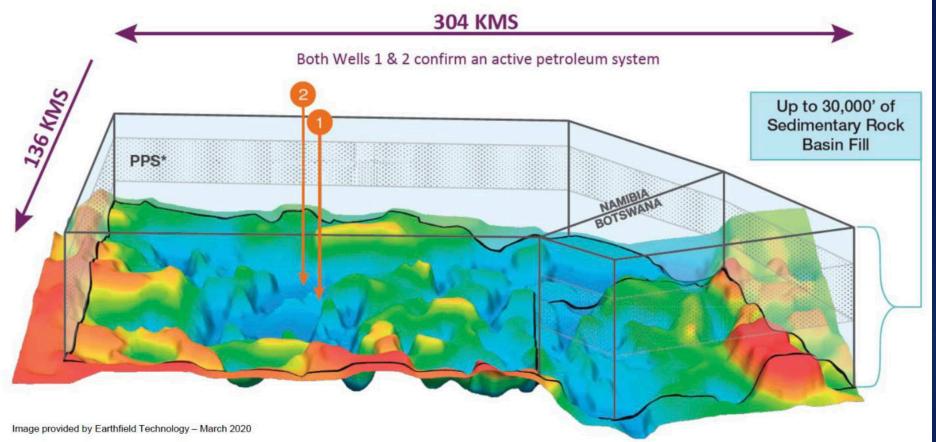
## "Kavango Deep" = Owambo Shallow

### **Owambo Basin Seismic Cross-Section**, Northern Namibia



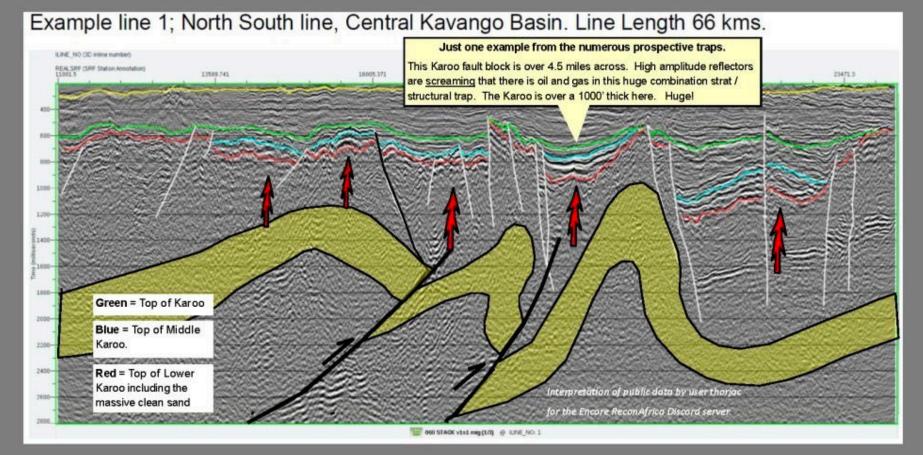
# 9,000 m "Deep Kavango Basin"?

#### **AERO-MAGNETIC SURVEY OF KAVANGO BASIN**



Nov 2021 ReconAfrica Investor Presentation

## **Recon Investors Still Believe:**



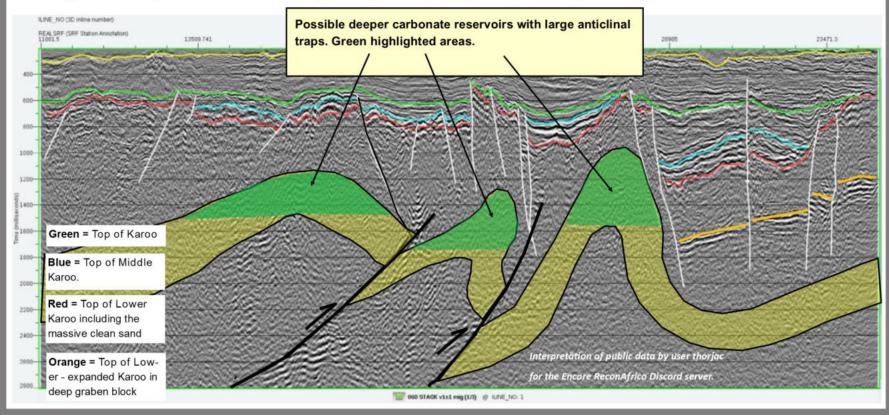


Red up-arrow indicates the location of a possible Gas Chimney. Called a "gas" chimney because <u>oil and gas</u> are actively migrating ..... in this case, into a trap. It is the migrating gas that gives the characteristic vertical seismic "washout" zone.

This is not just an active petroleum system - this is a massively active system!

### **Recon Investors Still Believe:**

#### Example line 1; North South line, Central Kavango Basin. Line Length 66 kms.



The green areas on top of the deeper carbonate sections could be oil trapped in simple four-way closures.

# Namibia's Development Alternative

# U.S. & Namibia's 5 GW Mega Solar Project



# Namibia's Green Hydrogen Project

#### Namibia and Germany join forces in green hydrogen race

26 Aug 2021 | News

Namibia has the natural resources, while Germany wants to become a world-leading hydrogen economy. A new partnership will see Germany inject €40M with the aim of putting both countries at the forefront of clean energy innovation

By Goda Naujokaitytė



Martin Andjaba, Ambassador of the Republic of Namibia, Federal Research Minister Anja Karliczek and the Commissioner for Green Hydrogen in the BMBF, Stefan Kaufmann. Copyright: BMBF / Hans-Joachim Rickel

August 26, 2021 - Green Hydrogen Project Announcement

# Hon. President Geingob at COP26

Climate change and the worsening ecological crisis obey no sovereign boundaries. COP26 is the international community's last chance to collectively overcome the disconnect between a divided international system and a global calamity that threatens us all. Namibia is taking transformative steps towards honoring this responsibility.

We are taking these bold steps to enhance our energy security, decarbonize our country, assist our regional and global peers to reduce their emissions and build a more resilient economy.







#### "100% Solar, Wind & Batteries is Just the Beginning"



www.youtube.com/c/RethinkX

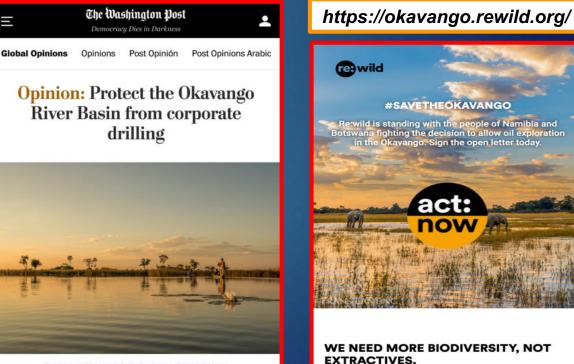
# Calls to Action for Namibians: 1. Nationwide Ban on Fracking

2. Immediate Kavango Drilling Moratorium

#### "You can repeat it again, we are saying it over and over again, you can transmit it and multiply it as many times as possible, this is the position of the Namibian government, there will be NO fracking on the

Namibian soil."

- Maggy Shino Petroleum Commissioner



We don't need more oil because we have enough proven reserves

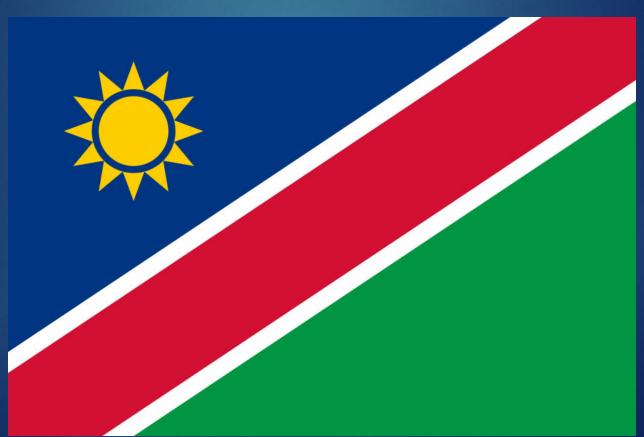
to supply demand as the world transitions to a more sustainable

low-carbon economy.

Botswana's Okavango Delta is shown. (@ Peter Moore)

By Prince Harry and Reinhold Mangundu October 14, 2021 at 2:46 p.m. EDT

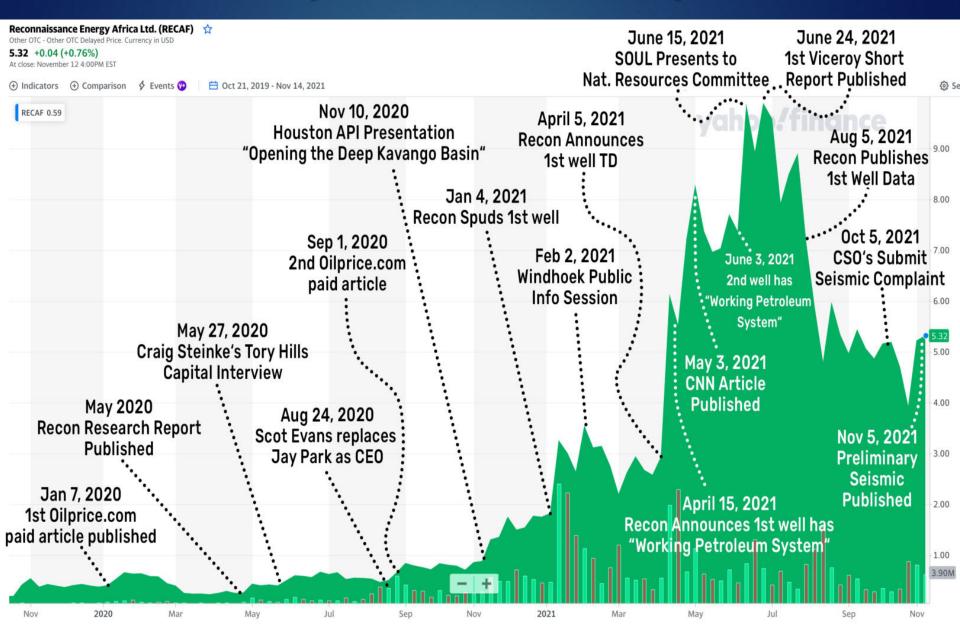
# Calls to Action for Namibians: 3. Renewable Energy Bill of Rights 4. LEAD THE WAY!





**Appendix Slides** 

## When Reality **Doesn't Meet Expectations:**



### **Recon Insiders Taking Money Off the Table:**

Holder Name	Trade Date Range	Security Type	Transacted Shares	Transaction Value Transaction Type	Price Range (C\$)
James Granath	9/14/2021	Common Shares	(40,000)	Range (C\$) 286,793.86 Open Market Disposition	7.17
Independent Director	6/14/2021	Common Shales	(40,000)	200,783.00 Open market Disposition	
Steinsberger Tight Gas Consulting LLC	Sep-9-2021 - Sep-15-202 Common Shares		(22,000)	144,791.51 Open Market Disposition	6.08 - 7.61
Nicholas Steinsberger	Aug-16-2021 - Sep-17-20 Common Shares		(100,000)	672,065.30 Open Market Disposition	6.60 - 7.03
Senior Vice President of Drilling &					
Completions					
lan William Telfer	Aug-5-2021 - Aug-10-		(71,732)	642,800.44 Open Market Disposition	8.46 - 10.12
Carlos Javier Escribano Chief Financial Officer	7/20/2021	Common Shares	(75,000)	683,742.10 Derivative Exercise and S	0.75 - 9.87
	5/7/2021	Common Shares	(10,000)	103,461.64 Open Market Disposition	10.35
Anna Maria Tudela Corporate Secretary & Chief Compliance Officer	7/20/2021	Common Shares	(75,000)	381,416.87 Derivative Exercise and S	0.50 - 9.86
	5/7/2021	Common Shares	(4,706)	49,079.23 Open Market Disposition	10.43
	4/29/2021	Common Shares	(12,500)	78.987.35 Derivative Exercise and \$	2.24 - 8.56
	4/22/2021	Common Shares	(25,000)	182,226.61 Open Market Disposition	2.24 - 8.30
	12/2/2020	Common Shares	(25,000)	45,399.29 Open Market Disposition	1.82
	11/27/2020	Common Shares	(14,706)	0.00 Open Market Disposition	1.02
	11/2/12020	Common Shales	(14,700)	355,692.48	10
Scot Evans Chief Executive Officer	May-3-2021 - May-4-2	202 Common Shares	(35,000)	251,920.52 Derivative Exercise and \$	0.51 - 7.71
Shiraz Dhanani Independent Director	11/27/2020	Common Shares	(100.000)	167,442.79 Open Market Disposition	1.67
David Brian Elliott	7/15/2020	Common Shares	(6,500)	5,087.08 Open Market Disposition	0.78
	6/8/2020	Common Shares	(25,000)	15,616.80 Open Market Disposition	0.62
	5/7/2020	Common Shares	(20,000)	9,346.21 Open Market Disposition	0.47
	2/20/2020	Common Shares	(5,000)	4,031.72 Open Market Disposition	0.81
	2/10/2020	Common Shares	(3,000)	2,316.76 Open Market Disposition	0.77
	Jan-21-2020 - Jan-31-202 Common Shares		(8,500)	6,155.01 Open Market Disposition	0.70 - 0.79
			(68,000.00)	42,553.58	
Craig Arthur-Allan Steinke	1/24/2020	Common Shares	(35,000)	29,263.60 Open Market Disposition	0.84
	1/21/2020	Common Shares	(76,000)	60,621.59 Open Market Disposition	0.80
	12/18/2019	Common Shares	(54,000)	24,529.56 Open Market Disposition	0.45
	11/14/2019	Common Shares	(85,000)	41,915.35 Open Market Disposition	0.49
	Nov-7-2019 - Nov-11-2011 Common Shares		(2.500)	1,757.68 Open Market Disposition	0.66 - 0.71
	10/30/2019	Common Shares	(50,000)	19,064.31 Open Market Disposition	0.38
			(302,500.00)	177,152.09	

Sources: SEDI Insider Filing Browser, S&P Capital IQ



# **Summary of Potential Reservoir Zones**

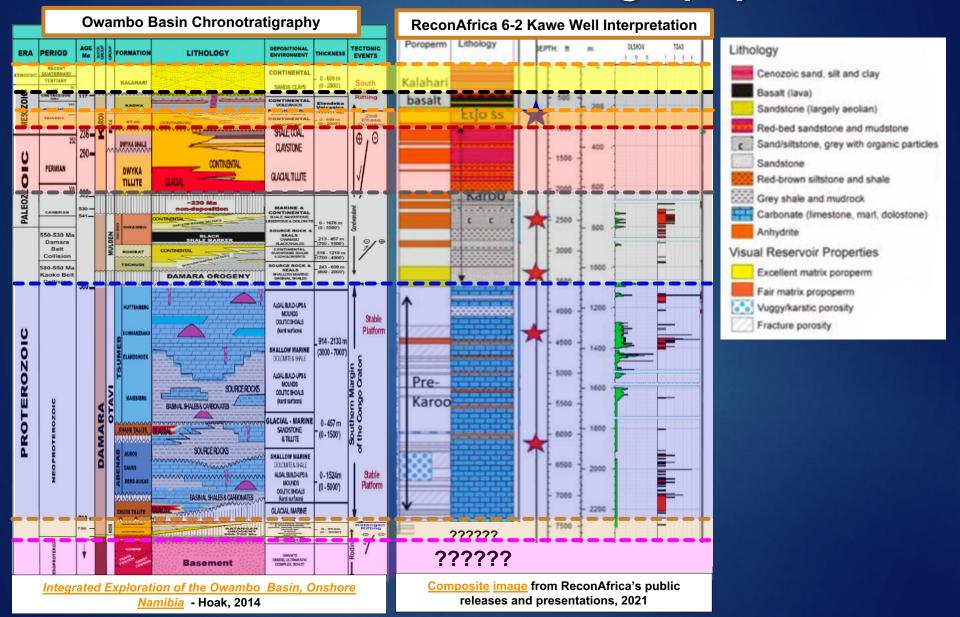
Zone	Net Thickness (m)	Avg. Porosity	Avg. Water Saturation*	Oil/Gas Shows	Comments
Clastic 700	54	20%	98%	oil and gas	Mudlog oil and gas (c2+) shows
Clastic 800	14.9	19%	100%	oil and gas	Live oil in drilling fluid
Clastic 1000	94	20%	98%	Trace	Core porosity up to 23%, high net/gross ratio
Carb 1350	5.3	9%	56%	Oil	Core porosity up to 17%, oil observed in drilling fluid
Carb 1900	29.2	8%	61%	Weak gas	Core porosity up to 14%, fractures present

August 31st, 2021 – From Netherland Sewell's Petrophysical study of the Kawe well

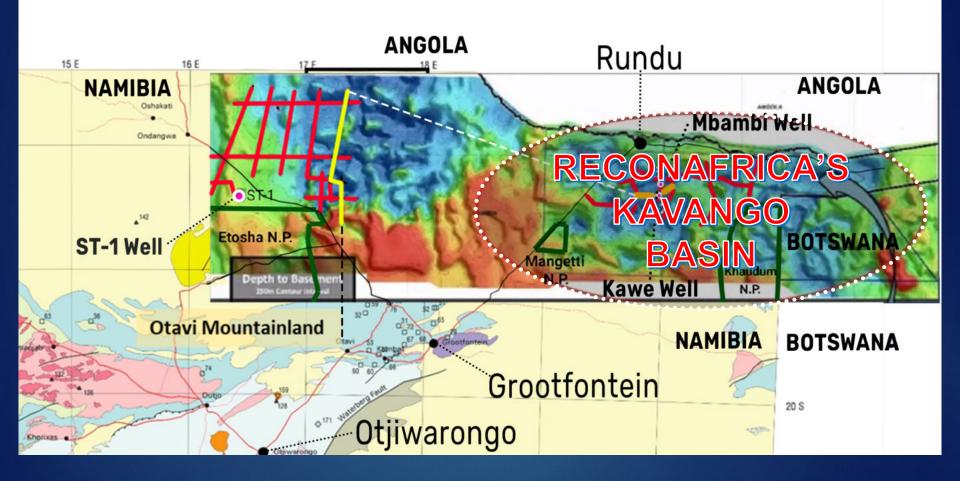
\*Estimates of water saturation (Sw) are based on log data. Hydrocarbon saturation estimates are 1-Sw.



### Recon's Well Data Correlates to the Owambo Basin's Stratigraphy



# Recon's "Deep Kavango Basin"



#### **Oilprice.com Paid Promotions:**

- Jan 7, 2020 <u>"Is \$90 Oil Possible? An Interview With Jay Park"</u>
- Sept 1, 2020 <u>"The Largest Oil Play Of The Decade? Interview With Daniel Jarvie"</u>
- Nov 18, 2020 <u>"Is This The Most Exciting Oil Stock For 2021?"</u>
- Jan 11, 2021 <u>"Is This The Most Exciting Oil Play Of The Decade?"</u>
- May 25, 2021 <u>"Is This The World's Most Exciting Oil Discovery? An Interview With Craig Steinke"</u>
- June 11, 2021 <u>"Is This The Most Exciting Oil Play Of The Last 20 Years?"</u>
- June 29, 2021 <u>"Recon Africa: The Truth About The World's Most Exciting Oil Play"</u>
- July 20, 2021 <u>"Could This Be The Most Promising Oil Play Of The Decade?"</u>
- Aug 9, 2021: <u>"Update On The World's Most Exciting Oil Play: Interview With Scot Evans"</u>
- Nov 4, 2021: <u>"Could This Be The Biggest Winner Of The Oil Price Boom?"</u>

# **ReconAfrica's Mud Pit Double-Downs**

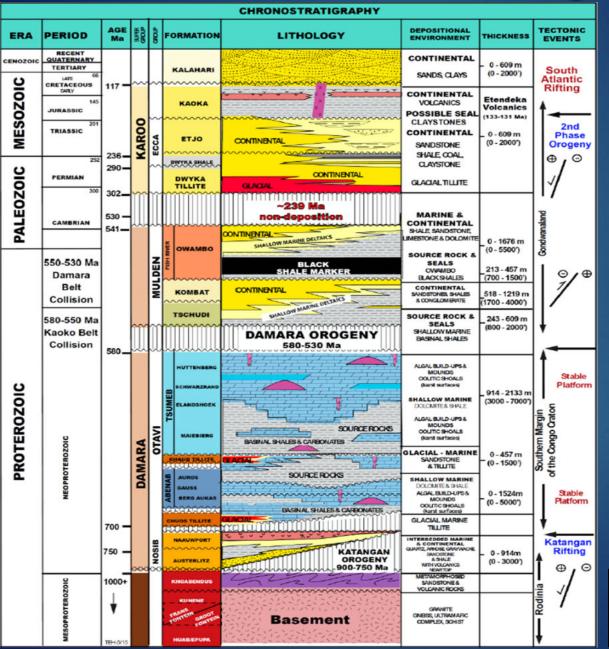
No pit liner used to protect the groundwater:

"A 100% Organic Drilling Fluid System"

"ReconAfrica's reserve pit uses a bentonite clay/gel layer as a safer (and more expensive) alternative to polyurethane pit liners. We are using the same product used widely by farmers and others when their ponds start losing water."

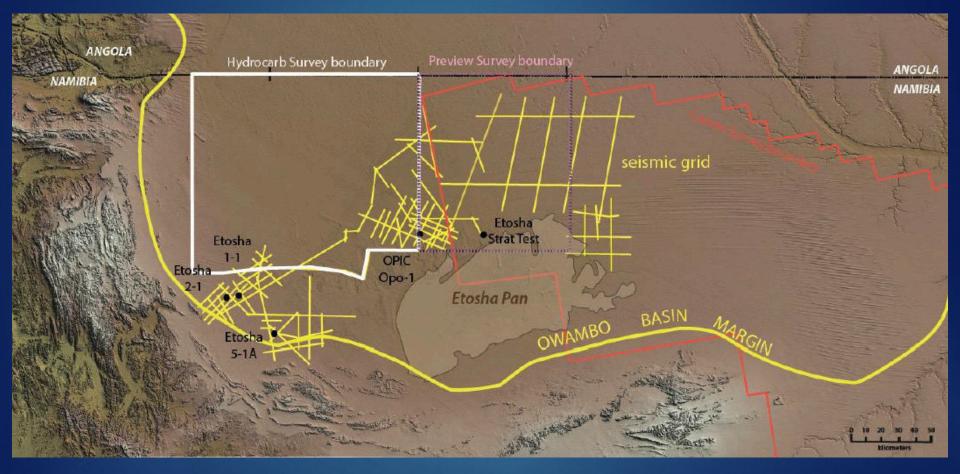
"Once drilling is complete, the remaining fluid can be recycled or used as a soil enhancement/fertilizer for agriculture. The fluid will biodegrade, yielding no toxic or damaging by—product, just an effective fertilizer that has been used by farmers and the agricultural industry in the U.S. and around the world.

#### Owambo Basin Stratigraphy



Integrated Exploration of the Owambo Basin, Onshore Namibia - T. Hoak, 2014

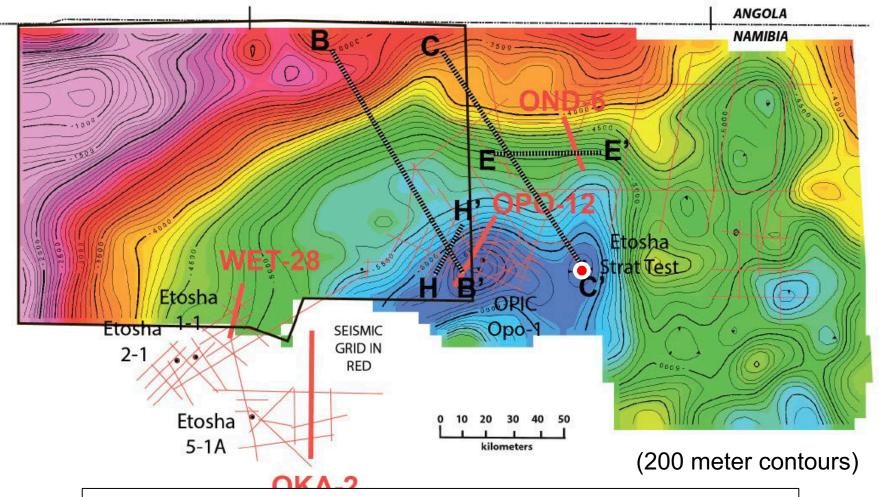
# Owambo Basin Data: Magnetics, Gravity, Seismic & Wells



Integrated Exploration of the Owambo Basin, Onshore Namibia - T. Hoak, 2014

#### **Owambo Basin** Depth to Basin Map (~6,600 m)

#### LOCATION MAP OF MODELED GRAVITY AND MAGNETIC PROFILES AND INTERPRETED SEISMIC LINES ON DEPTH-TO-BASEMENT BASE



Integrated Exploration of the Owambo Basin, Onshore Namibia - T. Hoak, 2014