WINCHESTER
ENERGY LIMITED

Australian Energy and Minerals Investor Conference

17 March 2021

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The estimated petroleum reserves and resources referred to in this presentation were first announced to the ASX on 16 March 2021.

The estimated quantities of petroleum that may potentially be recovered by the application of future exploration and development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons. The Company confirms that it is not aware of any new information or data that in its opinion materially affects the information included in the relevant market announcement and that all the material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

COMPETENT PERSON'S STATEMENT

The information in this document relating to petroleum resources and exploration results is based on information compiled by Mr Laurence Roe. Mr Roe has a BSc in Geophysics from the University of Adelaide and has over 40 years experience in the technical, commercial and managerial aspects of the oil and gas industry. Mr. Roe has consented in writing to the inclusion of the information stated in the form and context in which it appears.

The Contingent and Prospective Resources estimates in this report have been compiled by Kurt Mire, P.E. of Mire Petroleum Consultants from information provided by Winchester Energy. Mr Mire is a registered professional Engineer in the State of Texas and has over 30 years' experience in petroleum engineering. These Contingent and Prospective Resource estimates and their associated calculations may be subject to revision if amendments to mapping or other factors necessitate such revision.

Gas quantities are converted to boe (barrels of oil equivalent) using 6,000 cubic feet of gas per barrel. Quoted estimates are rounded to the nearest barrel.

All references to currency are in US$, unless stated otherwise.

Winchester Energy Limited

Summary

- Established US oil and gas explorer and producer
- Listed on ASX in 2014 (ASX Code: "WEL")
- Operations office in Houston, Texas
- Corporate office in Perth, Western Australia
- Winchester operates 18,856 net acres under lease in Nolan & Coke counties in the eastern Permian Basin, Texas
- Ongoing conventional oil and gas production:
  - ✓ 252 boepd (gross; Q4/20)[1]
- Net Reserves and Resources total 11.6 million barrels of oil equivalent (mmboe)[2,3]
- No Debt

Pumpjack in Winchester's Mustang Oil Field, Nolan County, Texas

Notes:
1. Average daily production in Q4 2020 – refer to ASX release: Quarterly Activities Report to 31 December 2020.
2. 6,000 cubic feet of gas is equivalent to 1 barrel of oil on a thermal energy basis.
3. WEL ASX Release 16 March 2021.

Company Snapshot

Corporate

Key Metrics

ASX Code	• WEL
Shares on issue	• 691 m
Unlisted options on issue	• 45 m
Share price	• A$0.023 (12 March 2021)
Market Capitalisation[1]	• A$15.9 m
Cash[1]	• A$2.07 m
Debt	• NIL

Operating Metrics

Daily Production[2]	• 252 boepd gross; 187 boepd net to WI
Lifting Costs	• US$8.46 / barrel
Qtly Net Revenue (Q4 2020)[2]	• A$507 K
Leasehold - Gross	• 21,707 acres
Leasehold – Net	• 18,856 acres
Net Reserves & Resources[3, 4]	• Reserves (3P): 496 mboe • Contingent Resources (2C): 4,352 mboe • Prospective Resources (P50): 6,753 mboe

Directors and Management

Laurence Roe - Executive Chairman / CEO	40 years technical experience & exploration success – USA (inc Permian Basin, Texas), Australia, International
James Allchurch - Non Executive Director	Technical & investment experience – ASX
Larry Liu - Non Executive Director	Commercial & investment experience – China
Tony Peng - Non Executive Director	Finance & merchant banking experience, USA, CFO Helios Energy
Doug Holland – Chief Operations Officer (Houston)	Extensive US operational experience
Ed May – Financial Controller (Houston)	Financial and Leasing Manager

Notes:
1. At 31 December 2020; A$/US$ exchange rate at that time: $0.70 – please refer to ASX release: Quarterly Activities Report to 31 December 2020
2. Average daily production in Q4 2020; net revenue in Q4 2020 – please refer to ASX release: Quarterly Activities Report to 31 December 2020. WI = Winchester's Working Interest.
3. 6,000 cubic feet of gas is equivalent to 1 barrel of oil on a thermal energy basis; mboe = thousand barrels of oil equivalent; mmboe = million of barrels of oil equivalent.
4. WEL ASX Release 16 March 2021.

Company Snapshot

Technical

- Large lease position in the Permian Eastern Shelf (Nolan / Coke Counties)
- High Working Interests; Established Production
- Winchester operates – controls its own destiny
- Leases covered by 3D seismic (exclusive to Winchester)
- Multiple stacked targets - typically extending over a 3,000 ft interval
- Drilling is typically vertical, shallow (around 7,000 ft) and inexpensive (US$700K D&C)[1]
- Extensive local infrastructure means a new well can be selling oil almost immediately after it is completed for production
- Strategy to create shareholder value by leveraging modern exploration science and technology to find, develop and exploit conventional oil and gas assets overlooked by previous explorers

WEL Reserves and Resources as of 31 December 2020[2,3]

Reserves - WEL Net Interests - Nolan County, 31 December 2020

Category	Net Reserves Oil (mBO)	Net Reserves Gas (mmscf)	BO equiv. (mboe)
Proved Developed Producing (PDP)	67.3	165.7	94.9
Proved Developed Not Producing (PDNP)/Shut In	0.0	0.0	0.0
Proved Undeveloped (PUD)	56.0	65.0	66.8
Total Proved Reserves (1P)	**123.3**	**230.7**	**161.8**
Probable Undeveloped	106.9	161.5	133.8
Total Proved & Probable Reserves (2P)	**230.2**	**392.2**	**295.6**
Possible Undeveloped	153.7	279.6	200.3
Total Proved, Probable & Possible Reserves (3P)	**383.9**	**671.8**	**495.8**

Contingent Resources - WEL Net Interests - Nolan County, 31 December 2020

Category	Net Contingent Resources Oil (mBO)	Net Contingent Resources Gas (mmscf)	BO equiv. (mboe)
Contingent Resources (Low Estimate; 1C)	1,472	2,828	1,944
Contingent Resources (Best Estimate; 2C)	2,923	8,572	4,352
Contingent Resources (High Estimate; 3C)	5,625	24,969	9,787

Prospective Resources - WEL Net Interests - Nolan County, 31 December 2020

Category	Net Prospective Resources Oil (mBO)	Net Prospective Resources Gas (mmscf)	BO equiv. (mboe)
Prospective Resources (Low Estimate; P90)	2,584	1,704	2,868
Prospective Resources (Best Estimate; P50)	5,994	4,554	6,753
Prospective Resources (High Estimate; P10)	13,512	11,969	15,507

Notes:
1. Depths and costs are indicative only and will vary from well to well & subject to prevailing market conditions.
2. WEL ASX Release 16 March 2021.
3. Reserves are stated net to Winchester's working interest and after deductions for royalty payments.
   - All reserves estimates were prepared using probabilistic and deterministic methods. All resource estimates were prepared using probabilistic methods. All reserves aggregation was performed by arithmetic summation. All resource aggregations was performed probabilistically.
   - Cautionary note: the aggregate 1P estimate may be a very conservative estimate and the aggregate 3P estimate may be very optimistic due to the portfolio effects of arithmetic summation.
   - Production quantities are measured at the leases via a sales meter (gas) or in oil storage tanks.

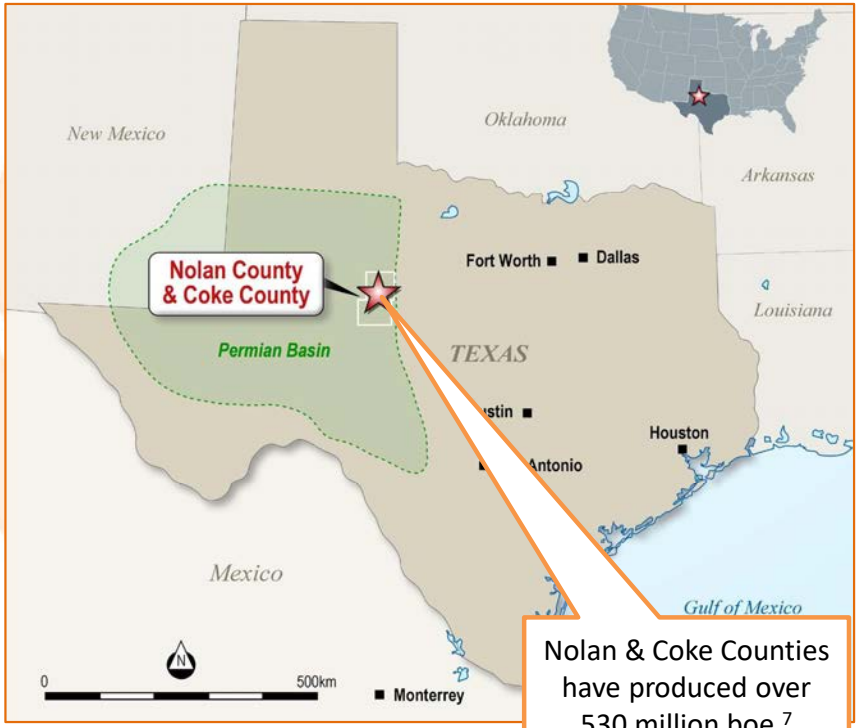
Permian Basin, Texas

Winchester active on Eastern Shelf

"The Permian Basin Is Now The World's Top Oil Producer"[1]

Permian Basin	
Stacked, proven, prolific oil producing horizons	
Technical Remaining Recoverable Resources [2]	**20 billion bo & 16 TCF** (Midland) **46 billion bo & 218 TCF** (Delaware)
Total oil and gas production *to 2018*[3]	**33 billion bo & 118 TCF**
Daily oil & gas production[4]:	**4.2 million bopd & 15.4 BCFG**
Proportion of current US oil production (4.3 mmbo/10.7 mmbo)[5]	**40%**
Proportion of US onshore rigs in Permian Basin:[6]	**52%**
Number of ASX Juniors exclusively focused on the Permian:	**1**

WEL Area Of Operations – Permian Eastern Shelf - Nolan & Coke Counties

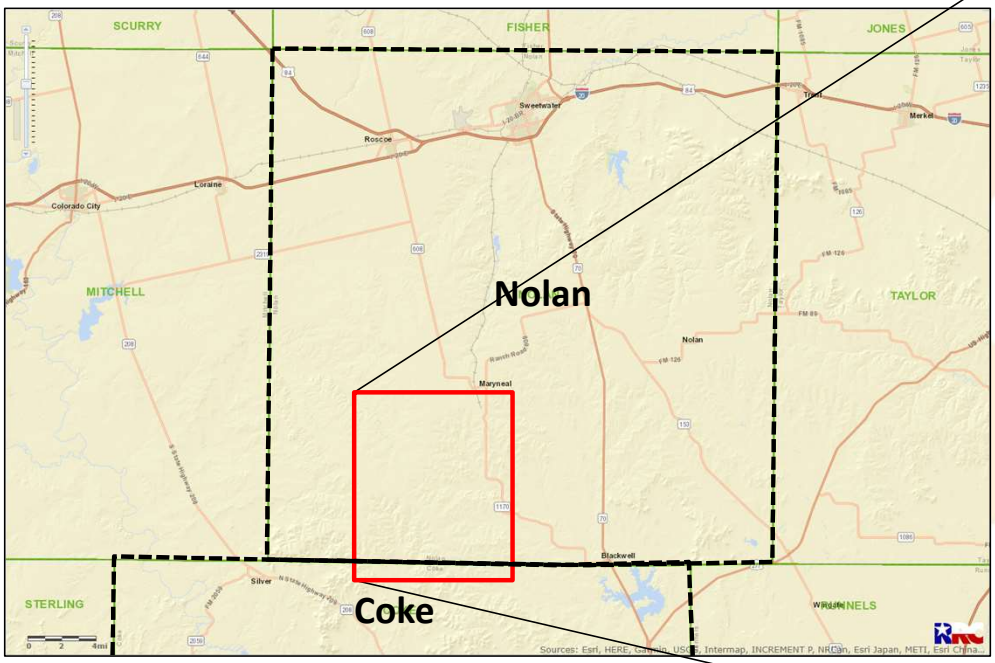


Notes:
1. Forbes Magaxine – April 2019
2. USGS - 2016 (Midland Basin); USGS - 2018 (Delaware Basin).
3. en.wikipedia.org/wiki/Permian_Basin_(North_America)
4. US EIA Drilling Productivity Report, 13 July 2020.
5. U.S. Crude Oil Production - Historical Chart | MacroTrends
6. Baker Hughes Rig Count 14 Aug 2020.
7. DrillingInfo Nov 2020.

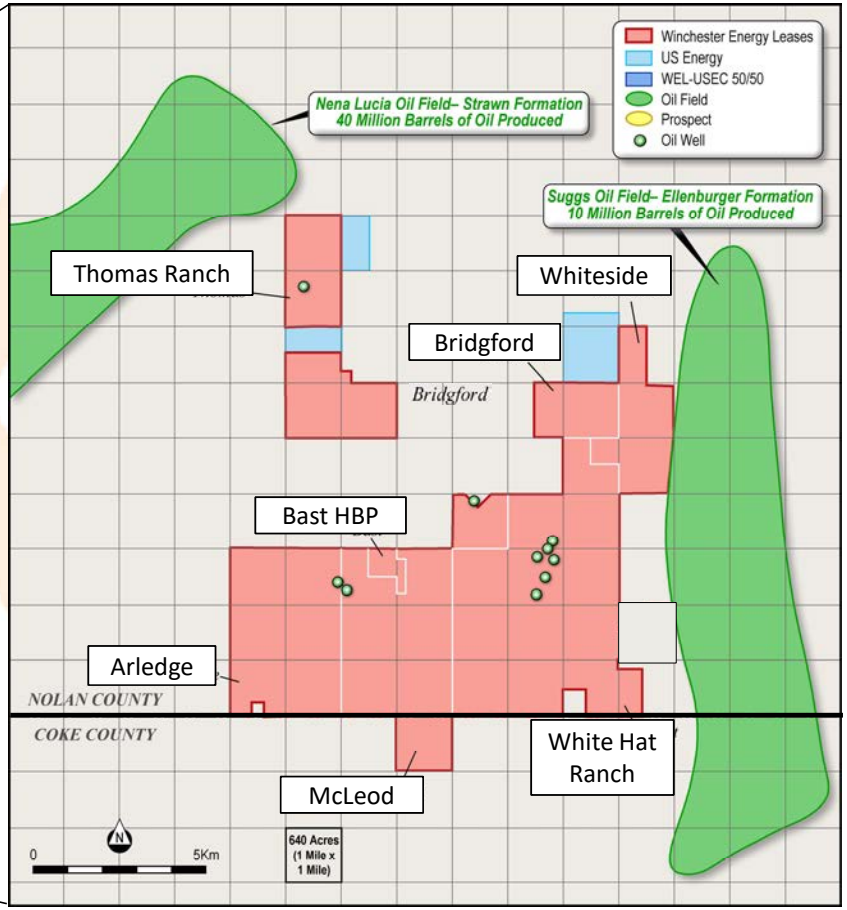
Nolan County Project - Land and Lease Status

Eastern Shelf - Nolan and Coke Counties

Winchester's Nolan County Project covers a large contiguous position, with over 19,500 net acres under lease, primarily in Nolan County.



SW Nolan County – Winchester leases and recent wells



Nolan County Project – Depositional Environments

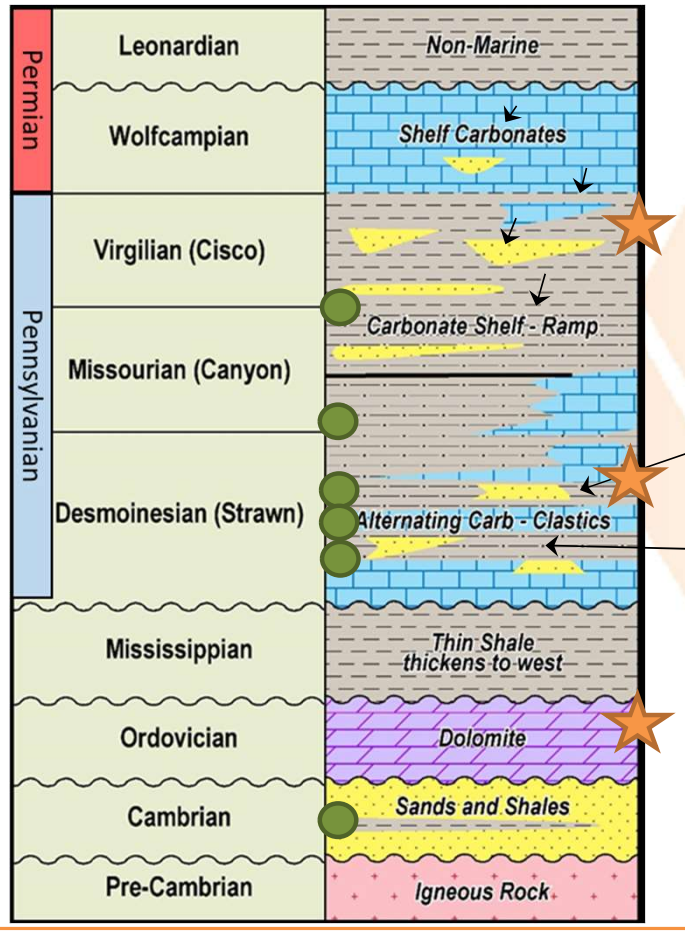
Key Zones and Potential

- Local production from multiple clastic and carbonate reservoirs in the Cambrian, Ellenburger, Strawn, Cisco and shallower zones.
- Current focus is on development of Mustang Field (Strawn Fry Sand) and Lightning Prospect (Cisco Sands).
- Significant conventional oil potential in untested Cambrian prospects and leads.
- Notional depths range from 4,500 ft (Top Cisco) to 7,500 ft (Top Cambrian).

WEL production

Locally productive

Eastern Shelf Stratigraphy (in part)



Shelf Carb	Tertiary – sporadic porosity/pay – serendipity play
Shelf Clastic	Tertiary – sporadic porosity/pay – serendipity play
Cisco Deltaic	Tertiary – widespread porosity – structural/pinchout traps
Cisco Slope	Unconventional – widespread gross pay – Hz approach?
Cisco Basal	Tertiary – sporadic porosity/pay – serendipity play
1 Carb – **Canyon Reef**	**Primary** – 3D mappable – commercial pods
1 Clastic - **Fry**	**Primary** – 3D mappable; commercial pods – **Mustang/Bast**
2 Carb - Jennings	Secondary – by-passed pay
2 Clastic – **Spitfire**, Gardner, Odom	**Primary** – 3D mappable – large
2.5, 3 Carb	Tertiary – sporadic porosity/pay – serendipity play
Ord Ellenburger	Secondary – historical targets – porosity may be paleo structurally related – **White Hat Ranch**
Cambrian	**Primary** – 3D 4-way dip traps – large – engages all shallow pot **Productive 10-20 km east of leases along Ft Chadbourne fault**

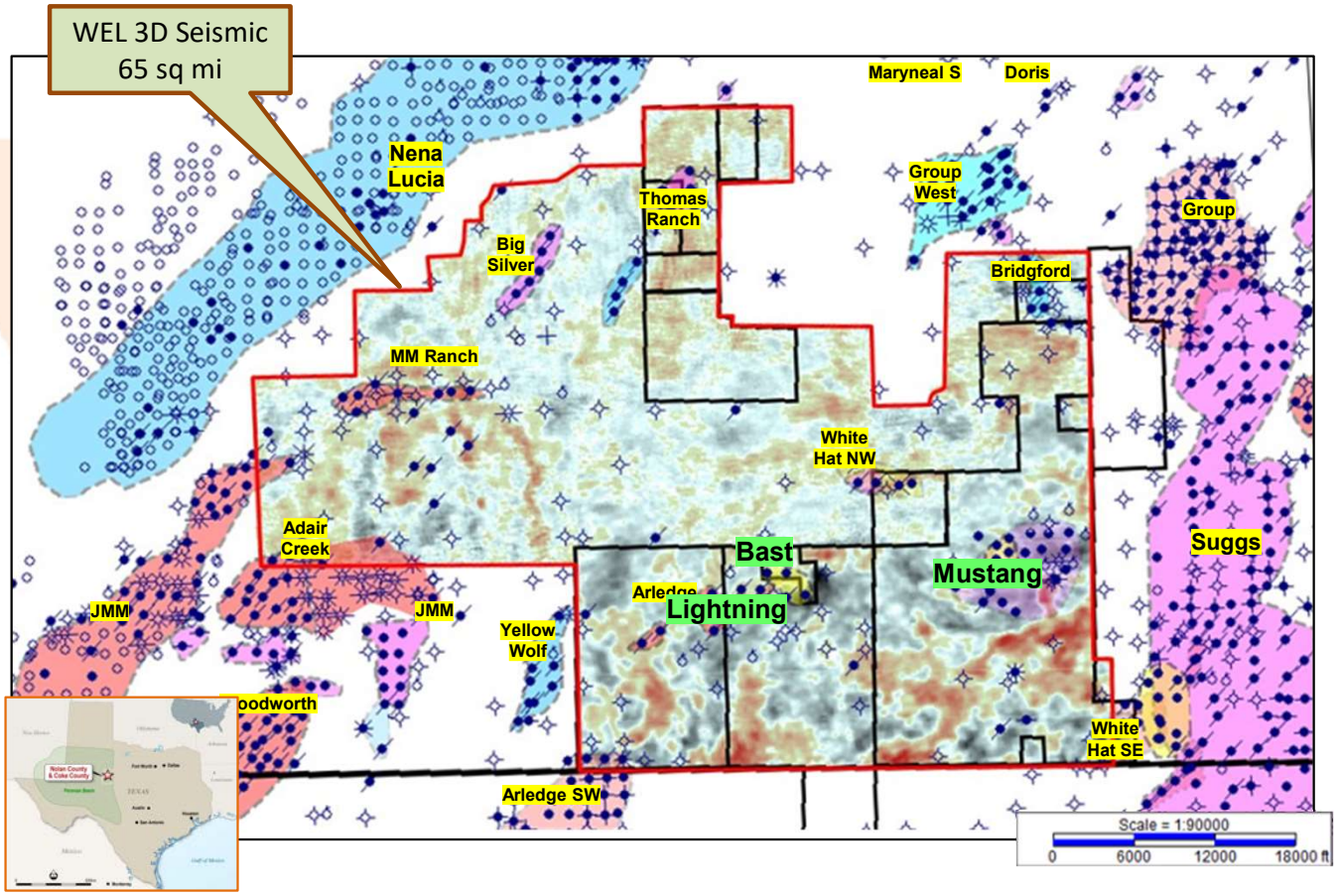
Nolan County Project – Historical Production and WEL 3D Seismic

Winchester properties and 3D seismic overlying local production

- Over 18,856 contiguous net acres under lease, primarily in Nolan County.
- Leases covered by 65 mi^2 of 3D seismic – exclusive to Winchester.

- **Local Production from multiple clastic** and carbonate reservoirs in the Cambrian, Ellenburger, Strawn, Cisco and shallower zones.
- **Allocated Production by Fields:**
  - ✓ Penn/Strawn Carb: 50 MMBO
  - ✓ Ellenburger: 28 MMBO
  - ✓ Cisco/Canyon 29 MMBO
  - ✓ Strawn 20 MMBO

Key Producing Intervals
Cisco
Strawn Carbonates
Strawn Clastics
Ellenburger

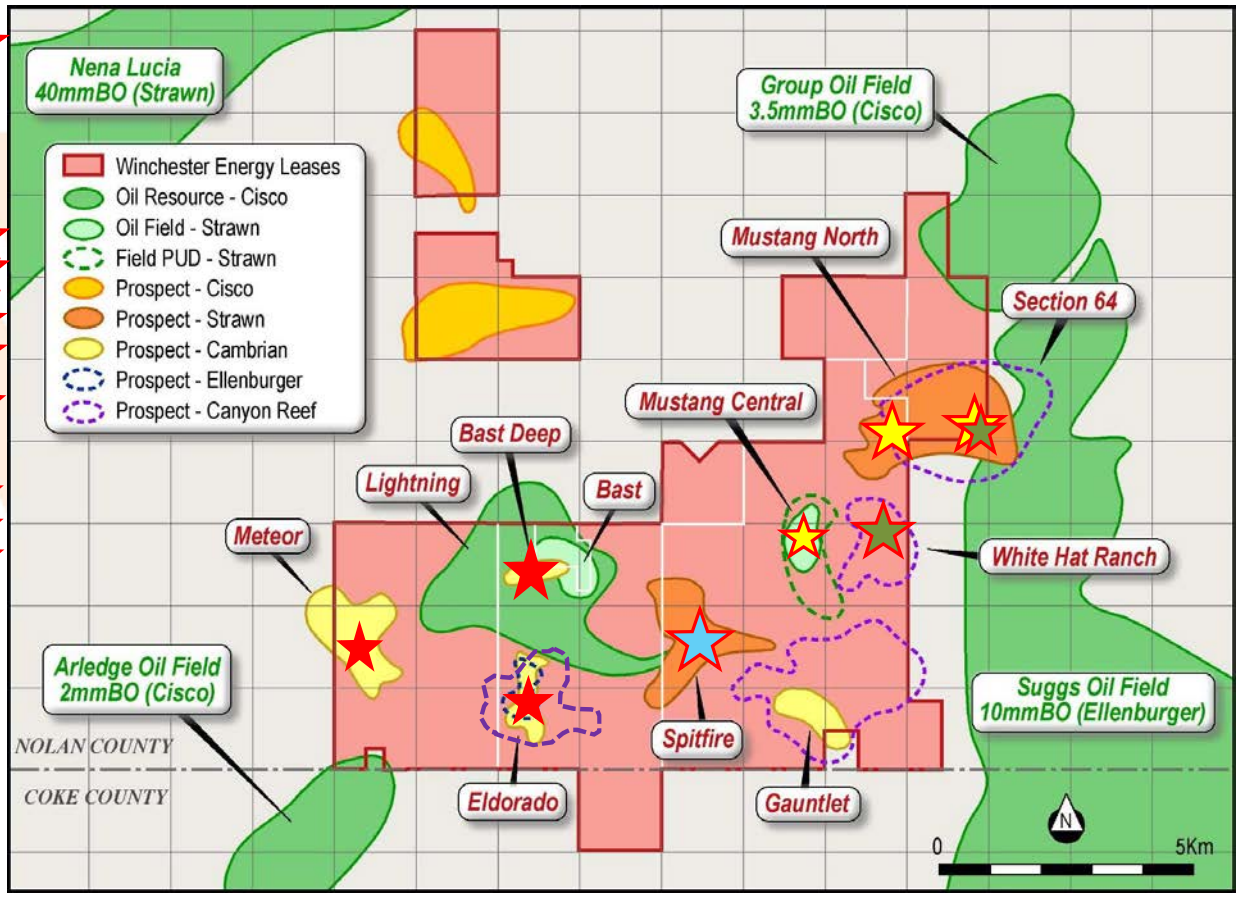


Nolan County Project - Prospect and Play Summary

2021 Review - Multiple Prospects and Play Types

Winchester Production	• Mustang Field (Fry Sand, Elbgr) • Bast Field (Bast Sand) • Lightning (Cisco)
Winchester Resources	• Greater Lightning (Cisco Tight Oil)
Canyon Reef Prospects	• **Hurricane 6402** • White Hat Ranch (re-entry?)
Fry Sand Prospects	• **Mustang North 6301** • **Hurricane 6402**
Strawn Prospects	• **Spitfire** • Bast East (+ Cisco)
Cambrian Prospects	• **Meteor Prospect** • **Bast Deep Prospect** • **El Dorado Prospect (+ ELB)** • Gauntlet Lead
Ellenburger Prospects	• Bast Deep • Eldorado • Mustang Area
Horizontal Plays	• Cisco Fan Plays (Lightning) • Three Fingers Shale • Strawn Sands • Strawn Carb (Canyon Reef)

Winchester Energy leases and oil fields, prospects and leads



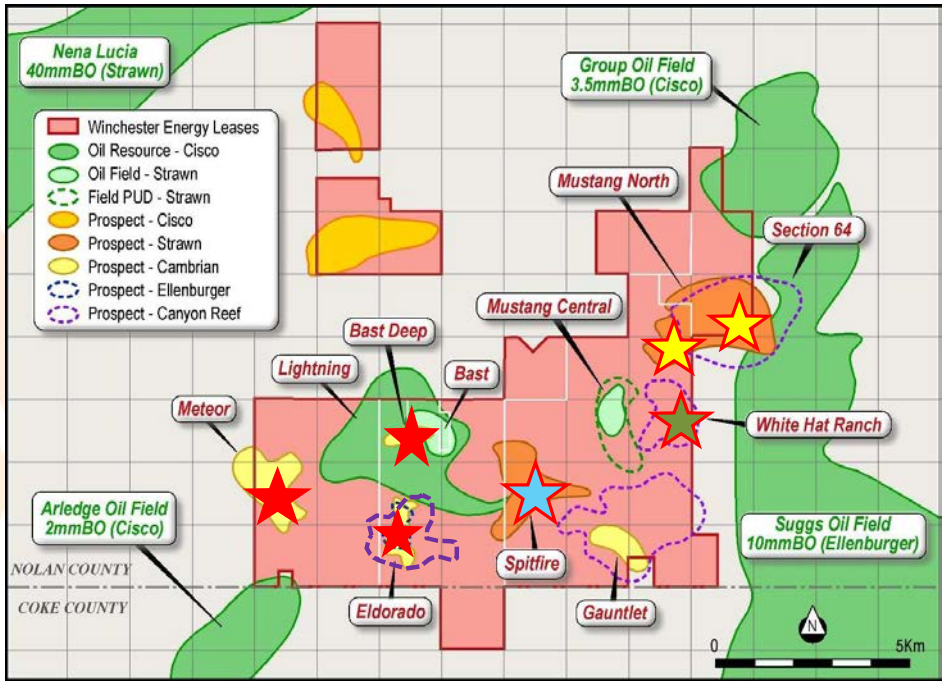
Nolan County Project - Prospect and Play Summary

Gross Resources (Unrisked)[1]

Gross Contingent Resources	P90 mboe	P50 mboe	P10 mboe
Lightning Cisco	2,174.2	4,822.5	11,015.3
Bast Field (Primary)	143.0	438.5	935.2
Bast Field (Secondary)	242.2	471.7	932.0
Total	2,559	5,733	12,883

Gross Prospective Resources	P90 mboe	P50 mboe	P10 mboe
Bast Deep	381.8	948.2	2,340.5
Spitfire	1,222.7	2,730.7	6,030.2
Meteor	694.8	1,934.5	4,685.8
Hurricane (Canyon Reef)[1]	560.3	1,036.7	1,910.3
Mustang North[2]	287.6	623.1	1,344.0
El Dorado	519.2	1,358.5	3,516.8
Total	3,666	8,632	19,828

Grand Total	6,225	14,635	32,711



Notes:
1. WEL leases cover only 50% of Mire's assessed volumes – the volumes shown have been scaled accordingly.
2. WEL leases cover only 80% of Mire's assessed volumes – the volumes shown have been scaled accordingly.

Notes:
1. Refer WEL ASX Release 16 March 2021.

Nolan County Project

Proposed Forward Program

Q2/Q3 2021

- Ongoing production from Mustang and Bast oil fields.
- Low-risk drill/workover program including 0.95 – 2.34 million boe potential Bast Deep prospect

April –	Bast #1 Workover
May –	Bast Deep Well
June –	McLeod 17-03 w/over
July –	Mustang 21-06 Well

Q3/Q4 2021

- Ongoing production
- Low/Med-risk drill/workover program with 2.7 – 6 mmboe Spitfire potential upside; Meteor subject to Bast Deep results
- Consolidate increasing reserves, production & cash-flow
- Farmout higher risk operations

Meteor
Bast A #1 Workover
Spitfire
El Dorado
Hurricane
Mustang North

2022

- Ongoing production and vertical drilling
- Introduce horizontal drill program (Lightning Cisco and/or Hurricane Canyon Reef)
- Seek local farminee to defray cost and risk.

Mustang / Mustang North
Hurricane
Bast Flood?
Hurricane / Mustang North Hz
Lightning Cisco Hz

Nolan County Project

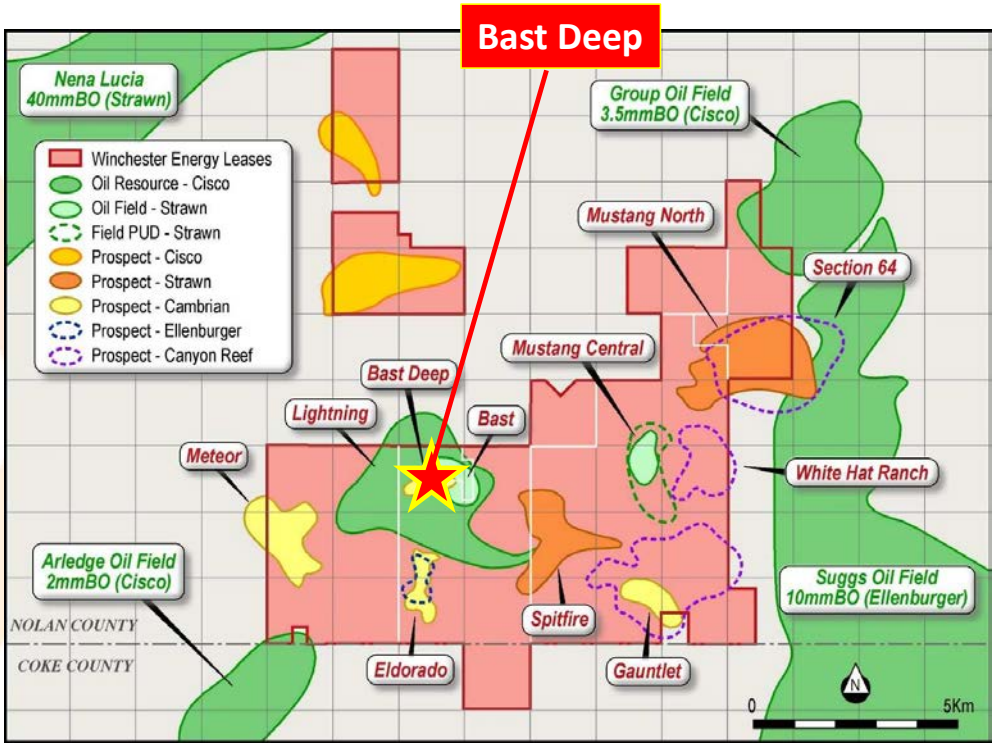
Upcoming Activity

- 2021 Q2/Q3 Program
  - ✓ Bast Deep
  - ✓ Mustang Development
  - ✓ Workovers

Bast Deep - High Impact Potential

Successful Cambrian Test will be "Game-Changer" for Winchester

Bast Deep Prospect	
Gross Prospective Resources[1]	**0.95 million boe (P50/Best Estimate)** **2.34 million boe (P10/High Estimate)**
Primary Target	**Cambrian Sandstone (4 way dip)**
Secondary Target	**Ellenburger Fm**
Additional Targets	**Bast Sands (Strawn)**
Programmed Total Depth	**7,700 ft**
Estimated Costs (100%)	**DHC: US$400,000** **Completion: US$400,000**
Estimated Spud Date	**May 2021**



Objective: To test multiple closed targets along the west Bast Structure – low risk Strawn bailout

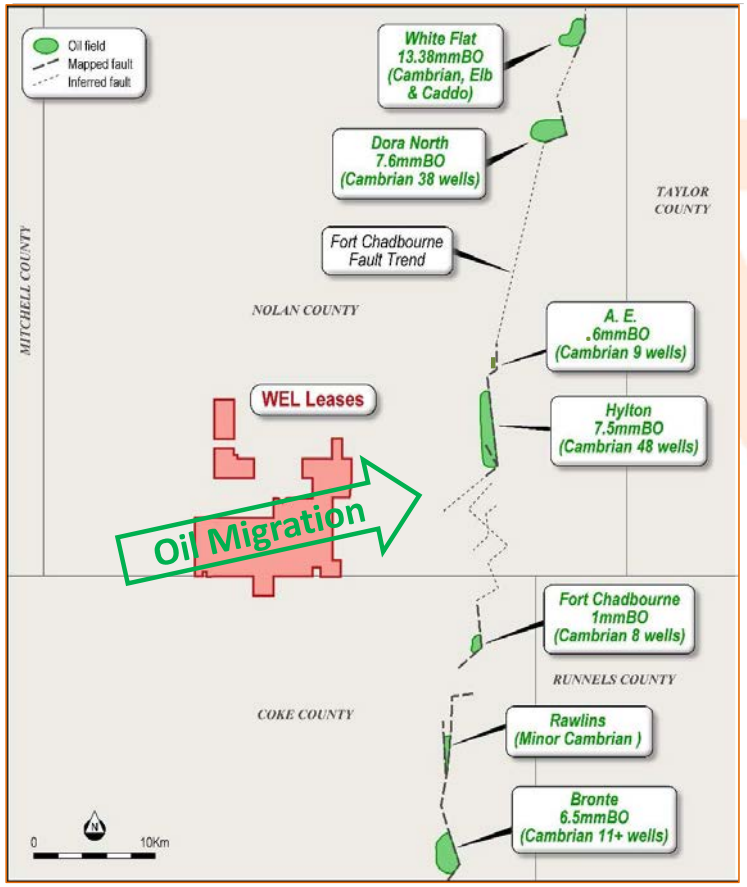
Cambrian success will confirm play type and lead to accelerated program at Meteor (Mean est. Prospective Resource of 2.4 mmboe) and El Dorado (Mean est. Prospective Resource of 1.8 mmboe)

Notes:
1. Refer WEL ASX Release 16 March 2021.

Nolan County Cambrian – High Impact Exploration Play

Cambrian Prospectivity - Regional

Cambrian Fields – Fort Chadbourne Fault Trend



Cambrian Production Summary – Fort Chadbourne Fault trend

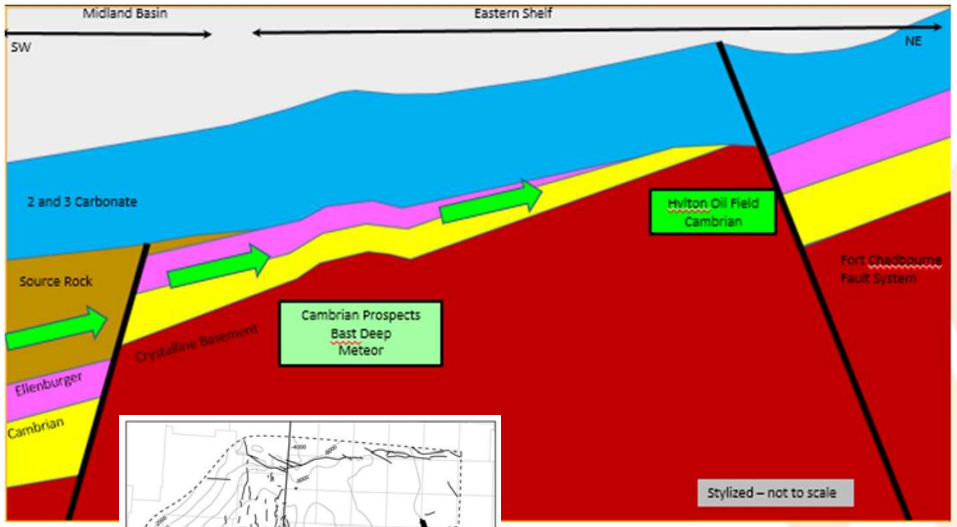
Field	Cum Production	Producing Zones
White Flat	13.4 mmBO	Cambrian, Ellenburger, Caddo
Dora North	7.7 mmBO	Cambrian
A.E.	0.6 mmBO	Cambrian
Hylton	7.5 mmBO	Cambrian
Fort Chadbourne	1.0 mmBO	Cambrian
Rawlins	Minor	Cambrian
Bronte	6.5 mmBO	Cambrian

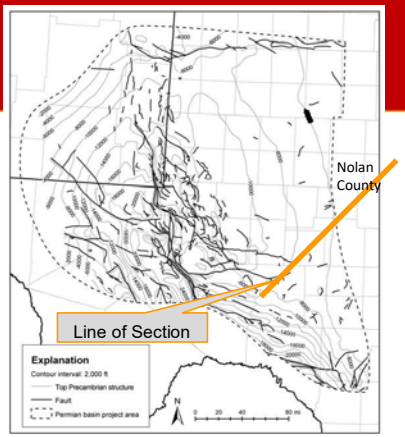
Total ex White Flat	23.3 mmBO	Cambrian Only
Total All	36.7 mmBO	Cambrian, Ellenburger, Caddo

Nolan County Cambrian – High Impact Exploration Play

Cambrian Prospectivity – Regional Charge Model

Cambrian Charge Model

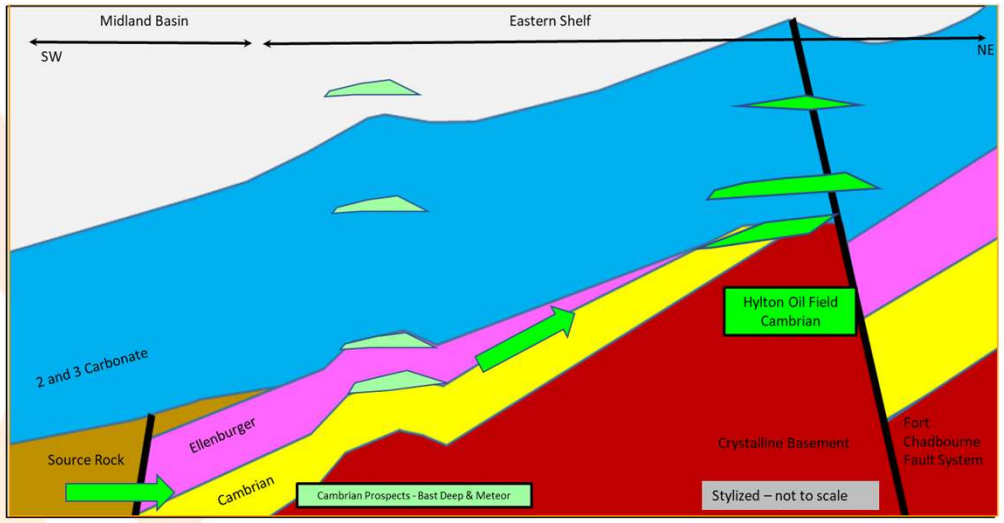




Permian Basin

Pre-Cambrian Structure

Cambrian Fields and Potential Traps



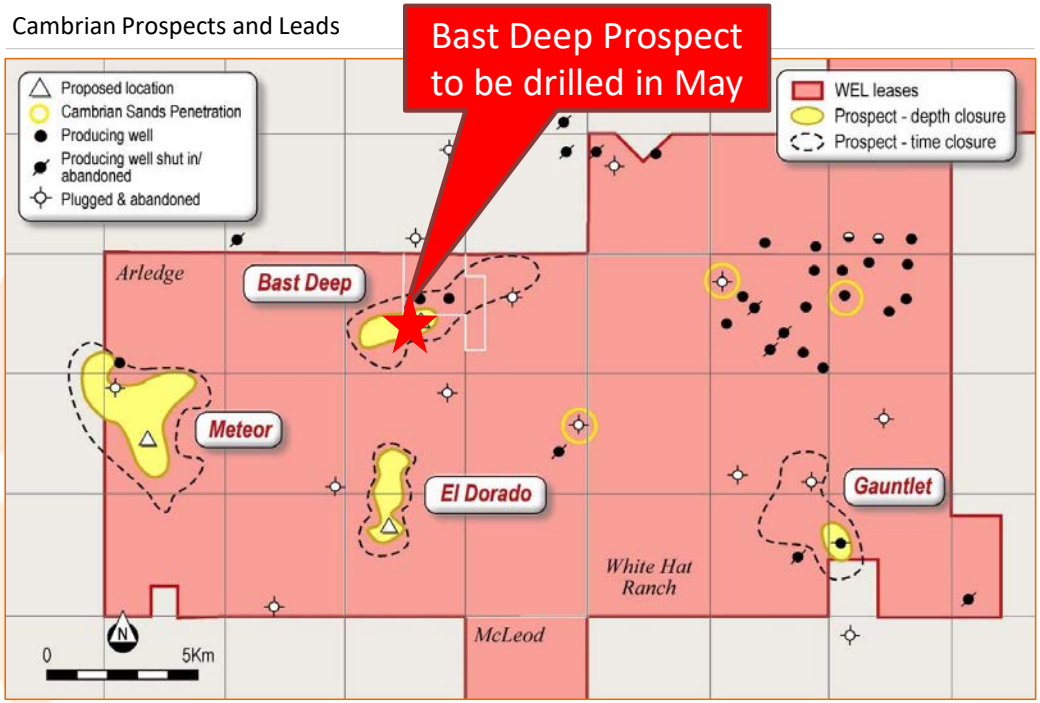
Nolan County Cambrian – High Impact Exploration Play

Cambrian Prospectivity - Regional

Cambrian Play

- Primary Target – Structural closures at Cambrian Sandstone level.
- This thick, porous widespread reservoir has produced from nearby fields. Structures 10 miles to the east have produced 15+ MMBO from the Cambrian Sandstone.
- All prospects are structural closures mapped on high quality 3D seismic.
- Three **off-structure** penetrations of the Cambrian on the 3D have good reservoir properties but were wet.
- The Cambrian sandstone is top sealed by the thick, largely tight Ellenburger Dolomite.
- Cambrian closures have associated Ellenburger, Odom and Strawn closures and targets.

Cambrian Prospects and Leads



Winchester Cambrian Prospects

Prospect	Gross Prospective Resource (Best Estimate; P50)	Gross Prospective Resource (High Estimate; P10)
Bast Deep	0.95 million boe	2.34 million boe
Meteor	1.94 million boe	4.69 million boe
El Dorado	1.36 million boe	3.52 million boe

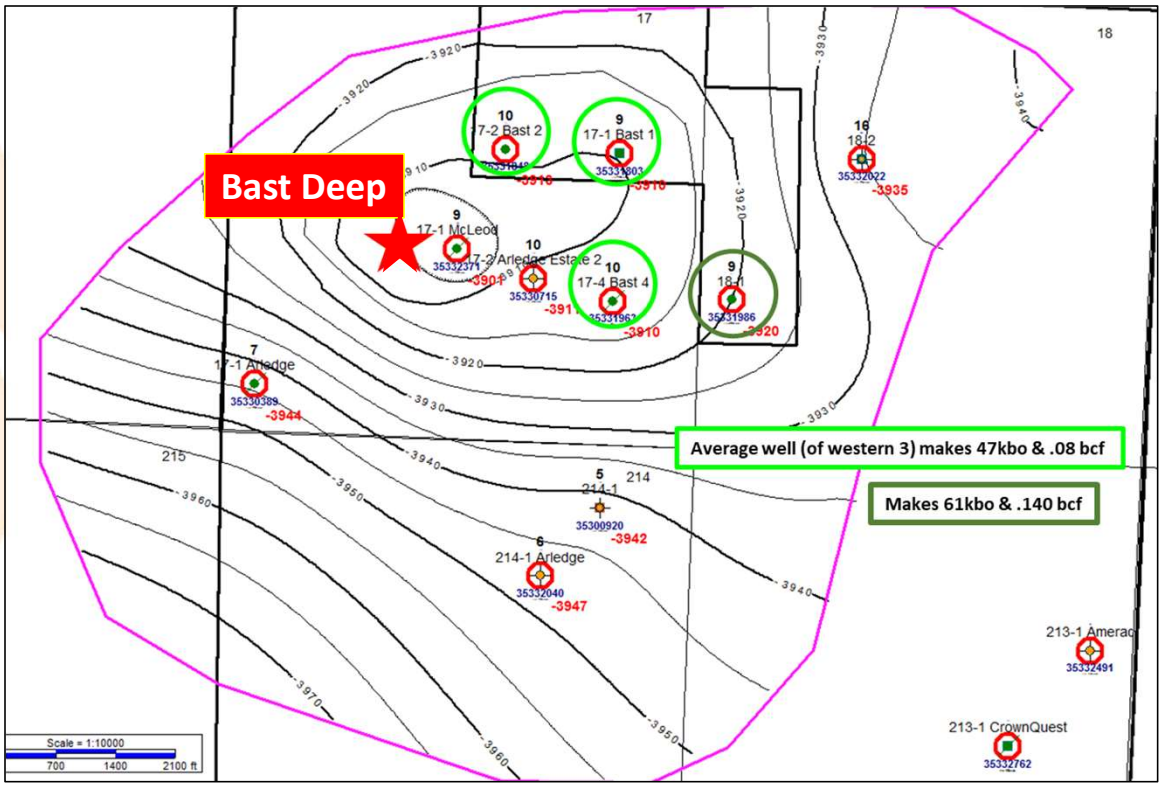
Bast Deep – Strawn Sands offer additional low risk target

Bast Deep well to also penetrate western side of existing oil field

Bast Deep

- Secondary Target is the Upper Strawn sandstone. This 10’ sand has produced oil in four adjacent wells with an average ultimate recovery of 47,000 barrels per well.
- This sand is likely present at Bast Deep and up-dip to existing production.
- Additional targets - Ellenburger and Cisco oil pay is present in nearby wells.

Bast Field - Strawn Sst Depth Structure Map showing Production and proposed Bast Deep location.



Nolan County Project

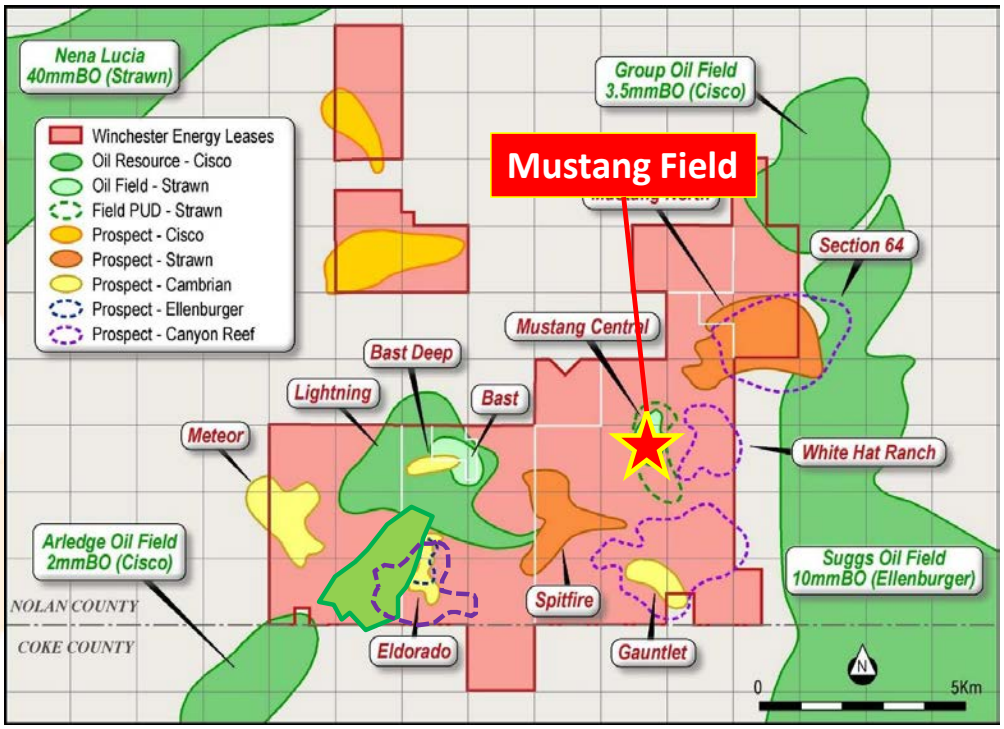
Upcoming Activity

- 2021 Q2/Q3 Program
  - ✓ Bast Deep
  - ✓ Mustang Development
  - ✓ Workovers

Nolan County Project – 2021 Q2/Q3 Program

Mustang development well – WHR 21-06

WHR 21-06	
Reserves (PUD)	**74 mboe**
Primary Target	**Strawn (Fry Sand; 5,000- 6,000 ft)**
Secondary Target	**Ellenburger Fm (7,000 ft)**
Additional Targets	**None**
Programmed Total Depth	**7,200 ft**
Estimated Costs (100%)	**DHC: US$350,000** **Completion: US$350,000**
Estimated Spud Date	**July 2021**



Objective: Fry Sand step-out development location

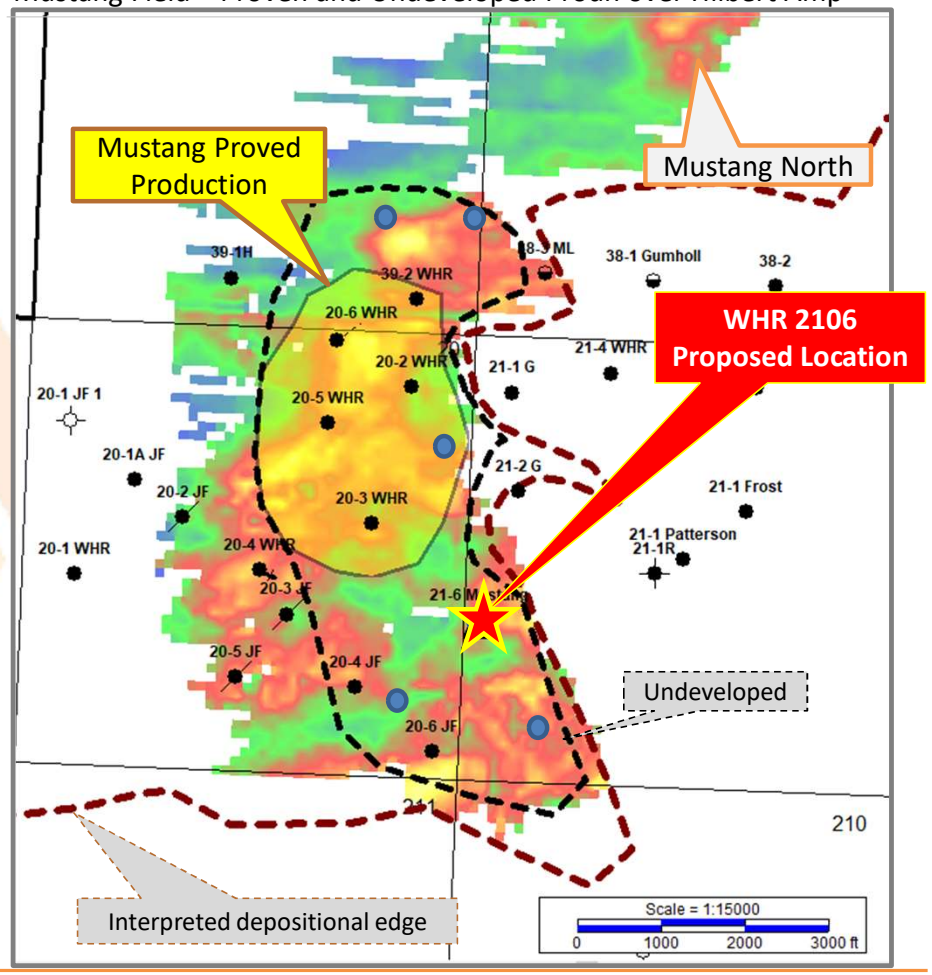
Nolan County Project – Development Program

Fry Sand Step-out

Field Mapping

- The Mustang Oil Field is a stratigraphic trap formed by the up-dip pinch-out of the westerly dipping Fry Sst. The Fry was deposited from the adjoining shelf to the east via a series of incised channels, with the sands ponding at the base of the slope, typically in a NE-SW orientation.
- Deposition occurred in a number of separate pulses resulting in a number of discrete pods.
- The proven Mustang Central pod covers approx. 350 acres with up to six more drilling locations identified.

Mustang Field – Proven and Undeveloped Prodn over Hilbert Amp



Nolan County Project – Development Program

Fry Sand Step-out

Field Mapping

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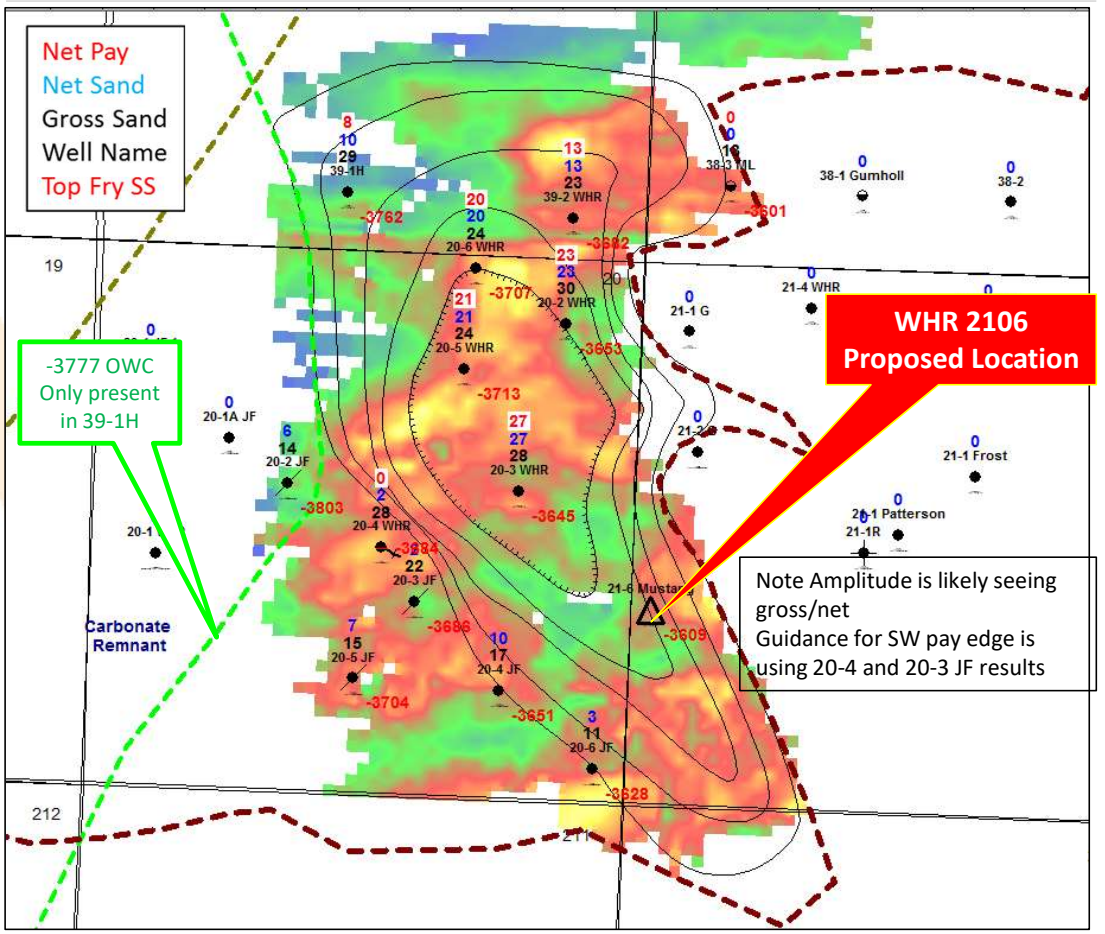
Fry Net Pay from Wells – Hilbert Amp Guidance



Nolan County Project

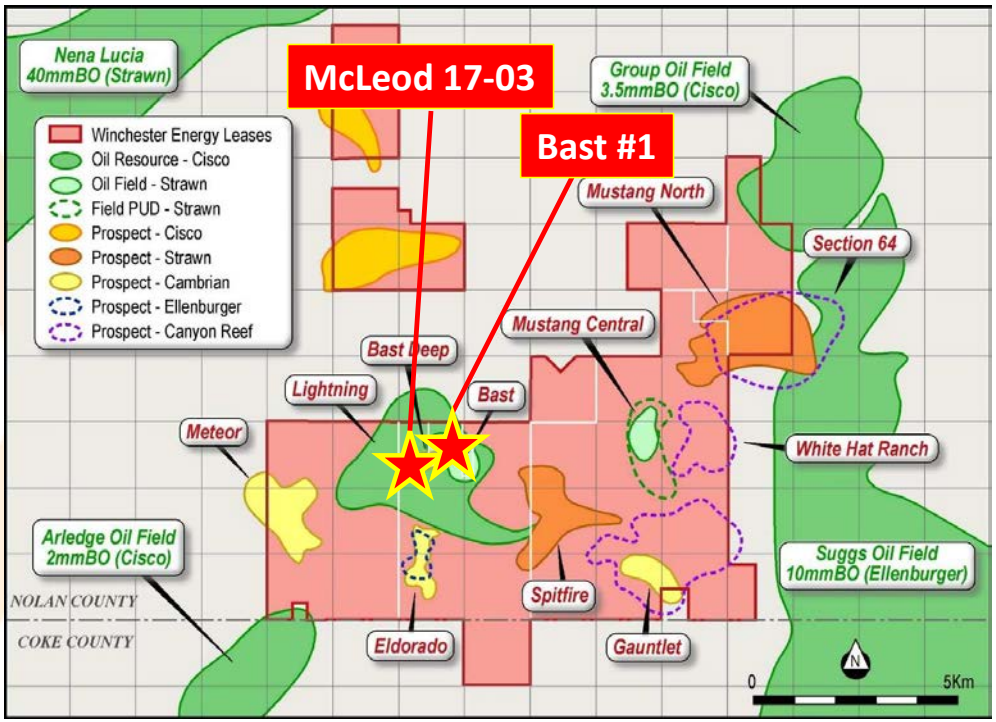
Upcoming Activity

- 2021 Q2/Q3 Program
  - ✓ Bast Deep
  - ✓ Mustang Development
  - ✓ Workovers

Nolan County Project – 2021 Q2/Q3 Program

Workovers - fracture stimulate Cisco Sands

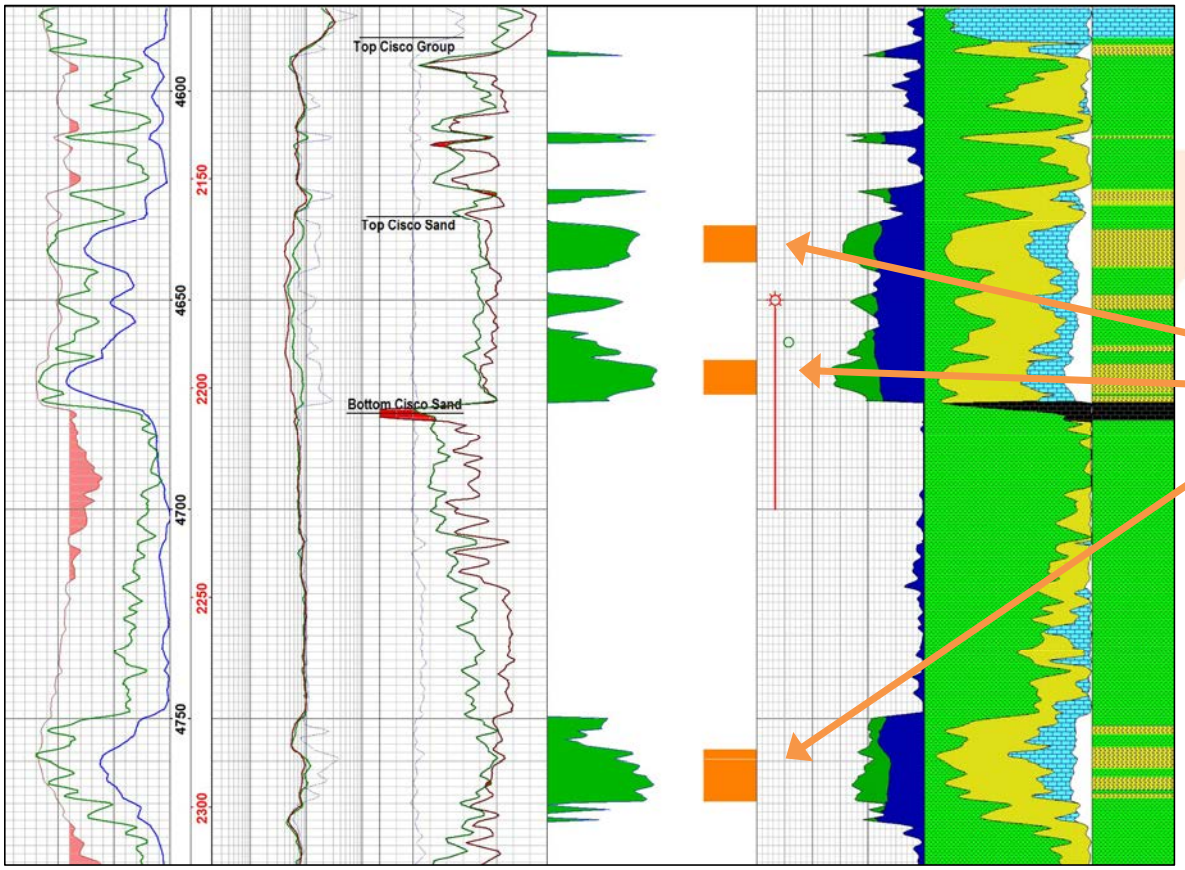
Bast #1 / McLeod 17-03 Workovers	
Estimated Recovery per well	**15 mbo each**
Primary Stimulation target	**Cisco Sands**
Secondary Target	**None**
Additional Targets	**None**
Estimated Workover Costs (100%)	**US$120K per well**
Estimated Workover Date	**April / June 2021**



Objective: Low-risk workover to stimulate and improve existing Cisco production

Nolan County Project – 2021 Q2/Q3 Program

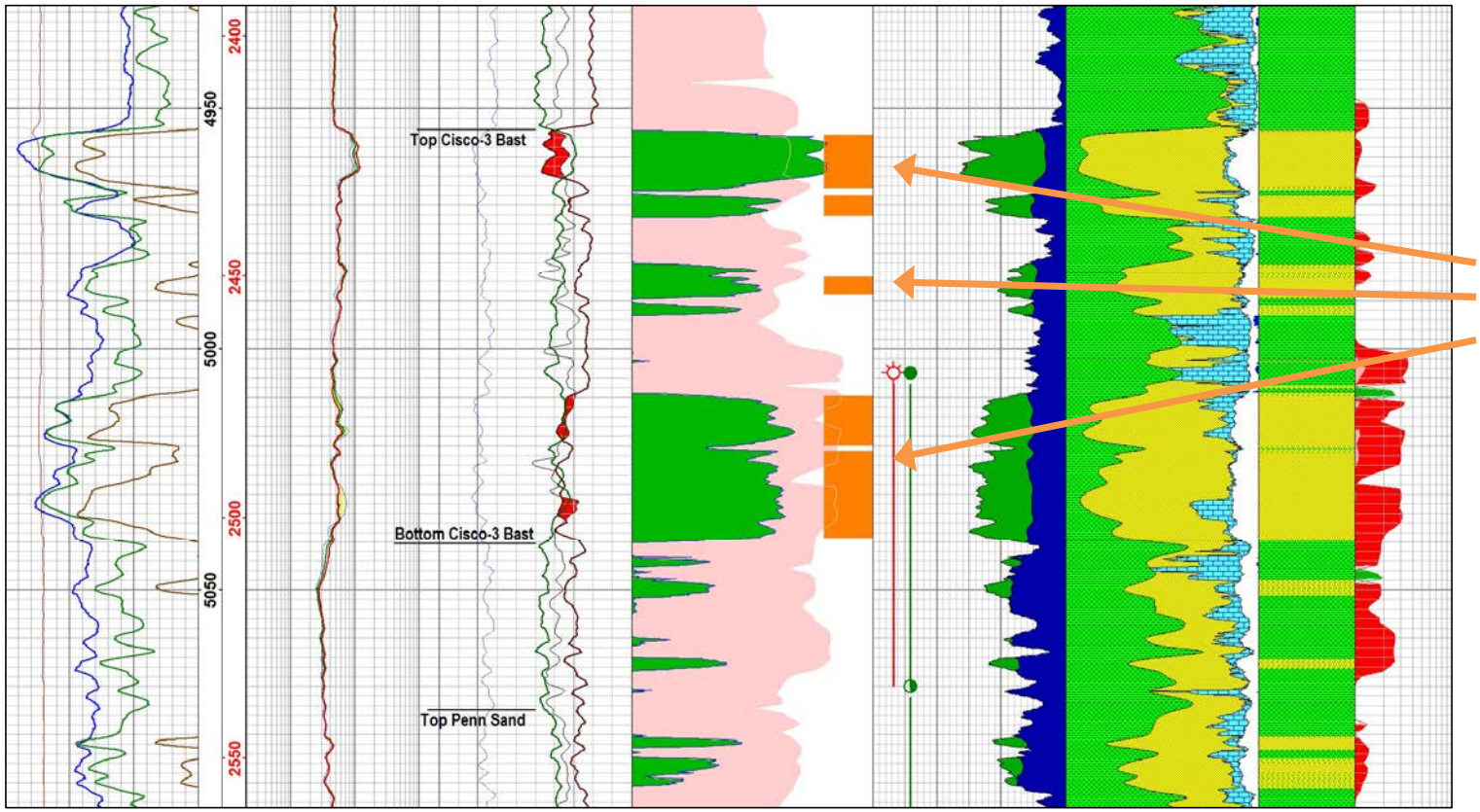
Bast #1 proposed workover (log analysis identifies untested potential pay)



Cisco Zones for Test

Nolan County Project – 2021 Q2/Q3 Program

McLeod 17-03 proposed workover (log analysis identifies good, unstimulated pay)



Nolan County Project – 2021 Q3/Q4 Program

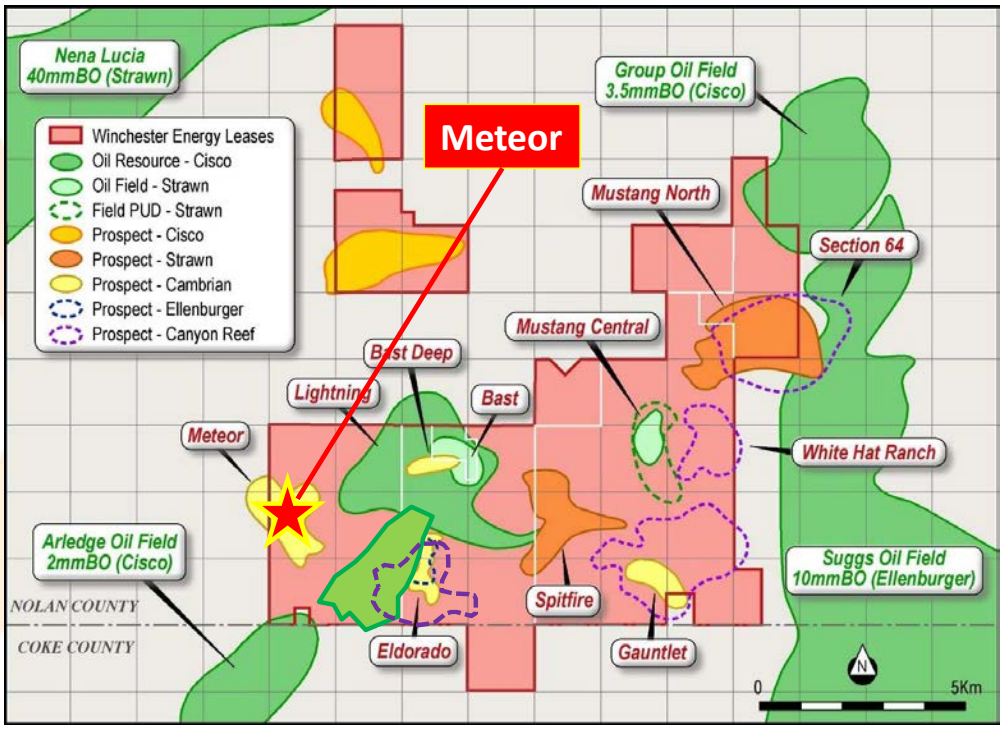
Nolan County Project

- 2021 Q3/Q4 Candidate Prospect Details
  - ✓ Meteor
  - ✓ Spitfire
  - ✓ El Dorado
  - ✓ Mustang North 63-01
  - ✓ Hurricane 64-02
  - ✓ Lightning Upper Cisco Horizontal

Nolan County Project – 2021 Q3/Q4 Program

Cambrian Prospect

Meteor	
Gross Prospective Resources[1]	**1.94 mmboe (P50)** **4.69 mmboe (P10)**
Primary Target	**Cambrian Sandstone (7,800 ft)**
Secondary Target	**Ellenburger Fm (7,000 ft)**
Additional Targets	**Odom**
Programmed Total Depth	**7,800 ft**
Estimated Costs (100%)	**DHC: US$500,000** **Completion: US$350,000**
Estimated Spud Date	**2H 2021**



Objective: To test potential 1.9 mmBO prospect (P50) in Cambrian four way dip structure

Notes:
1. Refer WEL ASX Release 16 March 2021.

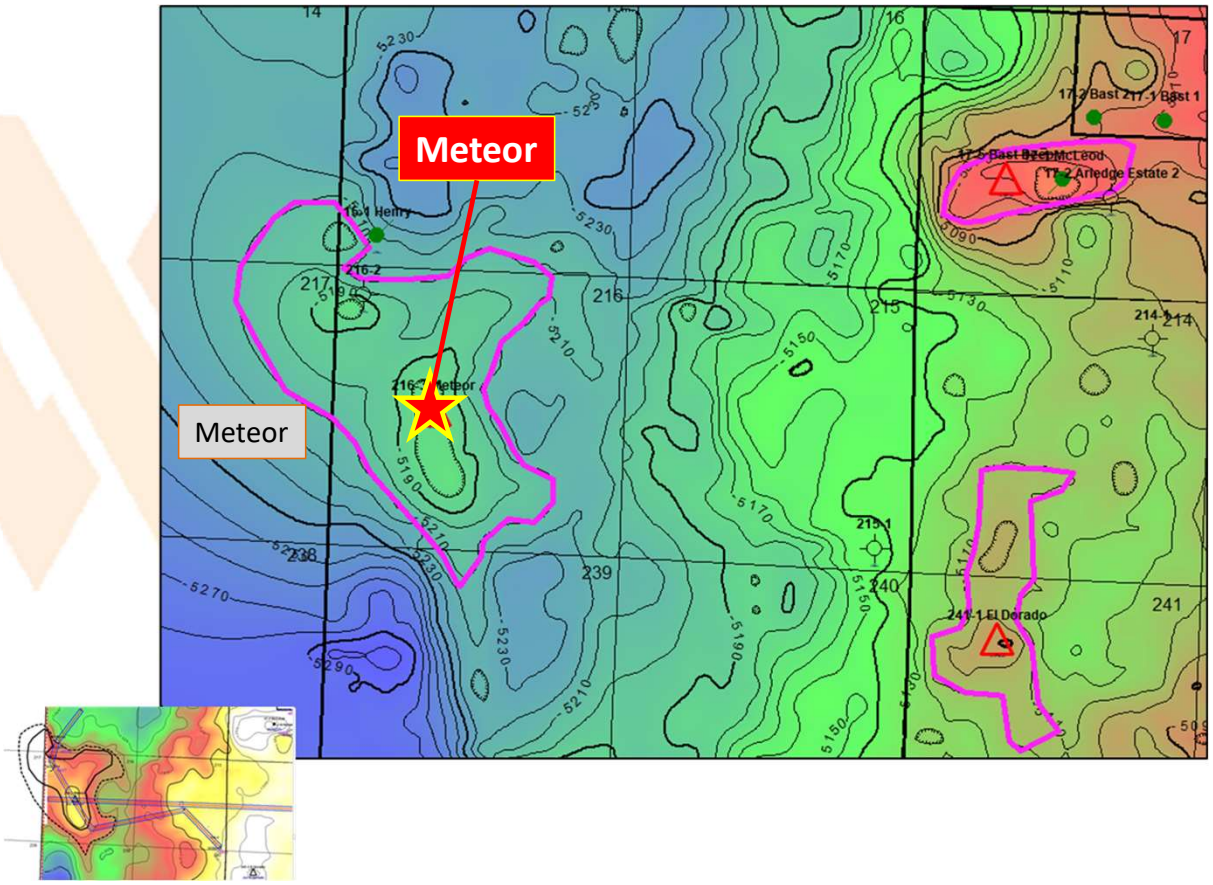
Meteor Prospect

High Impact Cambrian Test – 7,800 ft

Meteor

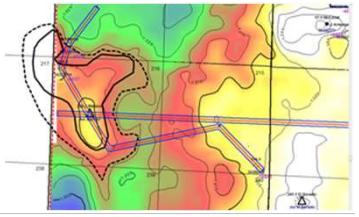
- **Primary Target - Cambrian Sandstone at 7,800 ft.**
- 4 way dip structural closure mapped on high quality 3D seismic.
- None of the local wells penetrate the Cambrian but out-of-structure Cambrian sands 5 miles to the east are thick with good porosity.
- A 40 foot closure is mapped over 300 acres.
- Secondary Targets – The overlying Ellenburger dolomite is also structurally closed and produced a minor amount of oil in the north edge of the prospect at the Henry well. Other shallow reservoirs are prospective.

Depth Structure Map – Top Cambrian Fm

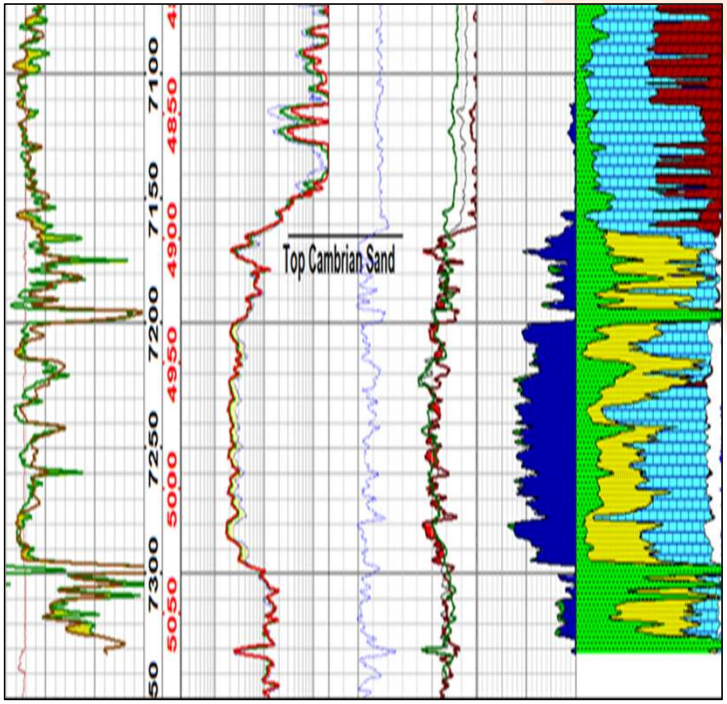


Meteor Prospect

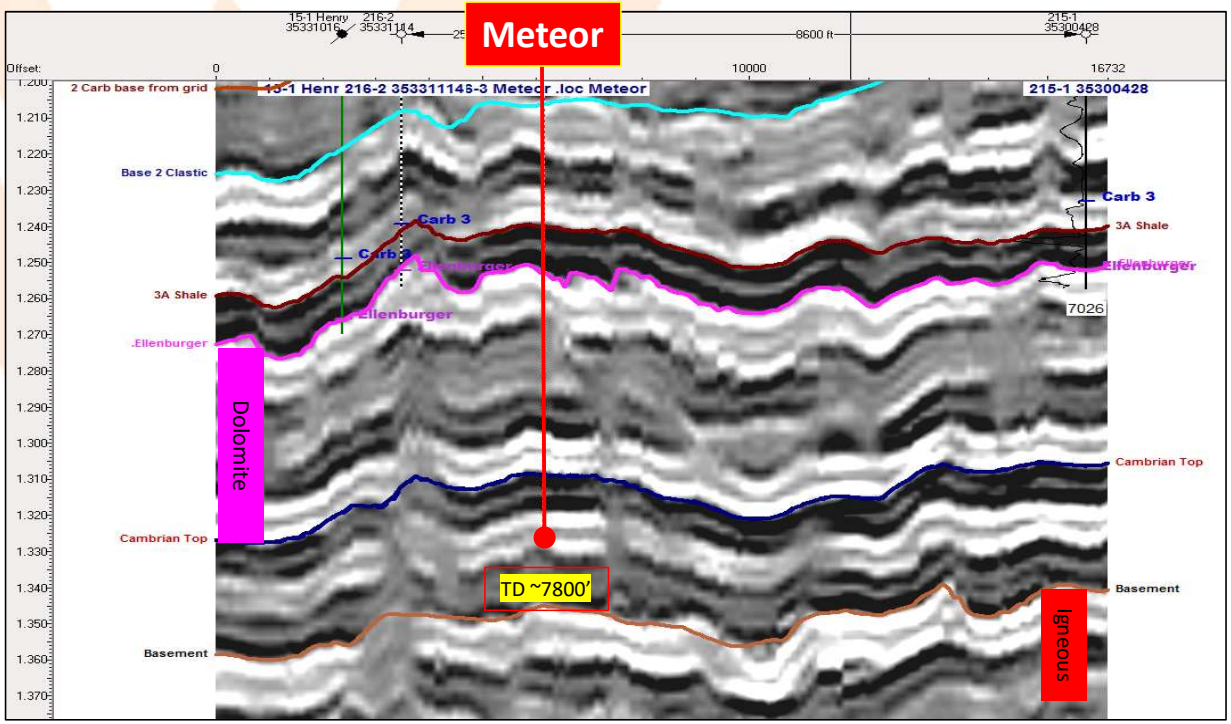
High Impact Cambrian Test – 7,800 ft



21-2G Nearby Cambrian Penetration



Seismic Cross Section shown proposed Meteor location (Hilbert)



Nolan County Project – 2021 Q3/Q4 Program

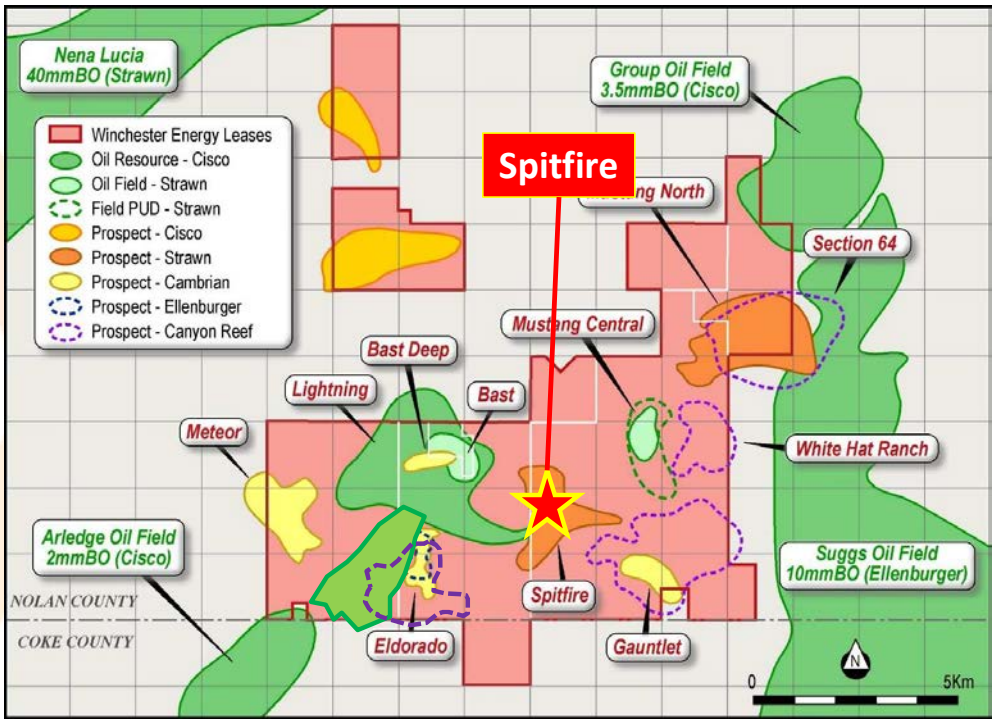
Nolan County Project

- 2021 Q3/Q4 Candidate Prospect Details
  - ✓ Meteor
  - ✓ Spitfire
  - ✓ El Dorado
  - ✓ Mustang North 63-01
  - ✓ Hurricane 64-02
  - ✓ Lightning Upper Cisco Horizontal

Spitfire Prospect

Strawn Channel Test – 7,200 ft

Spitfire	
Gross Prospective Resources[1]	**2.7 mmboe (P50)** **6.0 mmboe (P10)**
Primary Target	**Strawn Sandstone Channel (6,000 – 6,500 ft)**
Secondary Target	**Ellenburger Fm (7,000 ft)**
Additional Targets	**Nil**
Programmed Total Depth	**7,200 ft**
Estimated Costs (100%)	**DHC: US$500,000** **Completion: US$350,000**
Estimated Spud Date	**2H 2021**



Objective: To test channel sand anomaly, well defined by 3D seismic, in the Strawn stratigraphic section

Notes:
1. Refer WEL ASX Release 16 March 2021.

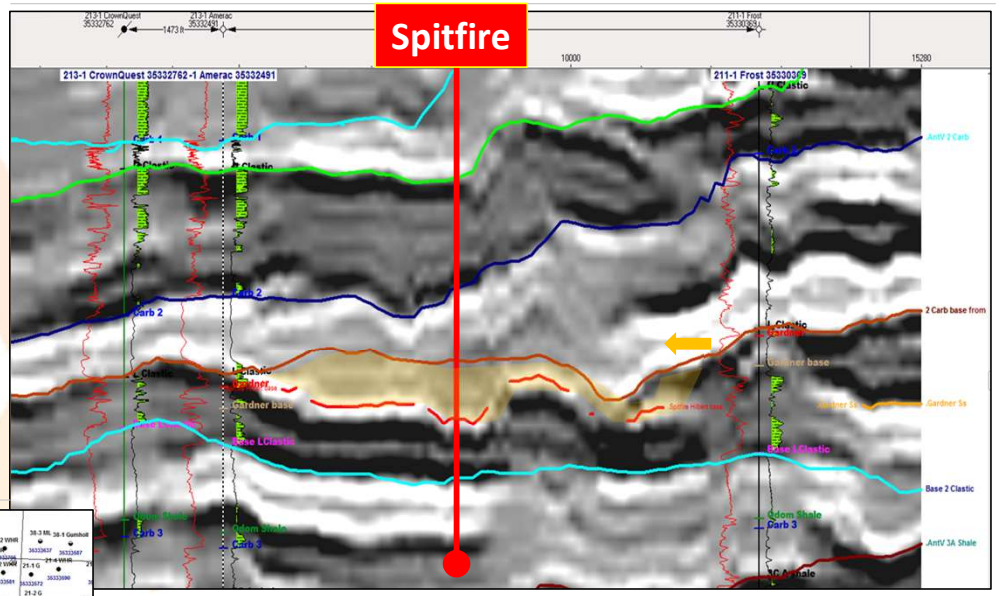
Spitfire Prospect

Strawn Channel Test – 7,200 ft

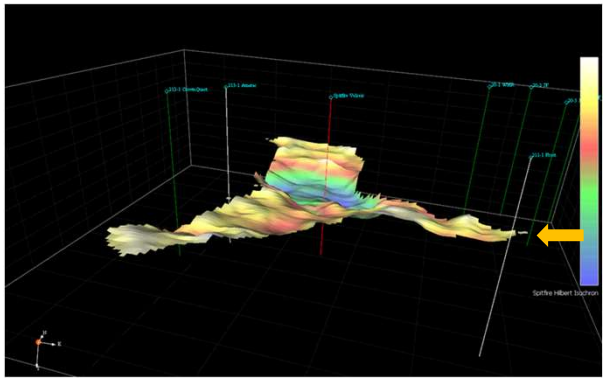
Spitfire

- The Spitfire Prospect will test a channel feature mapped on 3D seismic. The interval was penetrated at the channel edge in the McLeod 213 Amerac #1, where it penetrated 30 feet of gross sand with 7 feet of calculated pay. The interpreted target is anticipated to be up to 80 feet thick with an average net pay of 41 ft per Kurt Mire and Assoc.
- The prospect is also anticipated to have Penn Carb and Penn Shale secondary targets.
- Fractured Ellenburger remains an exploration target.

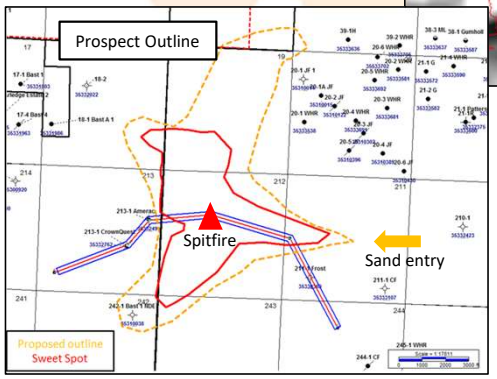
Spitfire – Seismic Interpretation



Isochron in 3D



Prospect Outline



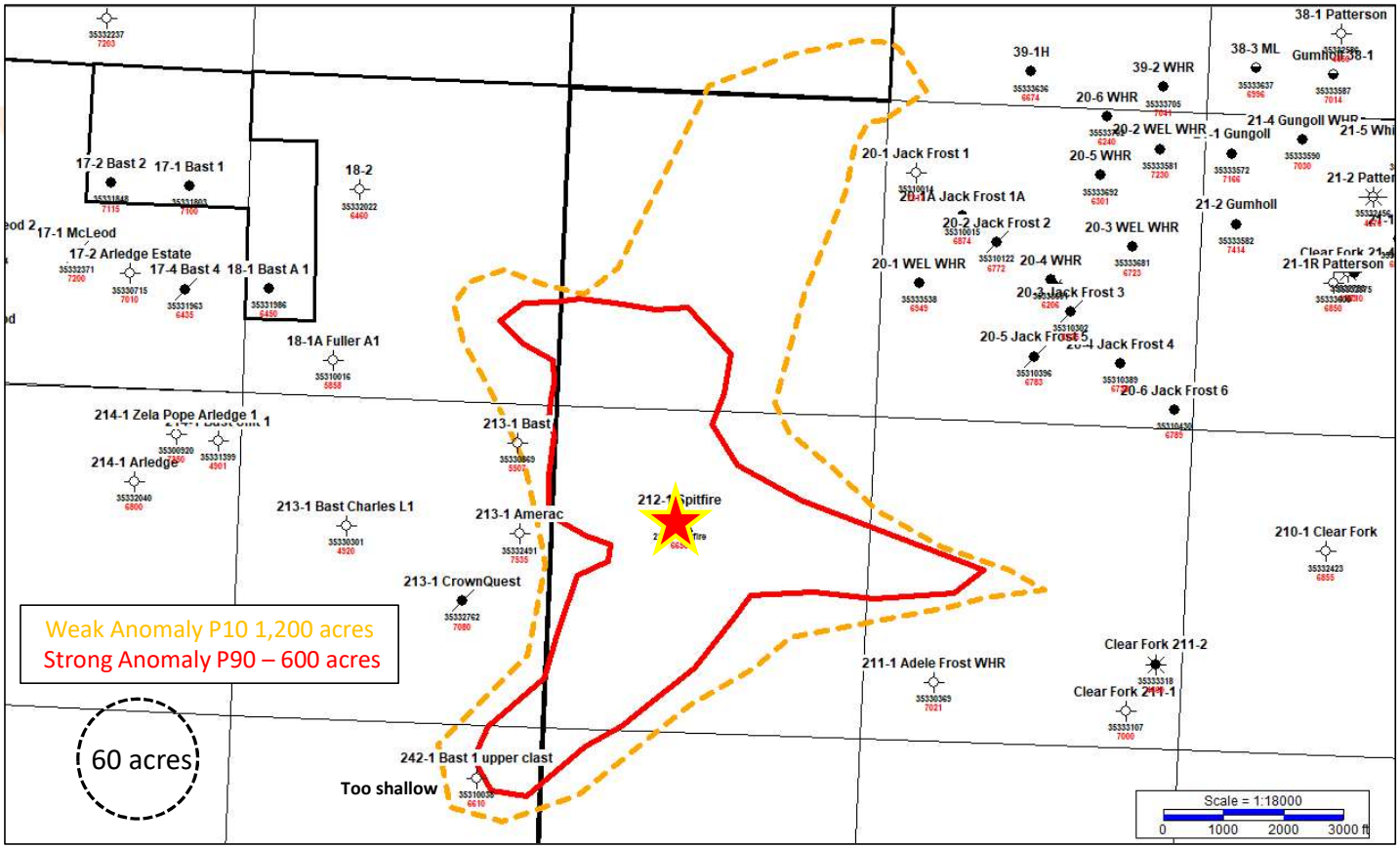
Spitfire Prospect

Strawn Channel Test – 7,200 ft; Seismic Anomaly Extent

Spitfire - 3D Seismic Definition

- Prospect is defined on high quality 3D seismic and covers up to 1,200 acres.
- Prospective areas (used in resource assessment):
  - P90 = 320 ac;
  - P10 = 1,050 ac
- Calibration with wells ties the anomaly to the very top of the 2 Clastic stratigraphically below Mustang to the east.

Spitfire – Mapped Anomaly



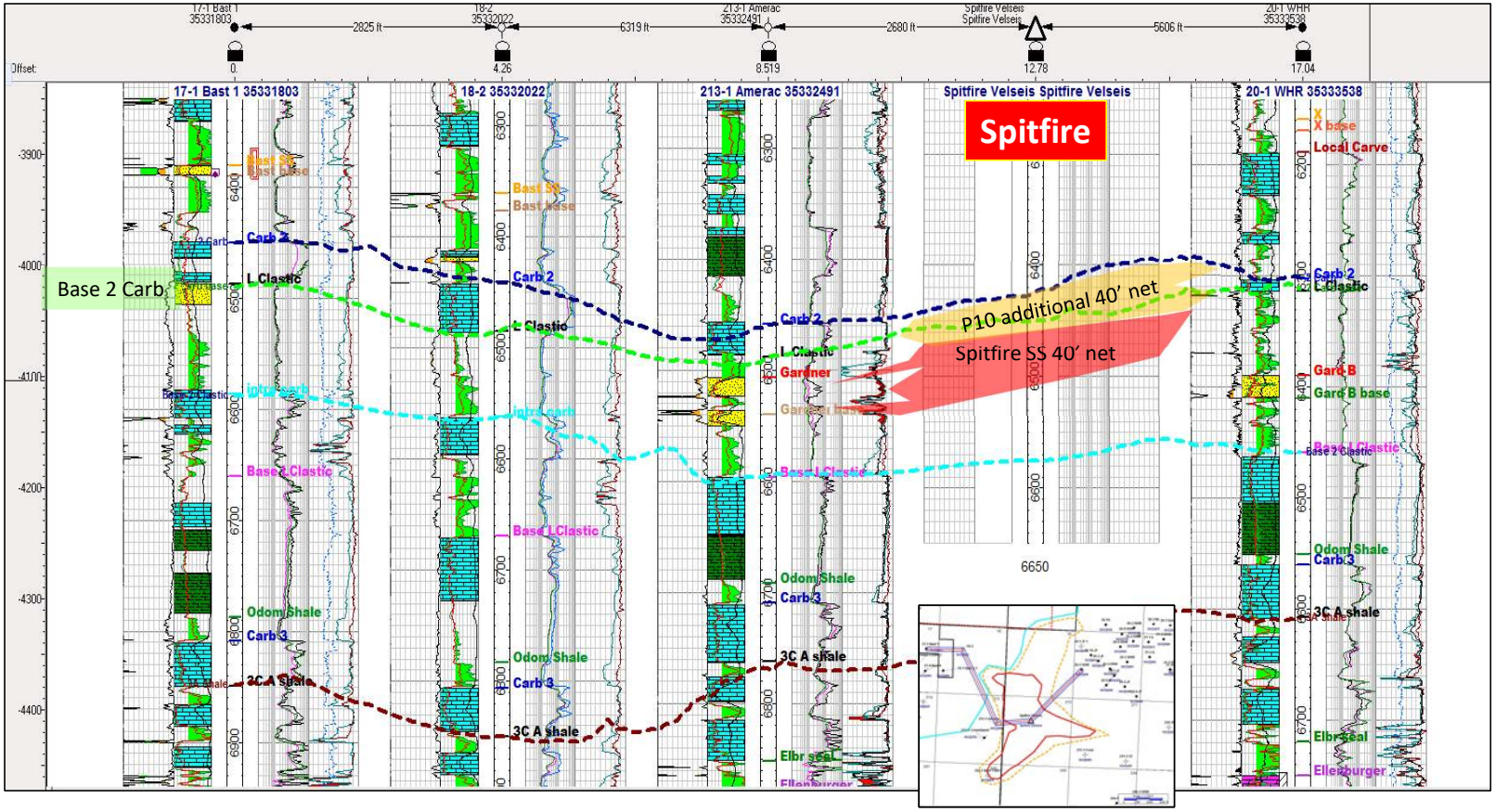
Spitfire Prospect

Drill Location Correlation

Spitfire

- The seismic anomaly is at the same level as the thin tight Gardner stringers at 213-1 Amerac, which may be oil bearing.
- The well to the east at Mustang are tight shale and limestone at this level.
- The thickness of the potential sand is at least 50’ (40’ net) - and double this size is possible in a P10 case.
- Sands of this thickness at this level are rare but are seen to the northeast in Section 71 .

Spitfire Prospect - Correlation



Nolan County Project – 2021 Q3/Q4 Program

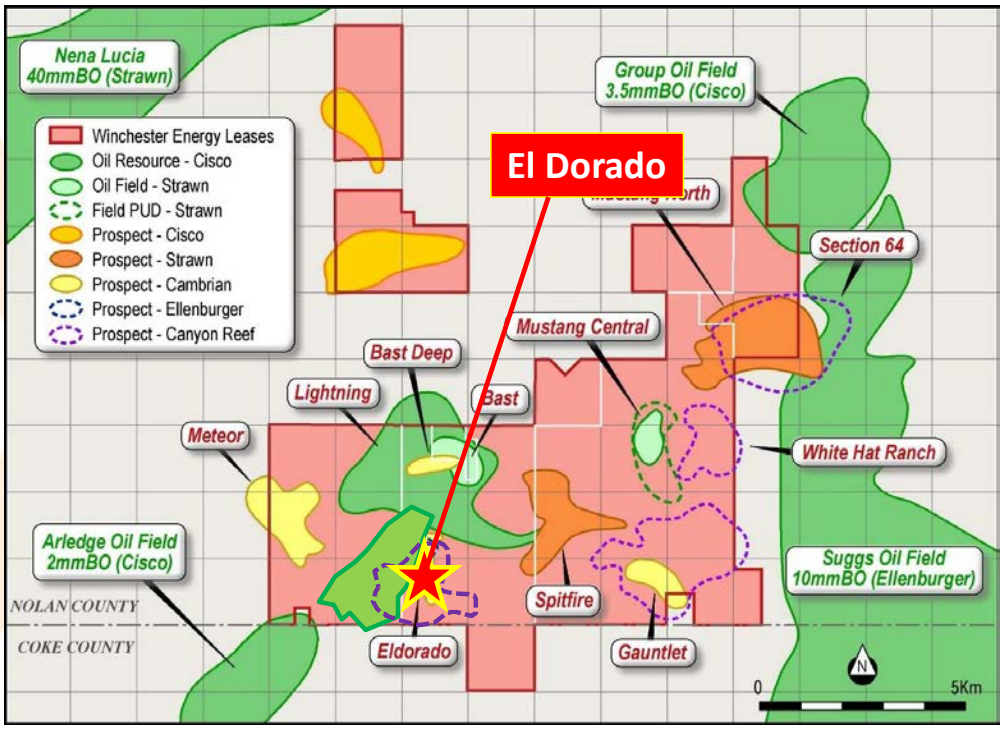
Nolan County Project

- 2021 Q3/Q4 Candidate Prospect Details
  - ✓ Meteor
  - ✓ Spitfire
  - ✓ El Dorado
  - ✓ Mustang North S63
  - ✓ Mustang North (Hurricane) 64-02
  - ✓ Lightning Upper Cisco Horizontal

El Dorado Prospect

Cambrian / Ordovician Test – 8,000 ft

El Dorado	
Gross Prospective Resources[1]	**1.36 mmboe (P50/Best Estimate)** **3.52 mmboe (P10/High Estimate)**
Primary Targets	**Cambrian Sandstone** **Ellenburger Fm (7,000 ft)**
Secondary Target	**Cisco Sands (4,000 – 4,800 ft)**
Additional Targets	**Odom**
Programmed Total Depth	**8,000 ft**
Estimated Costs (100%)	**DHC: US$500,000** **Completion: US$350,000**
Estimated Spud Date	**2H 2021**



Objective: To test multiple closed targets on untested El Dorado Structure

Notes:
1. Refer WEL ASX Release 16 March 2021.

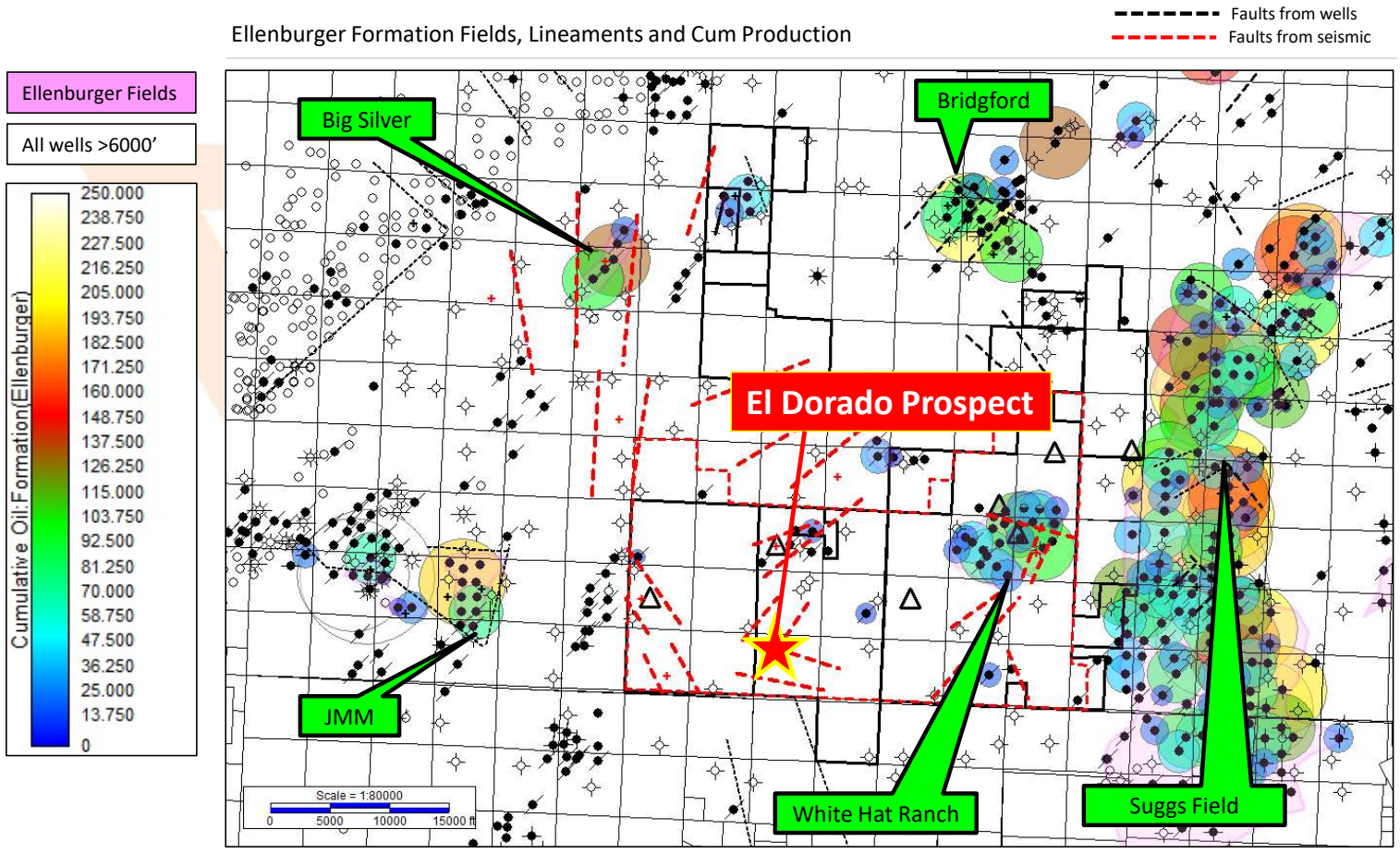
El Dorado Prospect

Cambrian / Ordovician Test – 8,000 ft

El Dorado Prospect

- Closed structure of over 1000 ac.
- Ellenburger shows structural closure and processing has suggested changes in velocity of the carbonates that may correspond to potential areas of fracture and potentially karstification.
- El Dorado is located at the convergence of a number of faults / lineaments. Winchester's analysis suggests that such a position is typically associated with improved Ellenburger porosity.
- Four way closure also mapped at the Cambrian sand level
- Mapped closure at the Upper Cisco Sand productive in the recently discovered Lightning field
- A potential reef development can be seen at the Odom level on the Structural high

Ellenburger Formation Fields, Lineaments and Cum Production



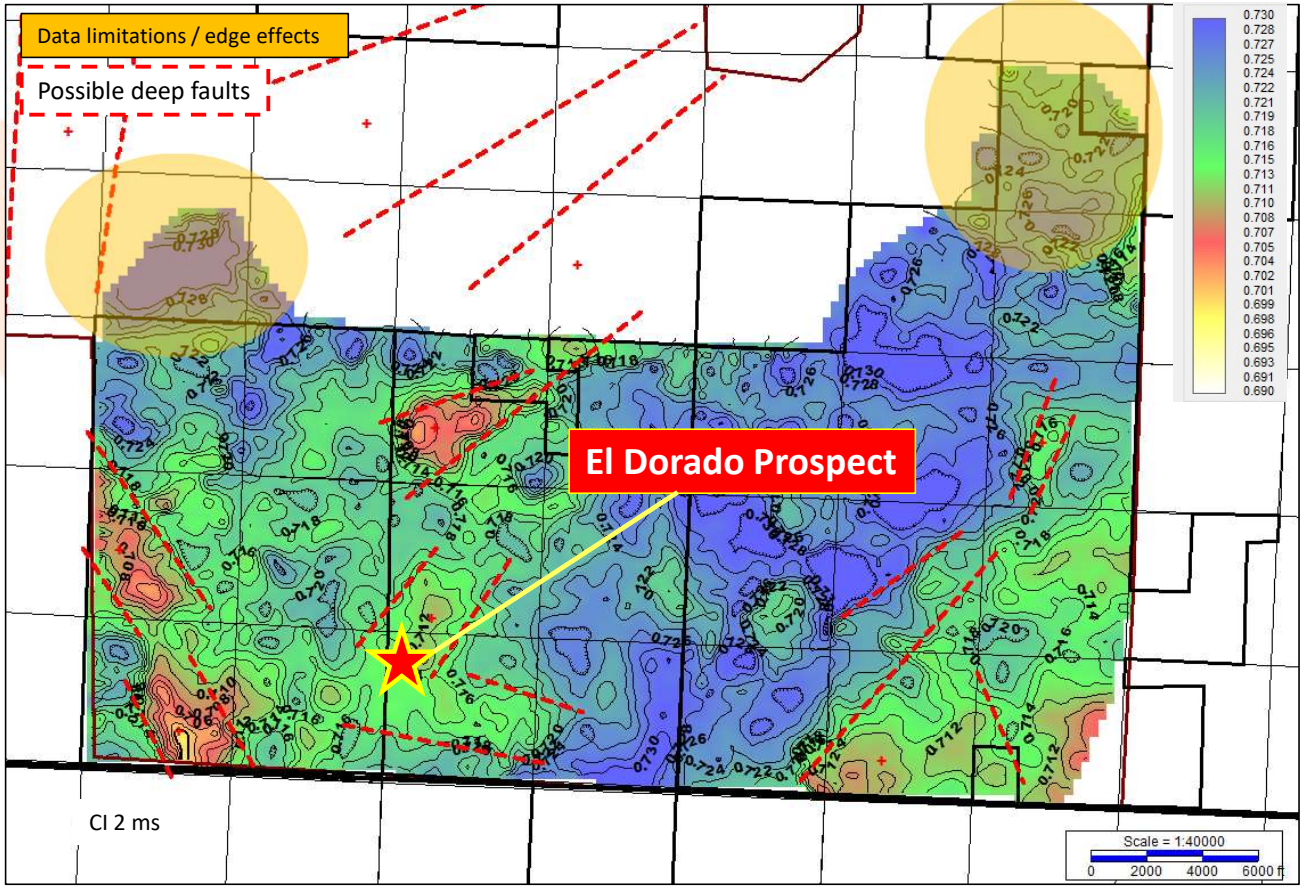
El Dorado Prospect

Cambrian / Ordovician Test – 8,000 ft

El Dorado Prospect - Ellenburger

- The superior data quality of the South Antelope cube allows an isochron to the Ellenburger but the isochron to the Cambrian is similar
- The mapped paleo highs are more robust and small features are imaged.
- Mapping clearly defines paleo structures and lineaments – the NE corner of the cube is still problematic and is discounted
- Four way closure mapped at the Cambrian sand level

Isochron Map: Interval from Big Red Shale to Ellenburger Formation



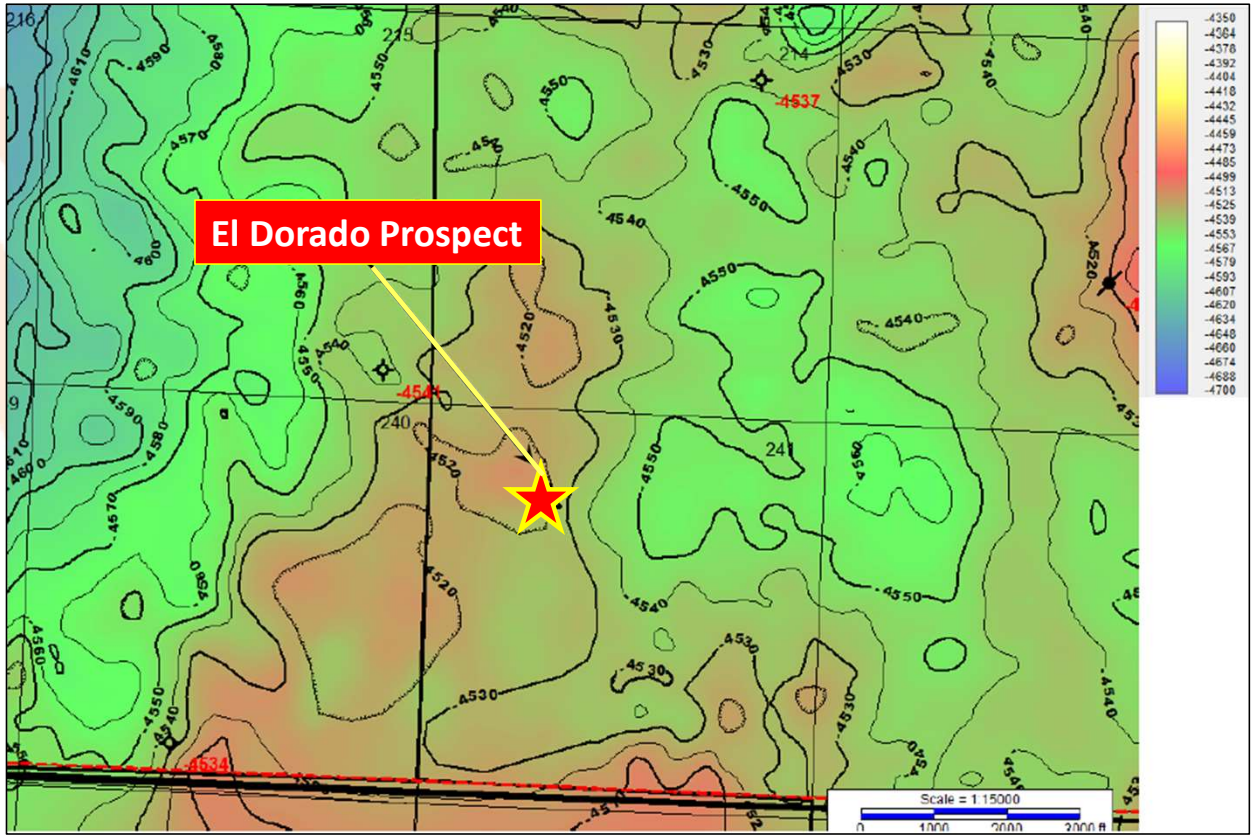
El Dorado Prospect

Cambrian / Ordovician Test – 8,000 ft

El Dorado Prospect

- El Dorado - closed structure of over 1000 acres
- Ellenburger shows structural closure and processing has suggested changes in velocity of the carbonates that may correspond to potential areas of fracture and potentially karstification.
- Four way closure also mapped at the Cambrian sand level
- Mapped closure at the Upper Cisco Sand productive in the recently discovered Lightning field
- A potential reef development can be seen at the Odom level on the Structural high

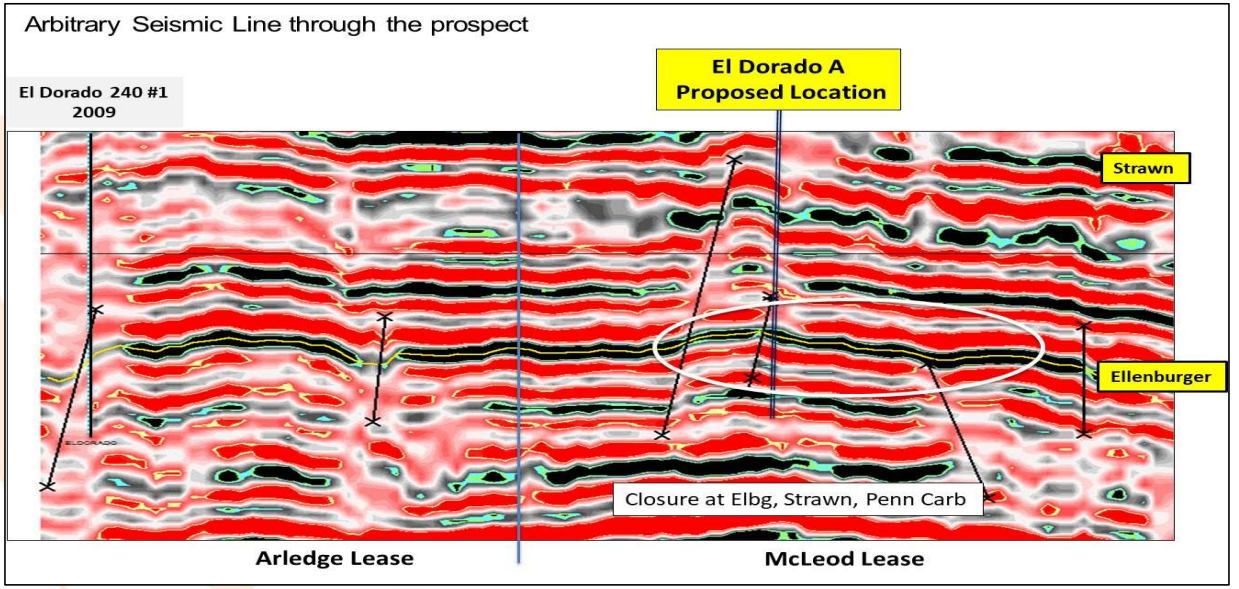
Depth Structure Map – Top Ellenburger Formation



El Dorado Prospect

El Dorado Prospect

- El Dorado - closed structure of over 1000 acres
- Ellenburger shows structural closure and processing has suggested changes in velocity of the carbonates that may correspond to potential areas of fracture and potentially karstification.
- Four way closure also mapped at the Cambrian sand level
- Mapped closure at the Upper Cisco Sand productive in the recently discovered Lightning field
- A potential reef development can be seen at the Odom level on the Structural high



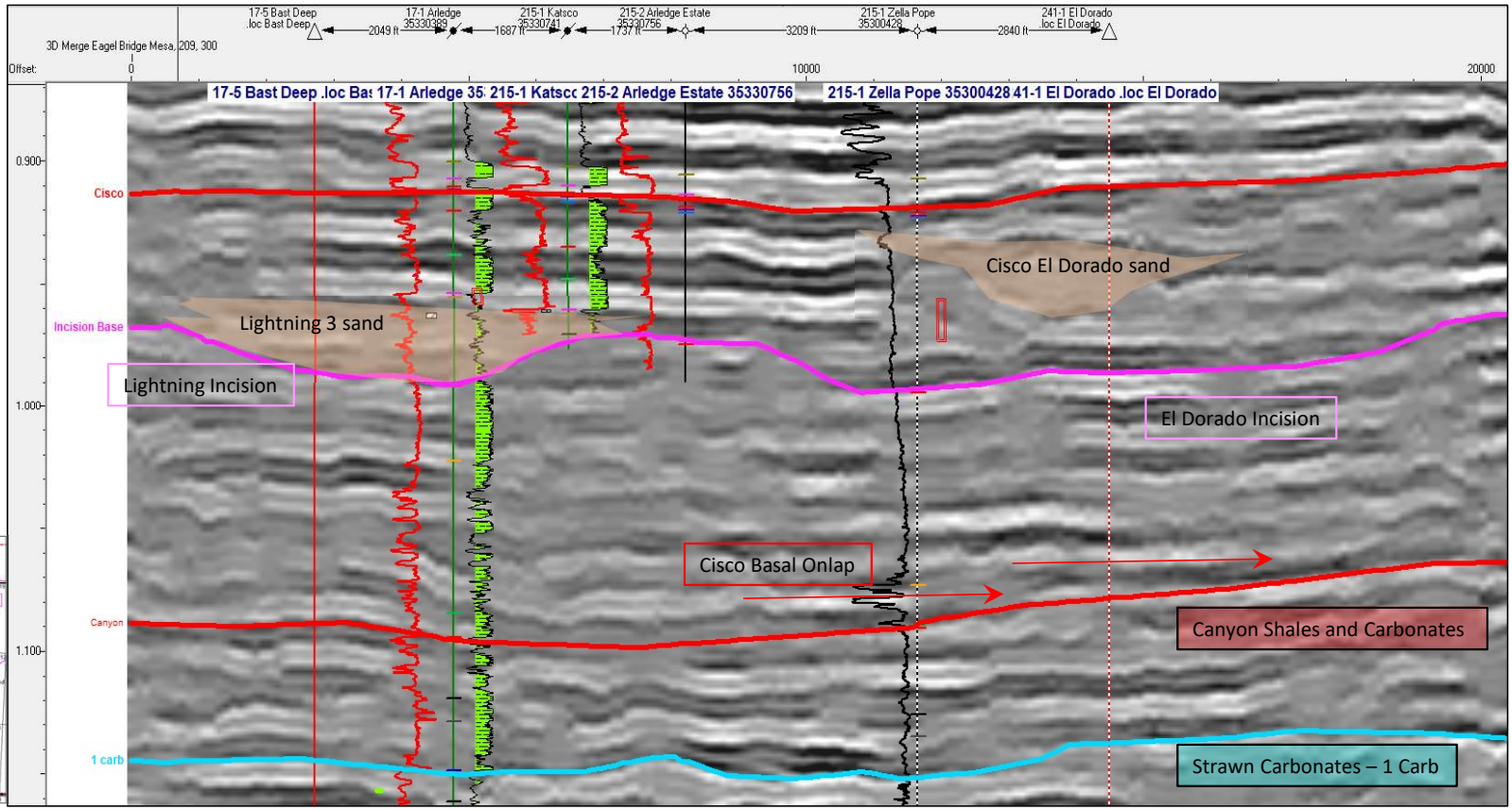
El Dorado Prospect

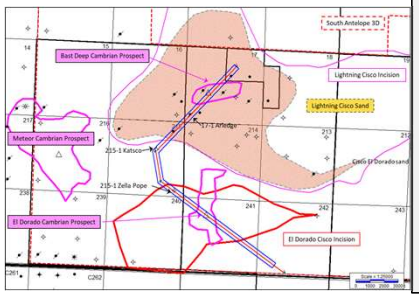
Cisco Sands - El Dorado Incision – Traverse from Lightning

El Dorado Prospect

- Cisco Sand potential at El Dorado based on well location that should intersect interpreted Cisco Sand Channel – separate from Lightning Cisco.
- Possible tight oil play.

El Dorado Seismic Section – Cisco incision





Nolan County Project – 2021 Q3/Q4 Program

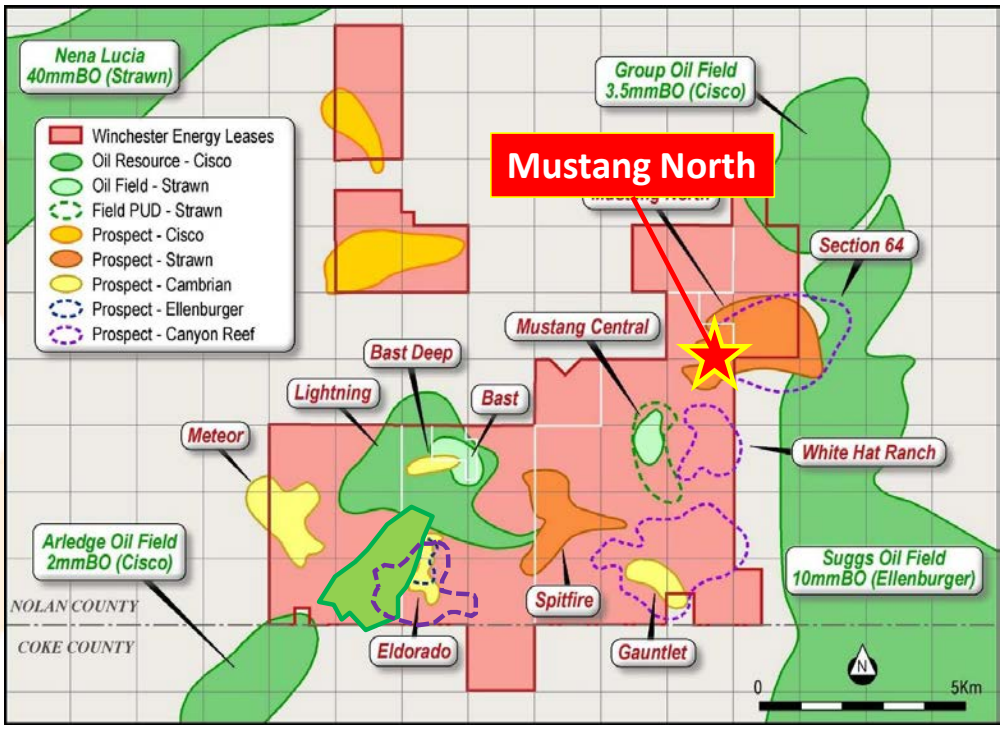
Nolan County Project

- 2021 Q3/Q4 Candidate Prospect Details
  - ✓ Meteor
  - ✓ Spitfire
  - ✓ El Dorado
  - ✓ Mustang North S63
  - ✓ Hurricane 64-02
  - ✓ Lightning Upper Cisco Horizontal

Mustang North Prospect - WHR 6301

WHR 6301 - Low-risk field extension

Mustang North - WHR 6301	
Gross Prospective Resources[1]	**623 mboe (P50/Best Estimate)** **1,344 mboe (P10/High Estimate)**
Primary Targets	**Strawn (Fry Sand; 5,000- 6,000 ft)**
Secondary Target	**Canyon Reef; Ellenburger Fm**
Additional Targets	**Nil**
Programmed Total Depth	**7,200 ft**
Estimated Costs (100%)	**DHC: US$350,000** **Completion: US$350,000**
Estimated Spud Date	**2H 2021**



Objective: To test Strawn Sands including the productive Fry sand, updip and one section from the Mustang Field

Notes:
1. Refer WEL ASX Release 16 March 2021.

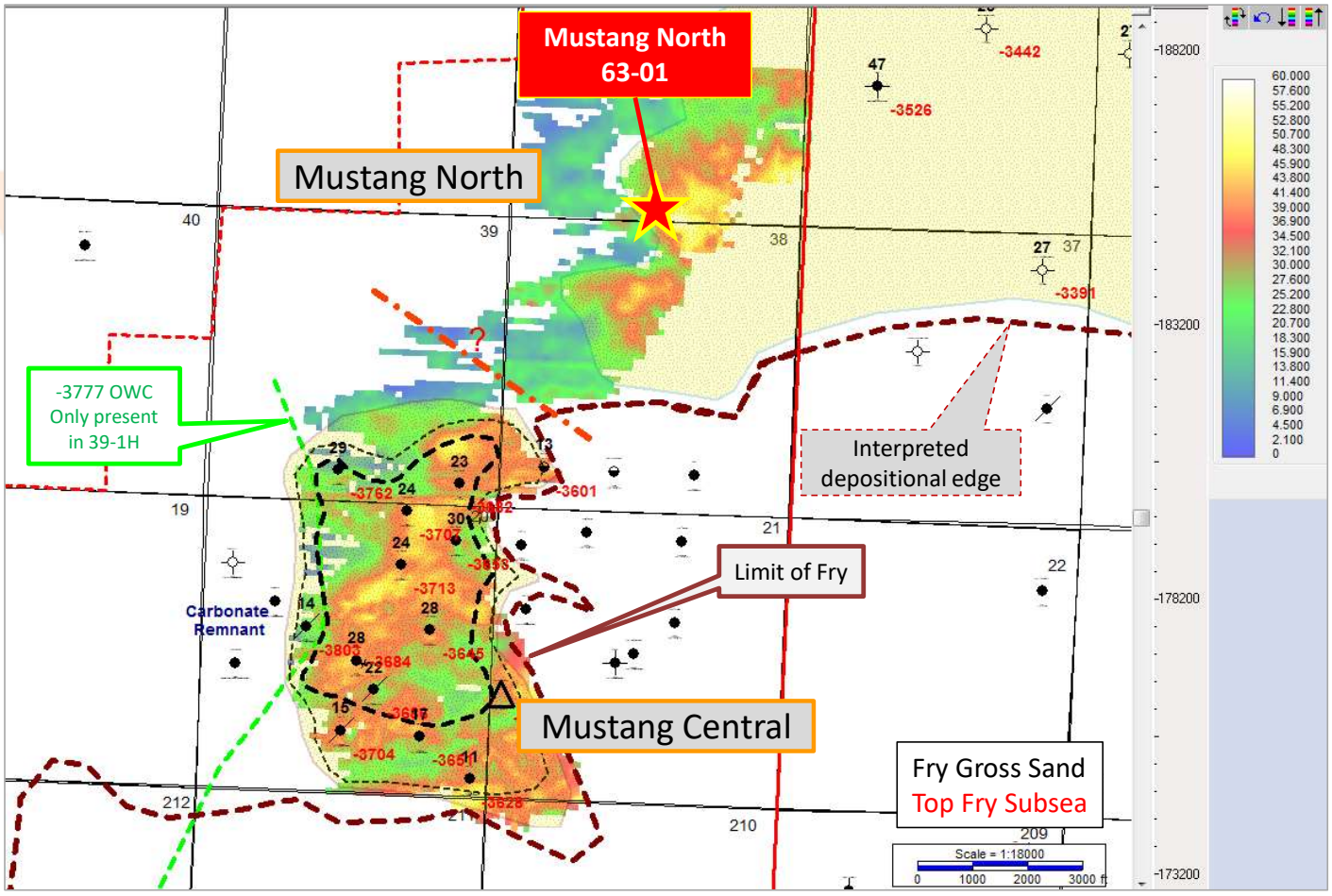
Mustang North Prospect - WHR 6301

WHR 6301

WHR 6301 - Mustang North

- Remapping of 3D seismic indicates productive trend at Mustang Central potentially extending to the north-east into Sections 38 and 63.
- Initial Mustang North drilling location in Section 63 defined on 3D seismic

Amplitude – Top Fry (Hilbert) – Gross Sand Overlay



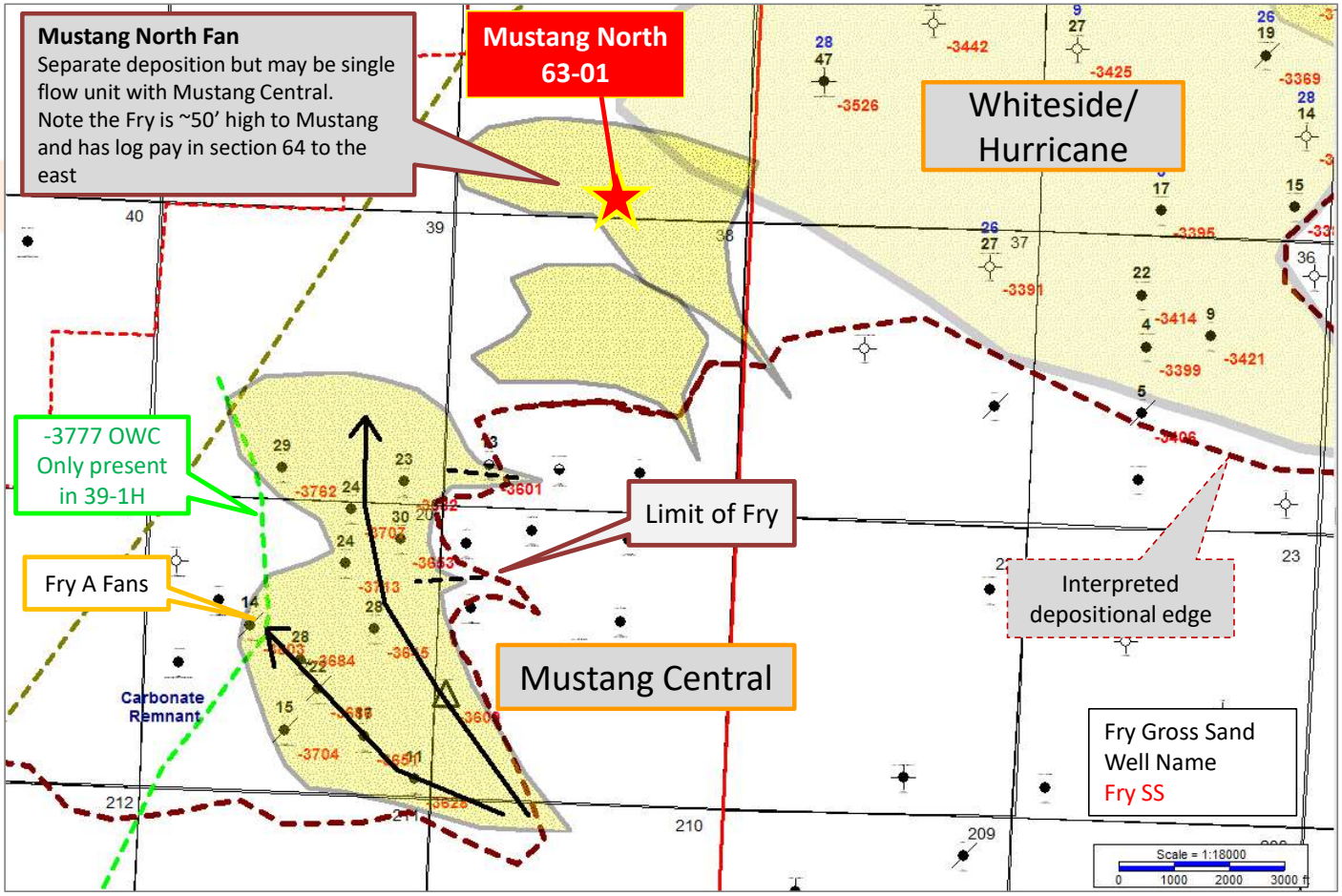
Mustang North Prospect - WHR 6301

Low-risk field extension

WHR 6301 - Mustang North

- Remapping of 3D seismic indicates productive trend at Mustang Central potentially extending to the north-east into Sections 38 and 63.
- Initial Mustang North drilling location in Section 63 defined on 3D seismic

Fry Interpreted Fans – Mustang – Mustang North and Extension



Nolan County Project – 2021 Q3/Q4 Program

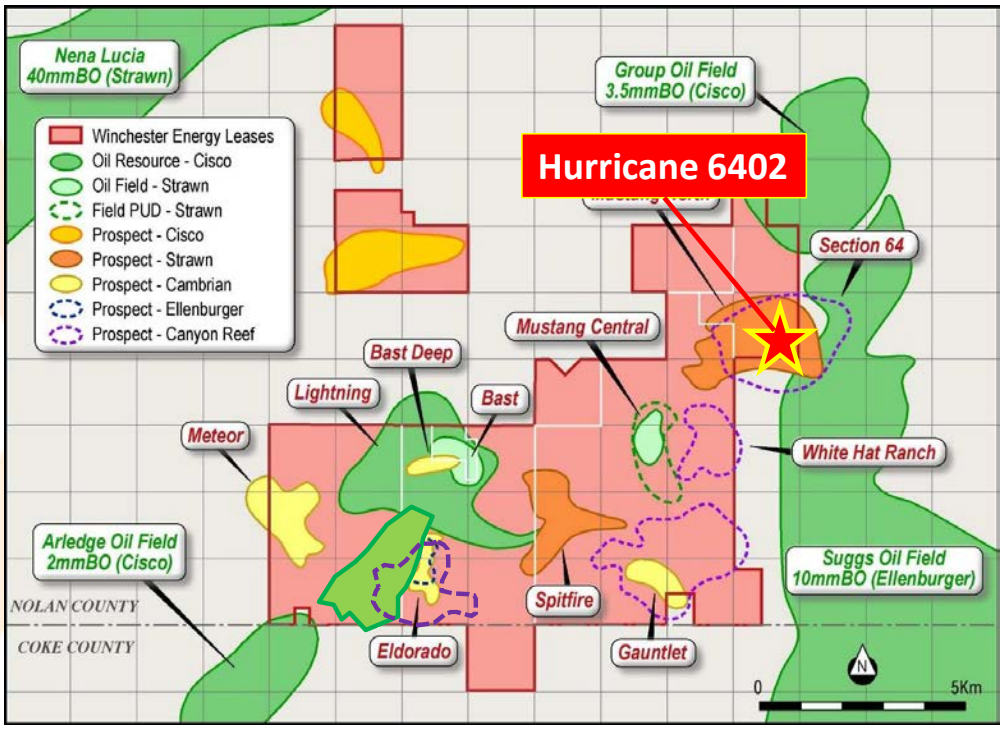
Nolan County Project

- 2021 Q3/Q4 Candidate Prospect Details
  - ✓ Meteor
  - ✓ Spitfire
  - ✓ El Dorado
  - ✓ Mustang North 63-01
  - ✓ Hurricane 64-02
  - ✓ Lightning Upper Cisco Horizontal

Hurricane Prospect

Canyon Reef and Fry potential with substantial follow-up

Hurricane 64-02	
Gross Prospective Resources[1]	**1.04 mmboe (P50/Best Estimate)** **1.91 mmboe (P10/High Estimate)**
Primary Target	**Canyon Reef**
Secondary Target	**Fry Sand**
Additional Targets	**Ellenburger Fm (7,000 ft)**
Programmed Total Depth	**6,900 ft**
Estimated Costs (100%)	**DHC: US$500,000** **Completion: US$350,000**
Estimated Spud Date	**2H 2021**



Objective: Test Canyon Reef and Fry sandstones stratigraphically trapped up-dip from Mustang plus deeper objectives

Notes:
1. Refer WEL ASX Release 16 March 2021.

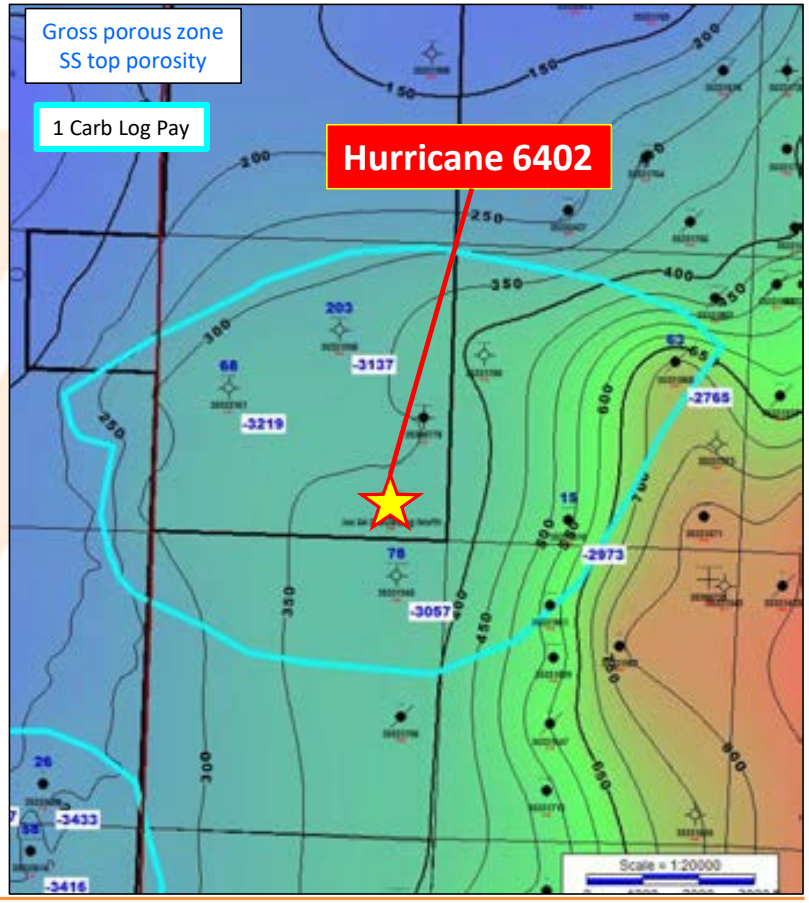
Hurricane Prospect

Canyon Reef Potential

Mustang North – Hurricane 64-02

- Prospective area covers 1,300 acres (from well control). There are five wells in the area with log pay; net pay ranges up to 200 ft and is expected to average at least 20'.
- The proposed Hurricane 6402 well is located within the prospect area with net pay expected to exceed 80 feet.
- The two wells off WEL current acreage in S65 are thinner and less certain on logs.

Isopach - 1 Carbonate (Canyon Reef)

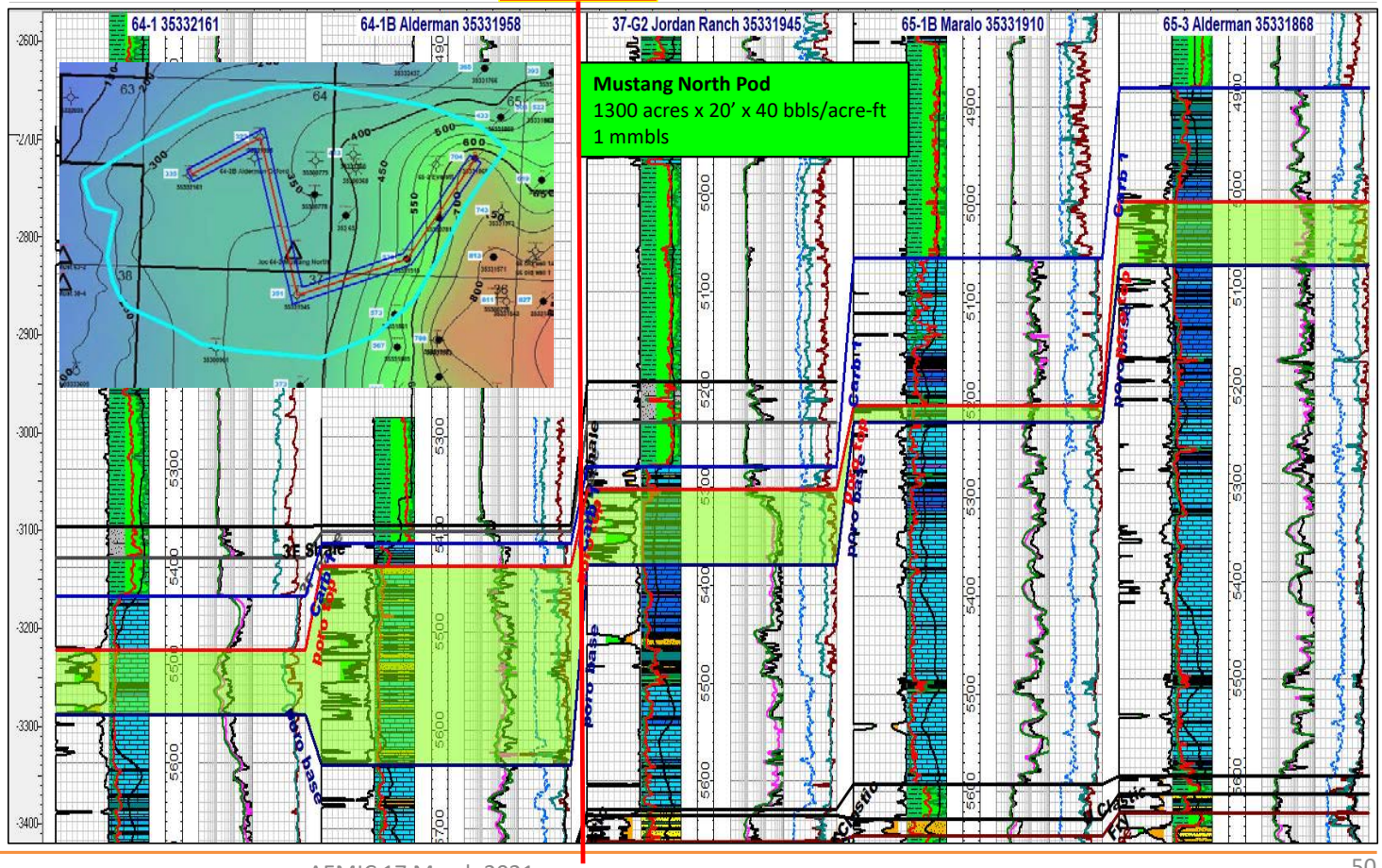


Hurricane Prospect

Canyon Reef Potential

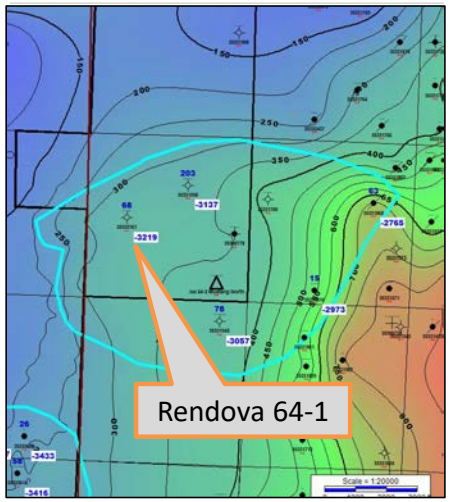
Stratigraphic Cross secn – Canyon Reef

6402 PL

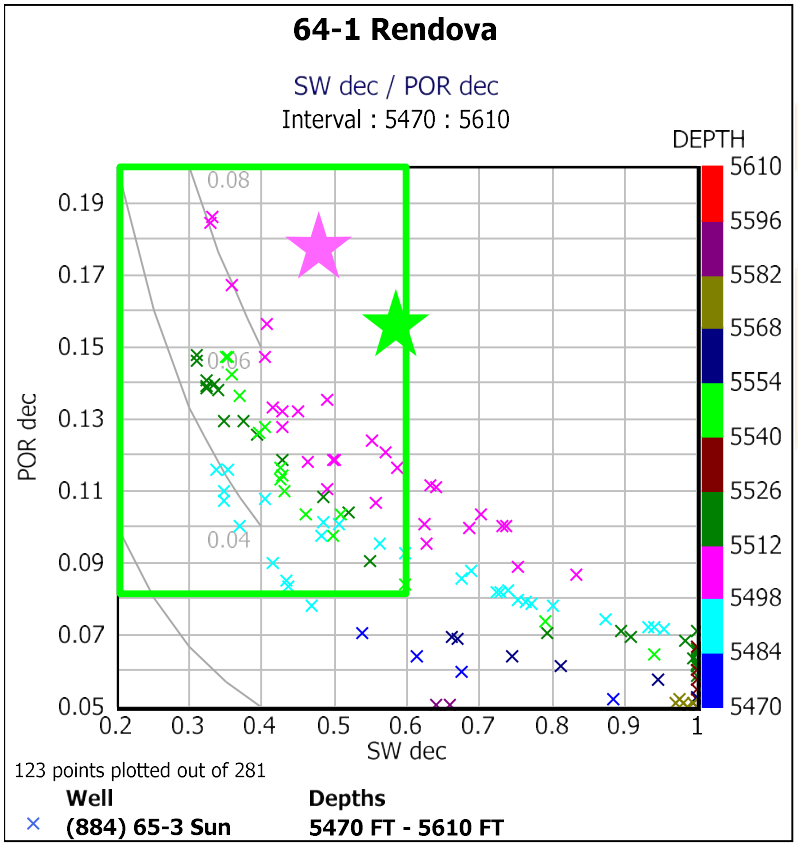


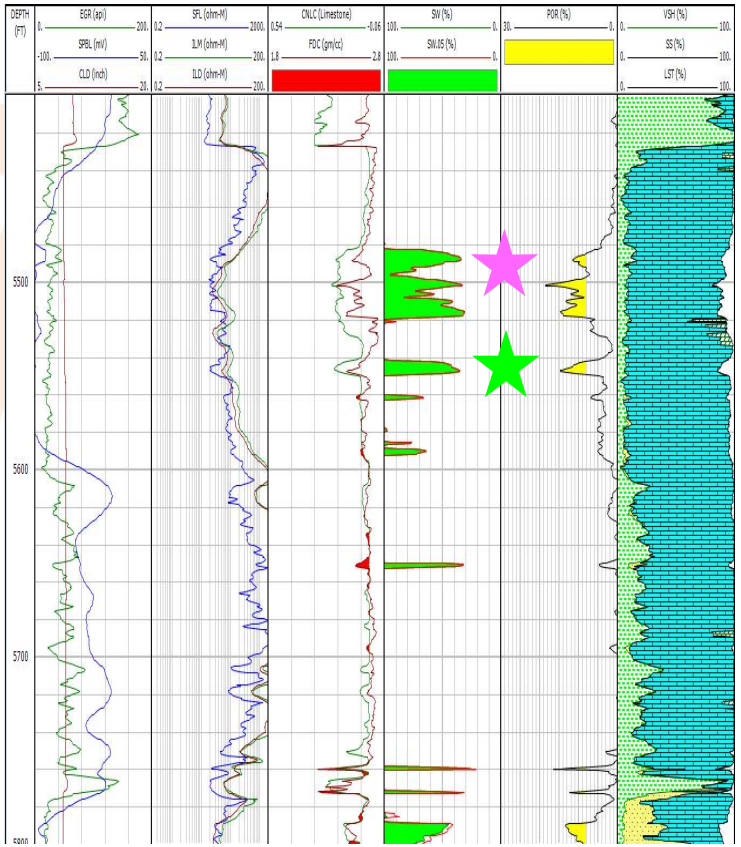
Canyon Reef analog well: 1991 Rendova Oil: Tubb-Christopher, Melvin C #1 - 68 feet interpreted pay

Isopach - 1 Carb (Canyon Reef)



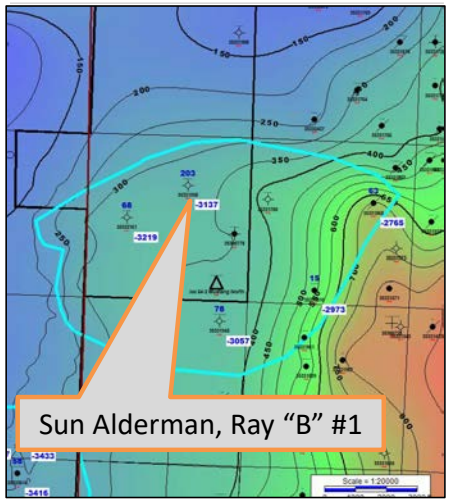
Log Analysis: 64-1 Rendova (API: 35332161)



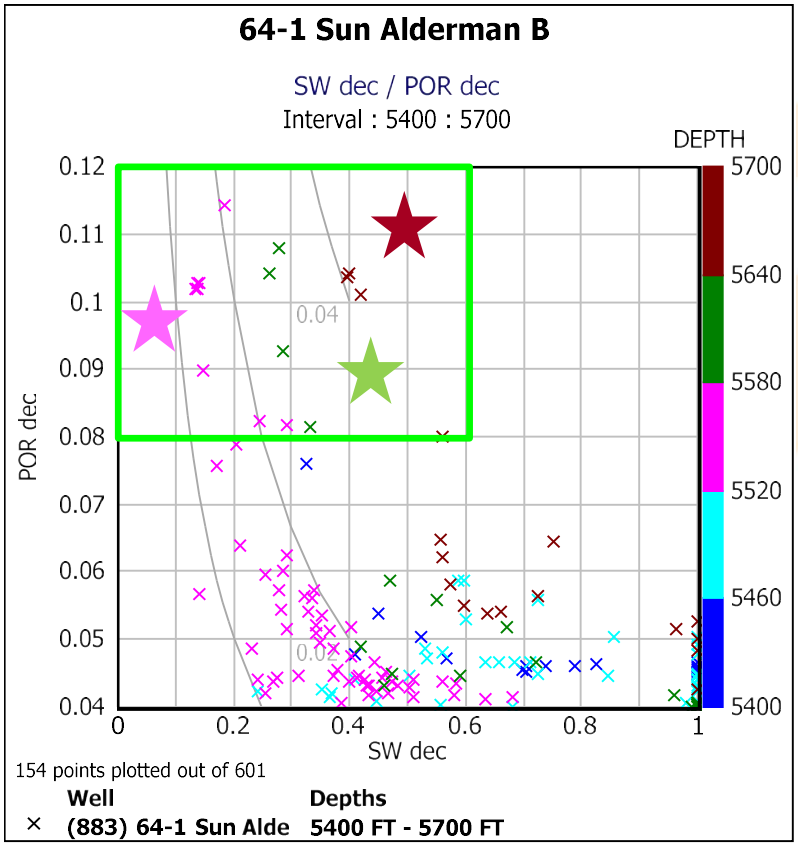


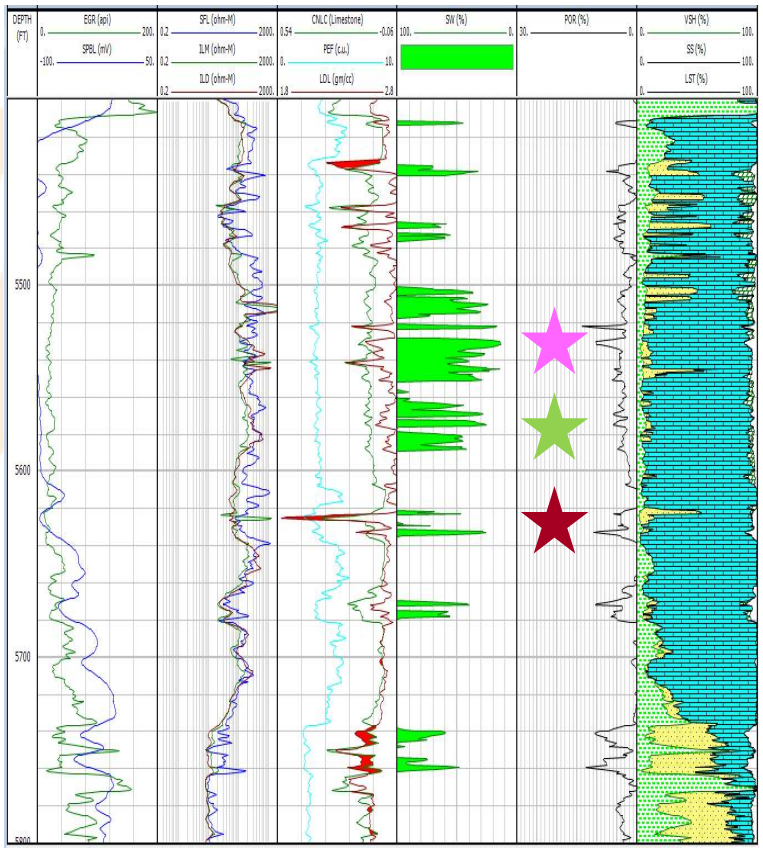
Canyon Reef analog well: 1986 Sun Expln: Alderman, Ray “B” #1

Isopach - 1 Carb (Canyon Reef)



Log Analysis: Sun Alderman B 64-1 (API: 353331958)





Nolan County Project – 2021 Q3/Q4 Program

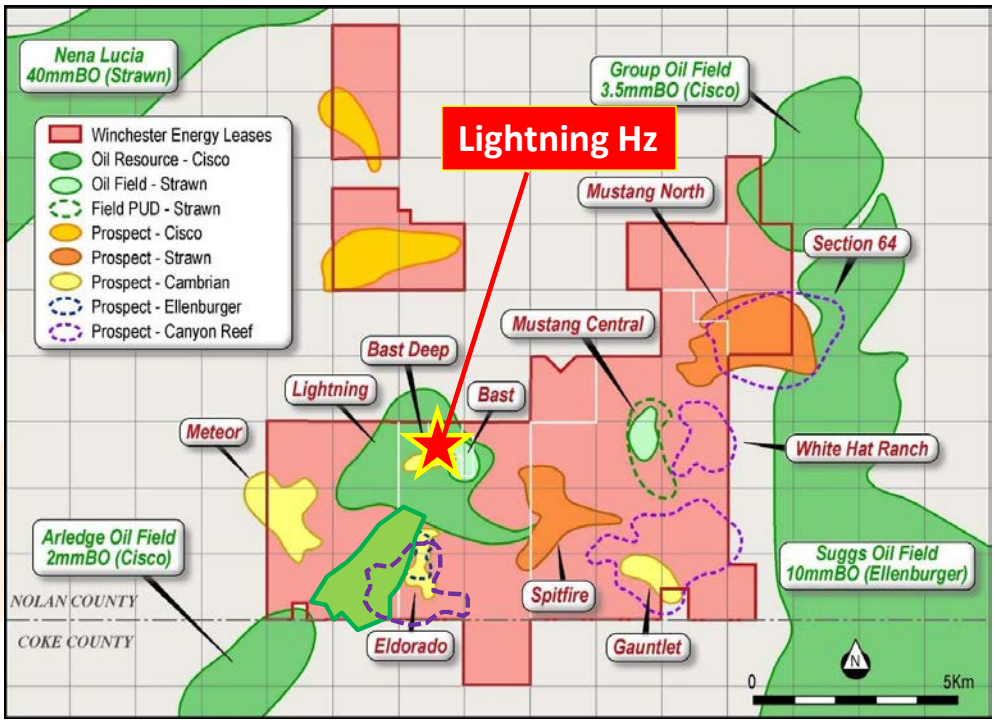
Nolan County Project

- 2021 Q3/Q4 Candidate Prospect Details
  - ✓ Meteor
  - ✓ Spitfire
  - ✓ El Dorado
  - ✓ Mustang North S63
  - ✓ Mustang North (Hurricane) 64-02
  - ✓ Lightning Upper Cisco Horizontal

Cisco “B” Sand Horizontal

Lightning Area – Upper Cisco “B” Sand – 7,500 ft horizontal well

Lightning Horizontal	
Gross Contingent Resources[1]	**4.82 mmboe (P50/Best Estimate)** **11.01 mmboe (P10/High Estimate)**
Primary Target	**Upper Cisco “B” Sand**
Secondary Target	**-**
Additional Targets	-
Programmed Total Depth	**12,500 ft (7,500 ft Hz)**
Estimated Costs (100%)	**DHC: US$1,500,000** **Completion: US$2,500,000**
Estimated Spud Date	**2022**



Objective: Extensive penetration and stimulation of oil-bearing Cisco Sands

Notes:
1. Refer WEL ASX Release 16 March 2021.

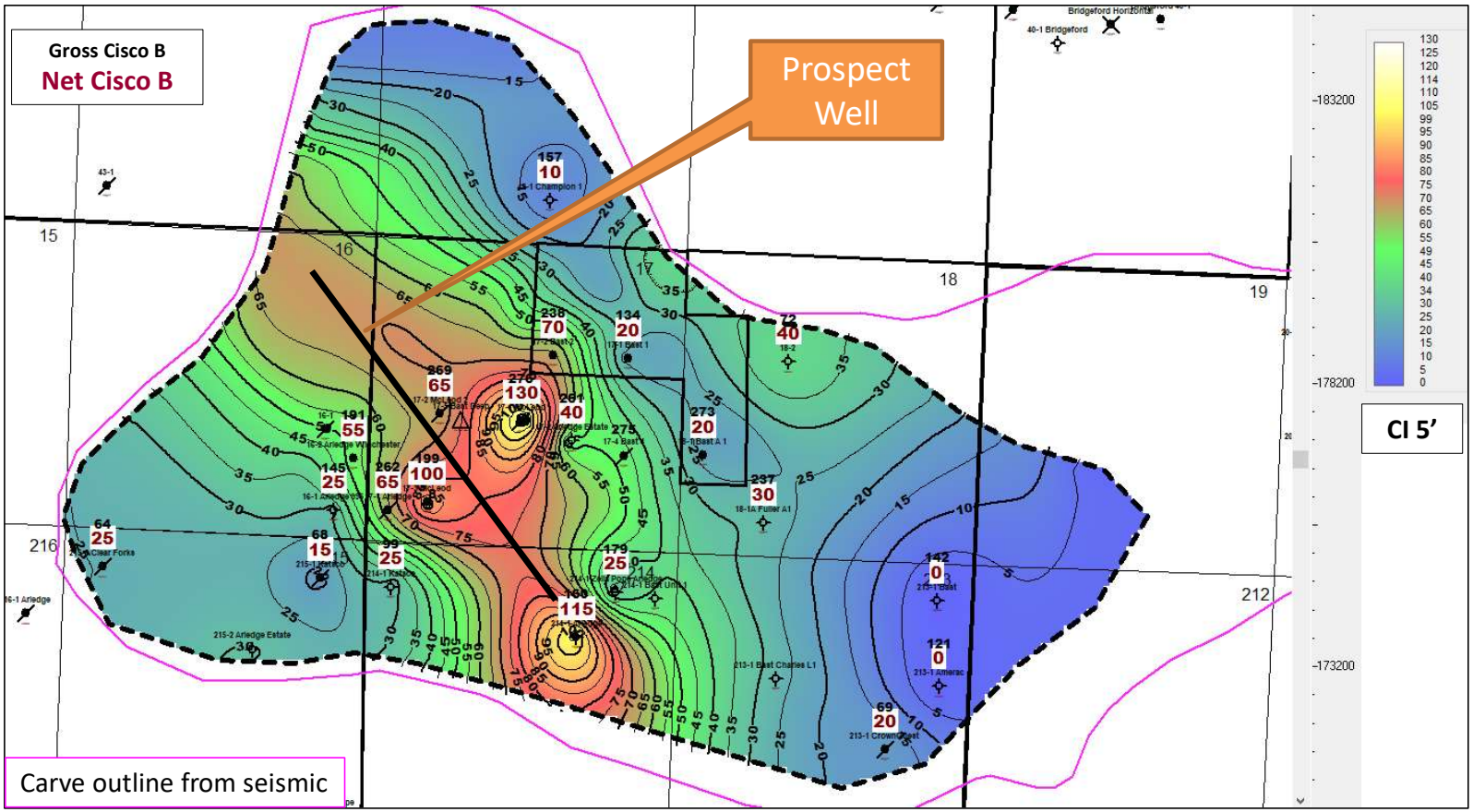
Cisco “B” Sand Horizontal

Lightning Upper Cisco B Sand – Net Sand

Upper Cisco – “B” Sand

- Gross OIP estimated at 42 mmbo
- Gross Contingent Resource (P50) Estimate: 4.8 million boe
- Sand distribution as mapped can accommodate multiple 7,500 ft horizontal wells.
- Well costs (D+C) estimated at US$4MM

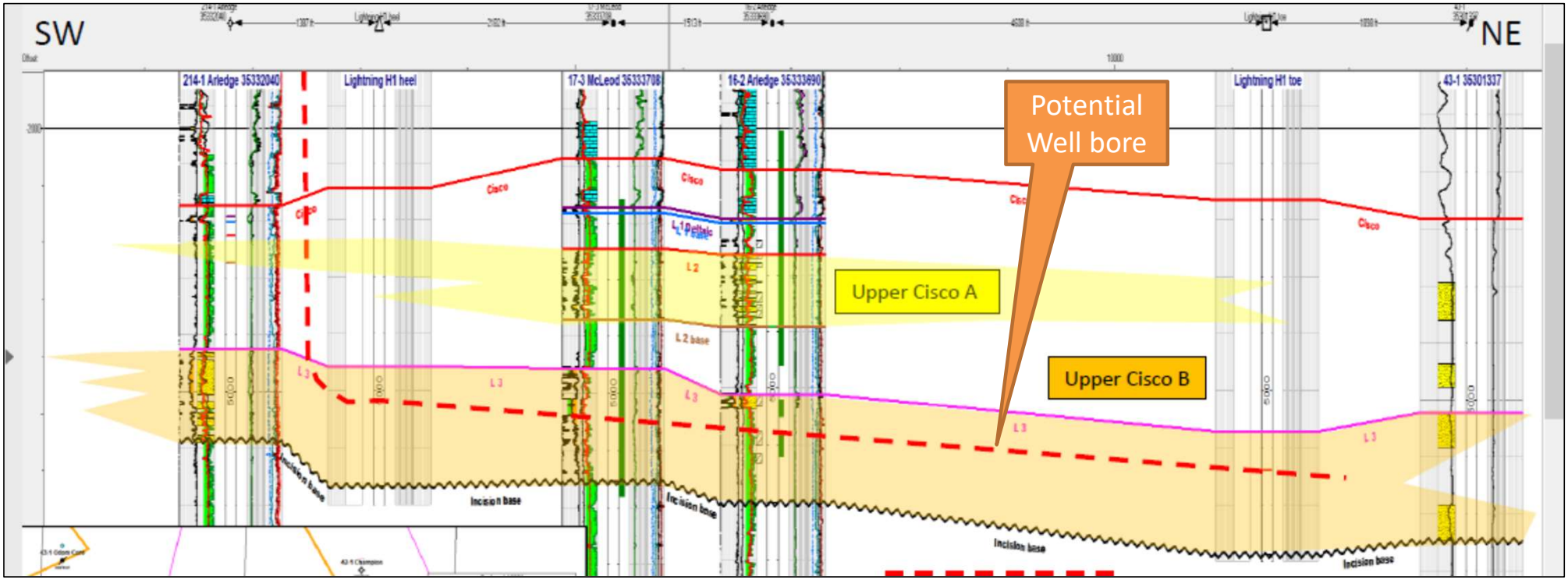
Lightning - Upper Cisco B sand - Net



Cisco “B” Sand Horizontal

Lightning Upper Cisco – Potential well-bore path

Lightning – Cisco Cross Section showing proposed well bore



Nolan County Project – 2021

2021

Phase 1 to July

- Apr – Bast #1 Workover
- May – Bast Deep Well
- Jun – McLeod 17-03 Workover
- July – Mustang 26-01 Well

Phase 2

Post July and subject to Phase 1 results

- Meteor
- Bast A#1 Recompletion
- Spitfire
- Eldorado
- Hurricane
- Mustang North

Winchester Energy Ltd		2021											
Drilling Schedule Permian Basin	WEL WI	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bast #1 Recompletion Upper Cisco Sand	92.0%												
Bast Deep Cambrian Structure/Strawn	100.0%												
Hurricane 6401 Fry and Canyon Reef	100.0%												
Spitfire Strawn Sand Channel	100.0%												
El Dorado Cambrian / Ellenburger	100.0%												
Mustang 26-01 Fry – Development	100%												
Meteor Cambrian Structure	100%												
Mustang North S63 Fry - Field extension	100%												
McLeod 17-03 Cisco Stimulation	100%												
Bast A #1 Recompletion Upper Cisco Sand													

Note – All well timing and well interests subject to rig availability, funding and/or farm-out.

Drilling Completion & Testing Workover/Re-entry

Nolan County Project – 2021

"Game Changer" potential drilling in May – other material prospects to follow

Re-entries and Recompletions – cost-effective production boosts				
Identified Opportunities	➢ Bast Field (up to 3 wells) ➢ Lightning (McLeod 17-03) ➢ White Hat Ranch (Canyon Reef)			
Field Extensions – low risk appraisal and development drilling				
Locations Identified	➢ Up to 6 locations at Mustang ➢ At least 1 location at Bast Field (Bast Deep success will add more)			
2021 Exploration Drilling – balancing risk and reward – success in any of these could add up to 50 new locations				
Prospects Identified and Ready To Drill[1,2]	➢ Bast Deep (Cambrian Four Way dip structure + shallow Strawn Sand)	948 mboe	100% WI	Q2 Drill !
	➢ Mustang Development Wel	74 mboe	100% WI	Q3 Drill !
	➢ Meteor (Cambrian Four Way dip structure)	1,934 mboe	100% WI	
	➢ Mustang North (Fry Sand – on trend with Mustang Field)	623 mboe	100% WI	
	➢ Spitfire (Strawn Channel Sand)	2,731 mboe	100% WI	
	➢ Hurricane (Canyon Reef + Fry Sand)	1,037 mboe	100% WI	
	➢ El Dorado (Cambrian / Ellenburger)	1,358 mboe	100% WI	
	Combined Gross Resource Potential (P50)	**8.7 million boe**		

Notes:
1. Ultimate decision to proceed with drilling subect to prospect meeting requisite financial and technical thresholds.
2. Resource estimates are Gross 'Best Estimates' (P50) – refer to 16 March 2021 ASX Release.

Nolan County Project – 2021

Summary

Multiple Prospects planned for 2021 Drilling	• Winchester has new prospects defined by both drilling and 3D seismic ready to drill in 2021 with considerable upside and large Working Interest (>75%).
Low to Moderate Risk	• Proven petroleum system, multiple reservoir targets in each prospect, well controlled by early drilling.
Low Cost	• Winchester is an established operator with a strong drilling track record. Low drilling and completion costs. Dry Hole drill cost, typically US$350,000 per location.
High Return	• If drilling is successful, discovery and development delivers a high rate of return expected to be reflected in WEL share price.

High Impact Bast Deep Prospect scheduled to be drilled in May 2021

Winchester Energy Pumpjack, Workover Rig, Oil being loaded at Arledge 16-02

WINCHESTER
ENERGY LIMITED

ASX: WEL
ABN 21 168 586 445

USA
TWO RIVERWAY, SUITE 1700
HOUSTON TX 77056

+1 713 333 0610

AUSTRALIA
24 OUTRAM STREET, GROUND FLOOR
WEST PERTH WA 6005

+61 8 9200 3743

WWW.WINCHESTERENERGYLTD.COM