

# INVESTOR UPDATE

MARCH 2021

**ROGER W. JENKINS**

PRESIDENT & CHIEF EXECUTIVE OFFICER

**Leaning Into Challenges**  
with Sustainable Solutions

# Cautionary Statement & Investor Relations Contacts

**Cautionary Note to US Investors** – The United States Securities and Exchange Commission (SEC) requires oil and natural gas companies, in their filings with the SEC, to disclose proved reserves that a company has demonstrated by actual production or conclusive formation tests to be economically and legally producible under existing economic and operating conditions. We may use certain terms in this presentation, such as “resource”, “gross resource”, “recoverable resource”, “net risked PMEAN resource”, “recoverable oil”, “resource base”, “EUR” or “estimated ultimate recovery” and similar terms that the SEC’s rules prohibit us from including in filings with the SEC. The SEC permits the optional disclosure of probable and possible reserves in our filings with the SEC. Investors are urged to consider closely the disclosures and risk factors in our most recent Annual Report on Form 10-K filed with the SEC and any subsequent Quarterly Report on Form 10-Q or Current Report on Form 8-K that we file, available from the SEC’s website.

**Forward-Looking Statements** – This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally identified through the inclusion of words such as “aim”, “anticipate”, “believe”, “drive”, “estimate”, “expect”, “expressed confidence”, “forecast”, “future”, “goal”, “guidance”, “intend”, “may”, “objective”, “outlook”, “plan”, “position”, “potential”, “project”, “seek”, “should”, “strategy”, “target”, “will” or variations of such words and other similar expressions. These statements, which express management’s current views concerning future events or results, are subject to inherent risks and uncertainties. Factors that could cause one or more of these future events or results not to occur as implied by any forward-looking statement include, but are not limited to: macro conditions in the oil and natural gas industry, including supply/demand levels, actions taken by major oil exporters and the resulting impacts on commodity prices; increased volatility or deterioration in the success rate of our exploration programs or in our ability to maintain production rates and replace reserves; reduced customer demand for our products due to environmental, regulatory, technological or other reasons; adverse foreign exchange movements; political and regulatory instability in the markets where we do business; the impact on our operations or market of health pandemics such as COVID-19 and related government responses; other natural hazards impacting our operations or markets; any other deterioration in our business, markets or prospects; any failure to obtain necessary regulatory approvals; any inability to service or refinance our outstanding debt or to access debt markets at acceptable prices; or adverse developments in the US or global capital markets, credit markets or economies in general. For further discussion of factors that could cause one or more of these future events or results not to occur as implied by any forward-looking statement, see “Risk Factors” in our most recent Annual Report on Form 10-K filed with the US Securities and Exchange Commission (“SEC”) and any subsequent Quarterly Report on Form 10-Q or Current Report on Form 8-K that we file, available from the SEC’s website and from Murphy Oil Corporation’s website at <http://ir.murphyoilcorp.com>. Murphy Oil Corporation undertakes no duty to publicly update or revise any forward-looking statements.

**Non-GAAP Financial Measures** – This presentation refers to certain forward-looking non-GAAP measures such as future “Free Cash Flow”. Definitions of these measures are included in the appendix.

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# Agenda



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# Murphy Overview

- Long corporate history, IPO 1956
- Advantaged low-carbon portfolio on both federal and private lands
- Global offshore and North American onshore assets
- Oil-weighted production drive high margins
- Exploration renaissance in focus areas
- Maintain appropriate liquidity levels
- Long-term support of shareholders
- Deliver energy in a safe and efficient manner
- Enhancing ESG disclosures and established emission reduction goals



# What's New in 1Q 2021

## Launched Bond Transaction March 2, 2021

- Objective is risk management of 2022 note maturities
- Maintain goal of aggregate debt reduction in oil price recovery

## Progressing King's Quay Negotiations

- Producer and owner groups finalizing documentation
- Proceeds will be used to repay borrowings on the senior unsecured credit facility

## Gulf of Mexico – Tieback and Workover Projects

- Operated and non-op subsea repairs complete, wells online
- Non-op Lucius 918 #3 and Lucius 919 #9 now online

## Gulf of Mexico – Khaleesi / Mormont / Samurai Projects

- Received all permits to begin drilling program in 2Q 2021

## Gulf of Mexico – Lucius Field

- Increased WI to 12.7% from 9% for \$20 MM, ~2 MBOEPD incremental current production
- Expect investment to pay back in ~1 year
- Not included in 1Q 2021 and FY 2021 production guidance

## Winter Storm Update

- Temporary onshore production shut-in, volumes back online
- Maintain production guidance
  - 1Q 2021 149 – 157 MBOEPD
  - FY 2021 155 – 165 MBOEPD

## Updated Compensation for 2021

- Maintained emphasis on capital returns
- Added free cash flow metric
- Increased focus on cost management by including G&A and lease operating expense metrics
- Added greenhouse gas emissions intensity reduction target
- Decreased emphasis on volume-based metrics
- Maintained 75% equity compensation tied to shareholder and capital returns
- Partially restored executives' salaries to pre-COVID levels
- Director cash compensation ~27% less than level at beginning of 2020

*Note: Production volumes, sales volumes, reserves and financial amounts exclude noncontrolling interest, unless otherwise stated*

# Executing Our Strategy



## Employ Foresight, Talent and Financial Discipline to Deliver Inspired Energy Solutions

- Targeting flatter oil production profile with Tupper Montney natural gas production development
- Maintaining capital discipline throughout commodity price cycles to support debt reduction in oil price recovery
- Benefiting shareholders with long-standing dividend policy
- Enhancing a culture of innovation



## Operate in a Sustainable, Safe and Conscientious Manner

- Protecting the health and safety of employees and contractors during COVID-19
- Targeting greenhouse gas emissions intensity reduction of 15 - 20% by 2030
- Advancing diversity, equity and inclusion programs



## Develop and Produce Offshore Assets with a Complementary Unconventional Onshore Portfolio

- Benefiting from diversification that provides flexibility through a multi-basin portfolio
- Balancing capital allocation of short-cycle wells and tie-back projects with long-term projects at low break-evens
- Streamlining portfolio through accretive, oil-weighted transactions since 2014



## Explore for Cost-Effective Resources Utilizing Differentiated Perspectives in Proven but Under-Explored Basins

- Building significant upside to current resource base through focused exploration
- Maturing ~1,000 MMBOE of net risked resources from current exploration portfolio



## Maintain a Diverse and Price Advantaged, Oil-Weighted Portfolio

- Maintaining competitive margins through lower cost structure
- Reducing risk through a multi-basin portfolio that realizes diversified pricing points
- Executing oil-weighted international exploration in Gulf of Mexico, Mexico and Brazil



## Continue to Be a Partner of Choice, Leveraging Our Operating and Technical Capabilities

- Continuing to advance company-making exploration plans ahead of oil price improvement
- Maintaining strategic partnership in Vietnam

# Leaning into Challenges with Sustainable Solutions

## Solidifying the Company to Remain Competitive



Established flatter production profile to maximize free cash flow and achieve debt reduction in an oil price recovery

Reduced risk and underpinned cash flows by employing opportunistic hedging strategy

Sanctioned low-risk Tupper Montney development

Supporting Gulf of Mexico projects that provide significant free cash flow generation and low emission intensity

Achieved G&A cost reductions through significant company-wide reorganization

## Ensuring Long-Term Resilience



Reduced CAPEX and cost structure while right-sizing dividend

Maintained \$311 MM of cash and cash equivalents, with total liquidity of \$1.7 BN at year-end 2020

Allocated capital to maximize long term free cash flow while covering long-standing dividend

Mitigating covenant risk on unsecured revolver

## Operating in Multiple Basins



Portfolio diversification across both federal and private lands provides flexibility and enhanced low-carbon footprint

Eagle Ford Shale operations located on private land and offer significant upside in an oil price recovery

Improved operations in Tupper Montney and Kaybob Duvernay assets to allow for significant free cash flow upside

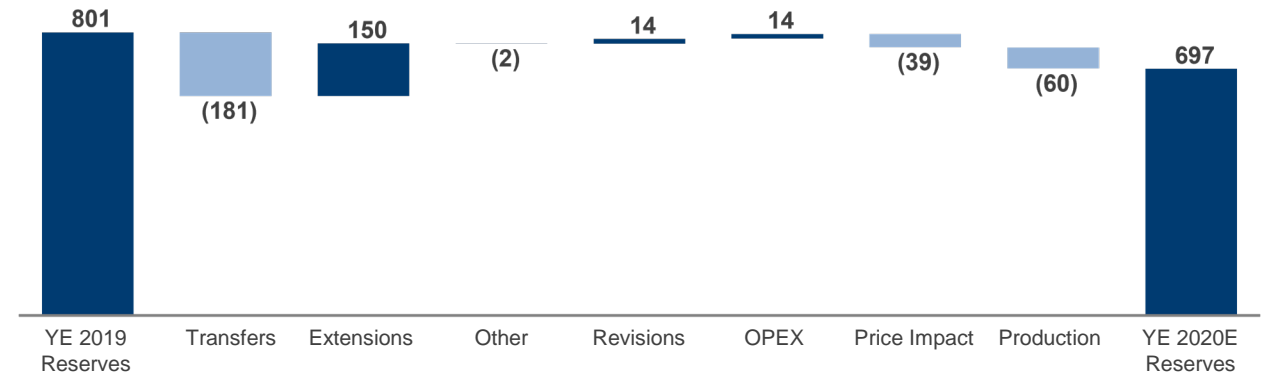
Operations supported by deep inventory of Gulf of Mexico and international exploration opportunities



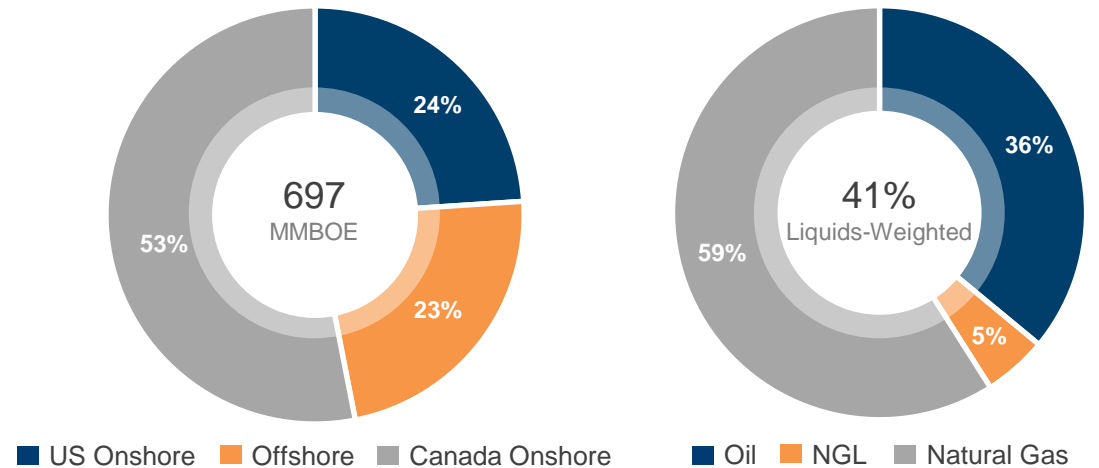
# 2020 Proved Reserves

- Total proved reserves 697 MMBOE at YE 2020 vs 801 MMBOE at YE 2019
- Total proved reserves declined 13% due to:
  - Nearly 30% lower crude oil prices and less capital allocation toward shale production growth
    - Resulted in transfer of Eagle Ford Shale and Kaybob Duvernay PUDs to probable reserves
  - Offset partially by the sanctioning of the Tupper Montney development, which converted probable reserves to natural gas PUDs with minimal subsurface risk
- Net transfers of PUDs to probable reserves (181 MMBOE)
  - US onshore (116 MMBOE)
  - Kaybob Duvernay (18 MMBOE)
  - Offshore (15 MMBOE)
- Net extensions from converting probable reserves and contingent resources to PUDs (150 MMBOE)
  - Tupper Montney 126 MMBOE
  - US onshore 16 MMBOE
  - Offshore 8 MMBOE
- Maintained proved developed reserves at 57%
- Preserved reserve life index of more than 11 years

Proved Reserves *MMBOE*



2020E Proved Reserves



*Note: Production volumes, sales volumes, reserves and financial amounts exclude noncontrolling interest, unless otherwise stated  
Reserves are based on preliminary SEC year-end 2020 audited proved reserves and exclude noncontrolling interest*



# Maintaining Onshore 2P Reserves

## Capital Allocation in Multi-Year Plan Drives Reserve Bookings

- Reduced capital allocation to Eagle Ford Shale and Kaybob Duvernay resulted in PUDs transferred to probable reserves
- Increased capital in Tupper Montney due to operational improvements, price recovery, opportunistic hedging and price diversification reclassified probable reserves as PUDs

## Ability To Rebook Onshore Shale PUDs With Adjusted Capital Plan

- PUD classification based on timing of capital not hydrocarbon risk

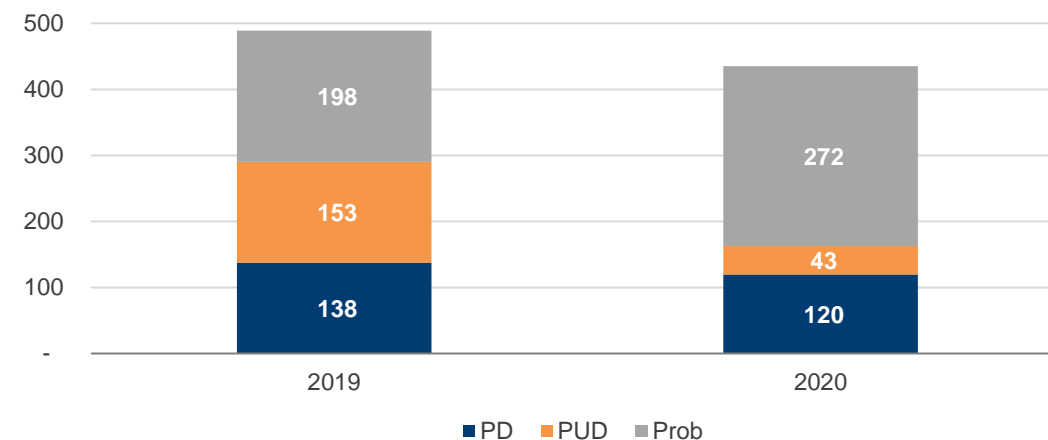
## Onshore Shale 2P Reserves Remain Stable Y-o-Y

- ~2,475 MMBOE YE 2020 vs. ~2,510 MMBOE YE 2019

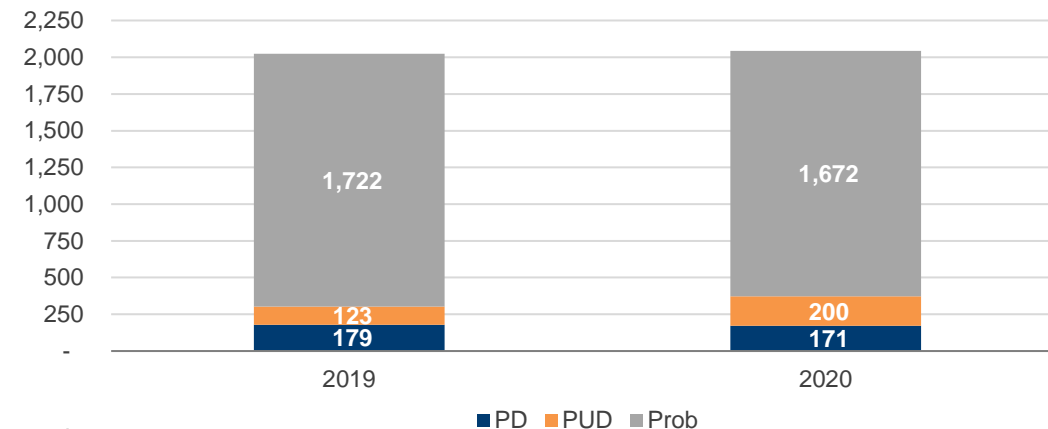
## Deep Inventory of Drill-Ready, Low Risk Locations

- More than ~3,400 undrilled locations onshore North America at YE 2020, including contingent resources

Eagle Ford Shale 2P Reserves MMBOE



Canada Onshore 2P Reserves MMBOE



Note: Production volumes, sales volumes, reserves and financial amounts exclude noncontrolling interest, unless otherwise stated  
2P reserves are based on SPE/PRMS framework, including projects outside the SEC 5-year rule, and exclude noncontrolling interest

# ENVIRONMENTAL, SOCIAL AND GOVERNANCE



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with Sustainable Solutions



# Committed to Benefitting All Stakeholders

## Environmental Management



4 IOGP\* recordable spills FY 2020, equaling rate of 1.1 BBLs per MMBOE

- Gulf of Mexico IOGP spill free since 2014
- Canada onshore 3 years with no IOGP spill

Achieved YoY flaring reductions in NA onshore by implementing natural gas takeaway installations, compressor upgrades and engineering controls

Built produced water handling system to recycle water for sanctioned Tupper Montney development

Founding member of The Environmental Partnership with a focus on reducing emissions

## Protecting Our People



Strong COVID-19 protocols, resulting in offshore infection rate almost half the industry average

0.28 Total Recordable Incident Rate FY 2020

Total Recordable Incident Rate YoY improvement of 46%

Advancing diversity, equity and inclusion programs and practices in the company and community

Continued community engagement with United Way and El Dorado Promise

Supporting employees in times of need with Disaster Relief Foundation during historic hurricane season

## Expert and Independent Board



Board members have long-term industry, operating and HSE expertise

Separate CEO and Chairman roles

12 of 13 directors are independent

15% of directors are female, with at least one female director for more than 30 years

Board of Directors elected with average vote of 99% over past 5 years

ISS governance score 75% above peer average

## Lowering Environmental Impact While Reducing Operating Costs



Utilize bi-fuel hydraulic frac spreads for 2020 and 2021 completions; achieved CO<sub>2</sub> emissions reduction of >2,500 tonnes

Removing compressor units

Established integrated remote operating center for Canadian operations, reduces downtime and costs

\* IOGP – International Association of Oil & Gas Producers

# 2020 Sustainability Report Highlights



## Sustainability Report Disclosure Framework



Aligned to the TCFD framework

Reported to SASB disclosure topics and metrics

Included TCFD and SASB content indices

### Environment



Expanded GHG and air quality disclosures

Established goal of reducing GHG emissions intensity by 15 - 20% in 2030 from 2019

Increased disclosures on climate risk management

Added waste management, biodiversity and well management disclosures

### Social



Outlined workforce development and employee engagement programs

Expanded diversity disclosures on minorities and women

Detailed community engagement involvement

Enacted Indigenous Rights Policy

### Governance



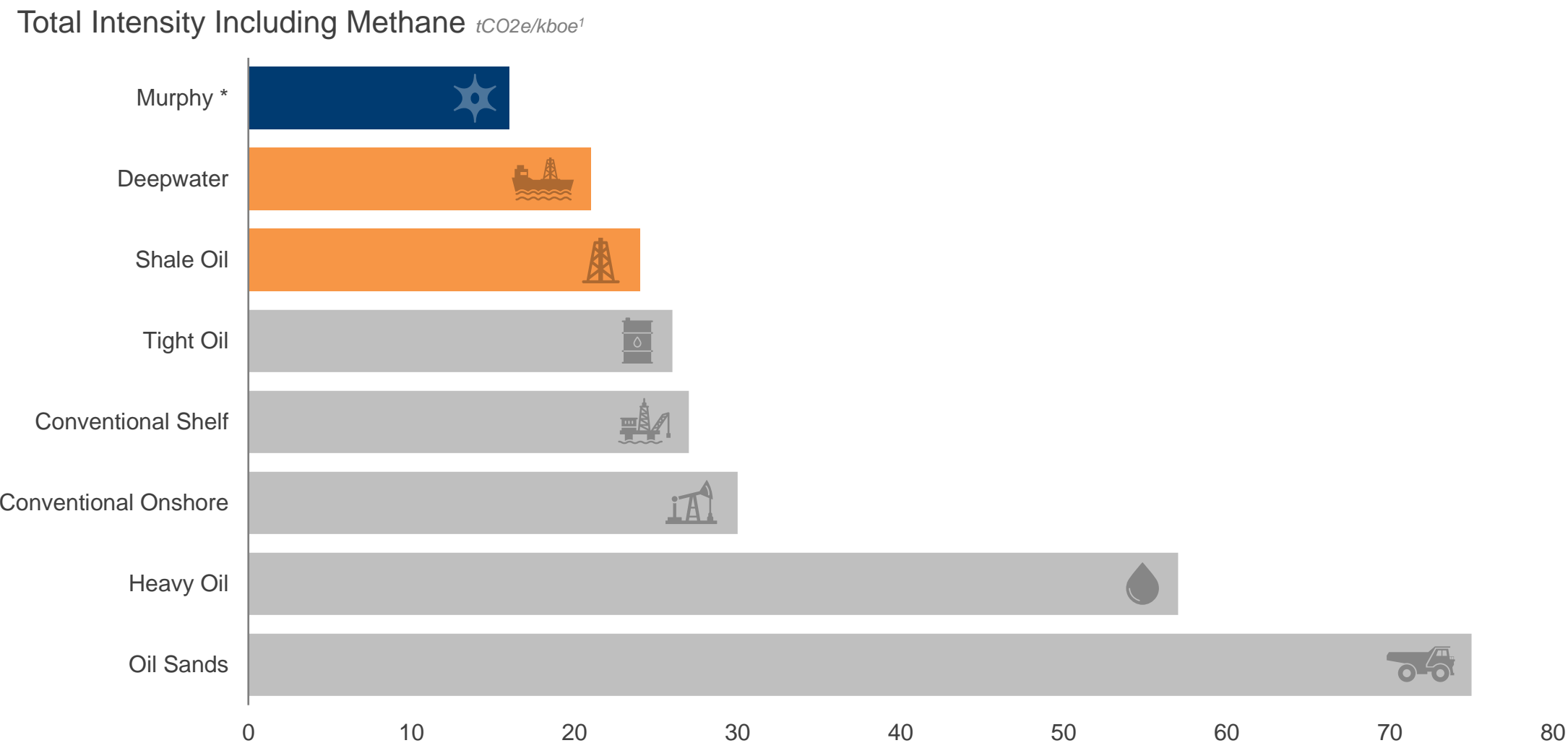
Expanded HSE Board Committee purview to include ESG issues and concerns

Formed ESG Executive Management Committee and created Director of Sustainability role

Disclosed Anti-Bribery and Corruption Policy



# Low-Emissions Energy Generation



<sup>1</sup> The foregoing information was obtained from *The Edge*, a product of Wood Mackenzie  
\* In 2019, excluding Malaysia

# ONSHORE PORTFOLIO UPDATE



# Eagle Ford Shale

FY 2021 Plan

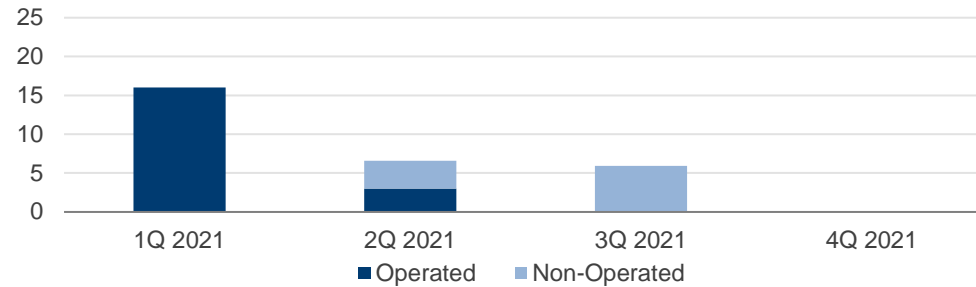
## FY 2021 Capital Budget

- \$170 MM CAPEX
  - Includes field development
- 19 operated, 53 gross non-operated wells online

## Strong Base Production Delivers Low, Stable Declines

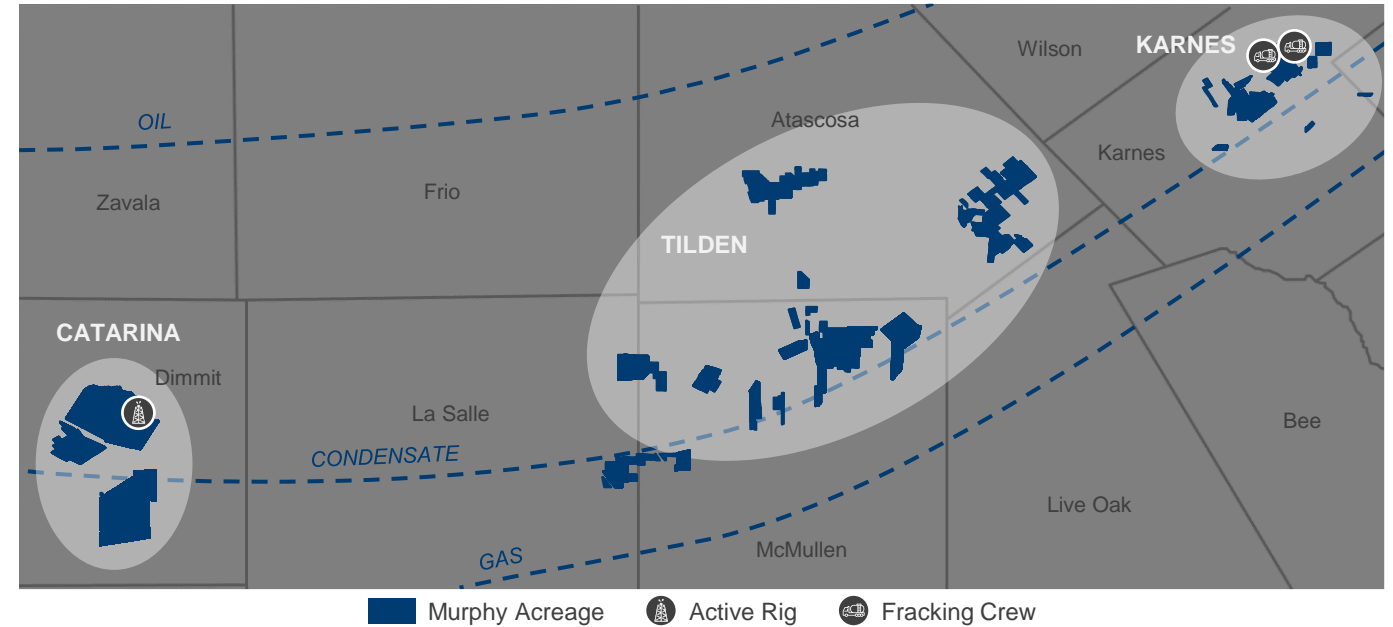
- Low base decline achieved through less downtime, artificial lift optimization and facility optimization
  - ~24% base production decline in 2021 for all pre-2021 wells

## 2021 Wells Online

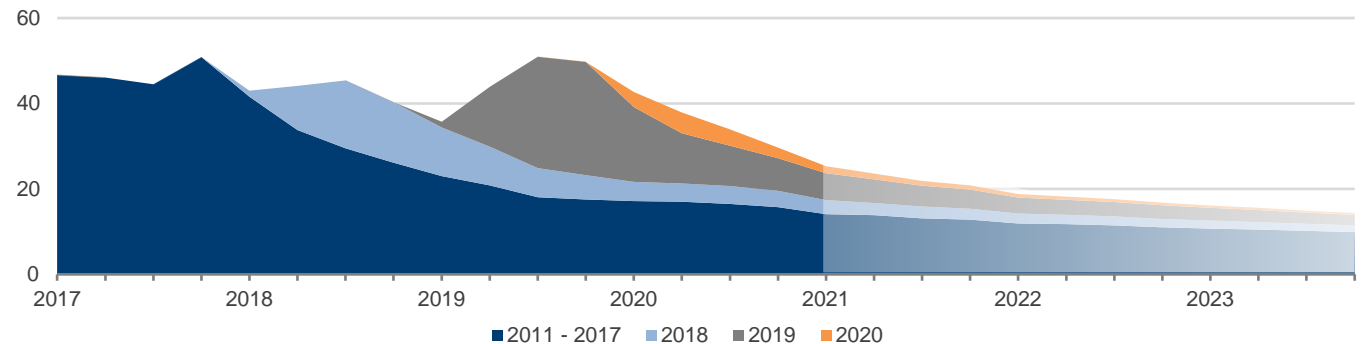


Note: Non-op well cadence subject to change per operator plans  
Eagle Ford Shale non-operated wells adjusted for 18% average working interest

## Eagle Ford Shale Acreage



## Eagle Ford Shale Existing Well Declines *Net MBOEPD*



### FY 2021 Capital Budget

- \$85 MM CAPEX
  - Includes field development
- 14 operated wells online

### Generated Positive Free Cash of ~\$50 MM in FY 2020

- Tightening AECO / Henry Hub basis due to improving market access from infrastructure buildouts has led to cash flow improvement

### ~1,400 Remaining Locations\* Support a Low-Carbon Energy Future

### Ongoing Price Risk Mitigation Strategy

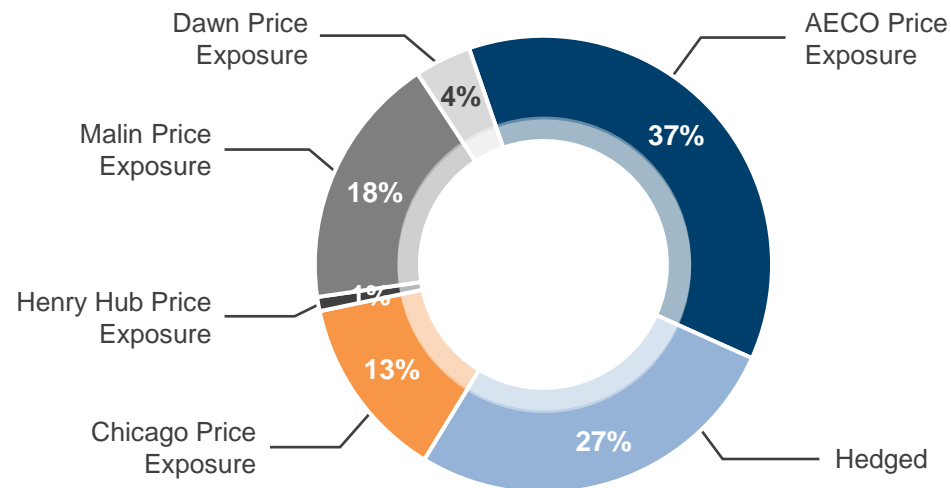
- Added contracts for FY 2021 – FY 2024 at AECO hub

Type	Volumes (MMCF/D)	Price (MCF)	Dates
Fixed Price Forward Sales at AECO	160	C\$2.54	1/1/2021 – 1/31/2021
Fixed Price Forward Sales at AECO	203	C\$2.55	2/1/2021 – 5/31/2021
Fixed Price Forward Sales at AECO	212	C\$2.55	6/1/2021 – 12/31/2021
Fixed Price Forward Sales at AECO	222	C\$2.41	FY 2022
Fixed Price Forward Sales at AECO	192	C\$2.36	FY 2023
Fixed Price Forward Sales at AECO	147	C\$2.41	FY 2024

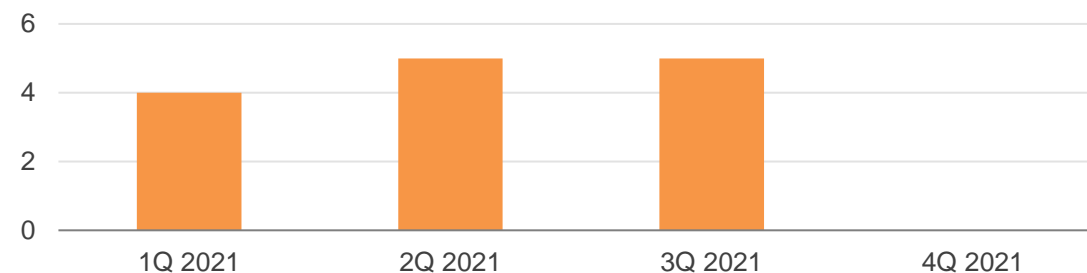
\* Includes contingent well count

Note fixed price forward sales contracts as of January 26, 2020

Mitigating AECO Exposure  
FY 2020 Tupper Montney Natural Gas Sales



### 2021 Wells Online





### FY 2021 Capital Budget

- \$10 MM CAPEX, including Placid Montney
- No wells online
- Field development ahead of well completions in 2022

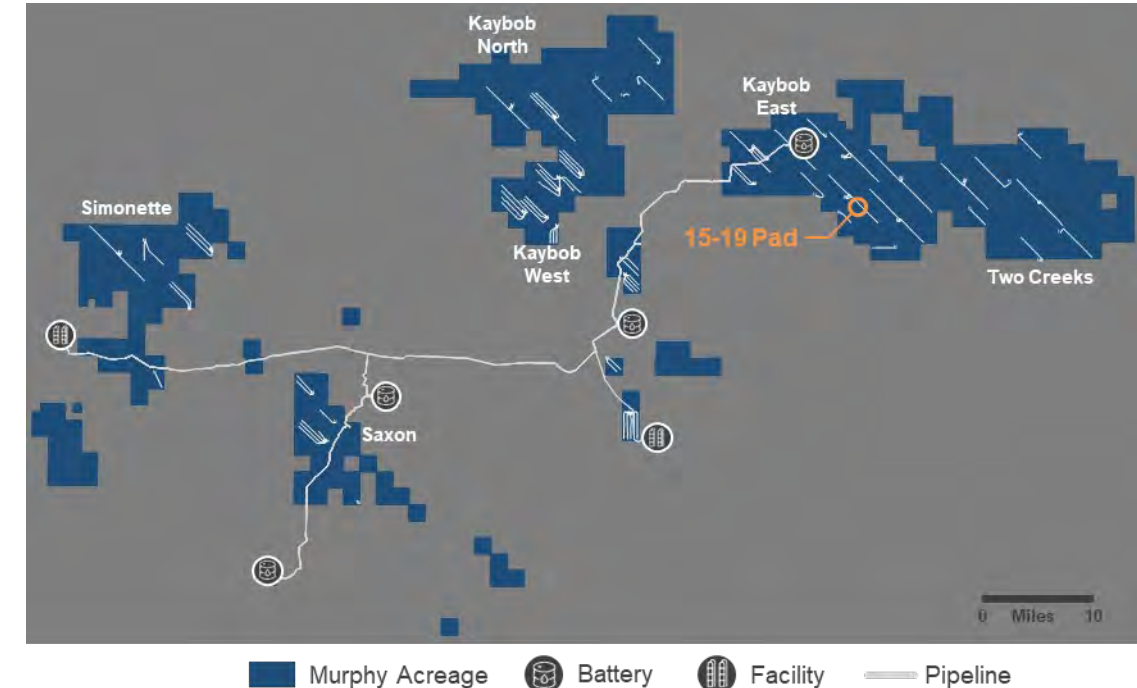
### Lower Costs Support Long-Term Development

- Established integrated remote operating center, reduces downtime and costs
- Industry-leading well productivity, in-line with core performance of other top NA shale plays
- Tightening differentials leading to improved cash flow

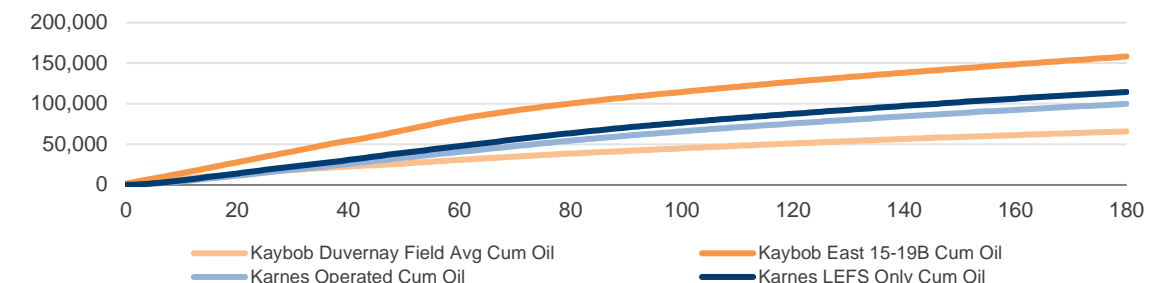
### Kaybob East 15-19 Pad

- Online 3Q 2020
- Competitive with top producing EFS Karnes wells
- 180-day cumulative oil production
  - Best well performer in Kaybob Duvernay
  - Top 2% of Murphy unconventional wells

Kaybob Duvernay Acreage



Cumulative Oil *BOPD*



# OFFSHORE PORTFOLIO UPDATE



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### FY 2021 Capital Budget

- \$325 MM CAPEX
- Primarily supports major projects with first oil 1H 2022

### Tieback and Workover Projects

- Progressing non-op Kodiak #3 well completion with first oil 1Q 2021
- Non-op Lucius 918 #3 and Lucius 919 #9 now online
- Finalizing Calliope work, first oil on track 2Q 2021
- Operated and non-op subsea repairs complete, wells online

#### Operated Tieback and Workover Projects

Project	Drilling & Completions	Subsea Tie-In	First Oil
Calliope*	✓	✓	2Q 2021

#### Non-Operated Tieback and Workover Projects

Project	Drilling & Completions	Subsea Tie-In	First Oil
Kodiak #3 <sup>1</sup>	✓	✓	1Q 2021
Lucius 918 #3	✓	✓	✓
Lucius 919 #9 <sup>1</sup>	✓	✓	✓

<sup>1</sup> Completions only; well previously drilled



# Gulf of Mexico

## Major Projects Capital Drives Future Production

### King's Quay Floating Production System

- Fabrication progressing on schedule, despite COVID-19 limitations
  - Construction >90% complete, achieved significant milestone of mating hull and topsides
- Producer and owner groups finalizing documentation
- On track to receive first oil 1H 2022

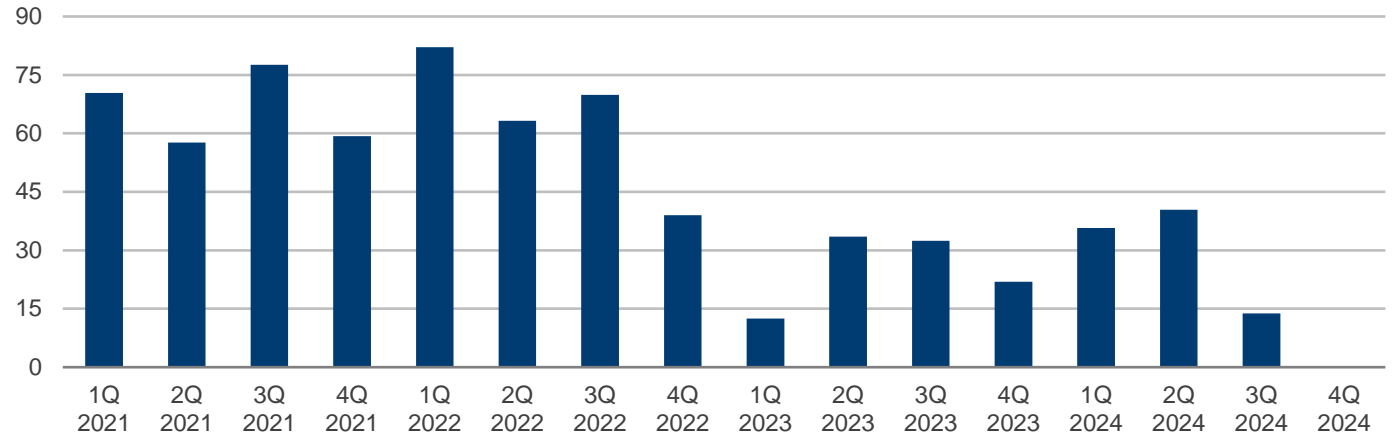
### Khaleesi / Mormont / Samurai

- Received all permits to begin drilling
  - Campaign launches 2Q 2021
- On track for first oil in 1H 2022
- Project breakeven <\$30/BBL

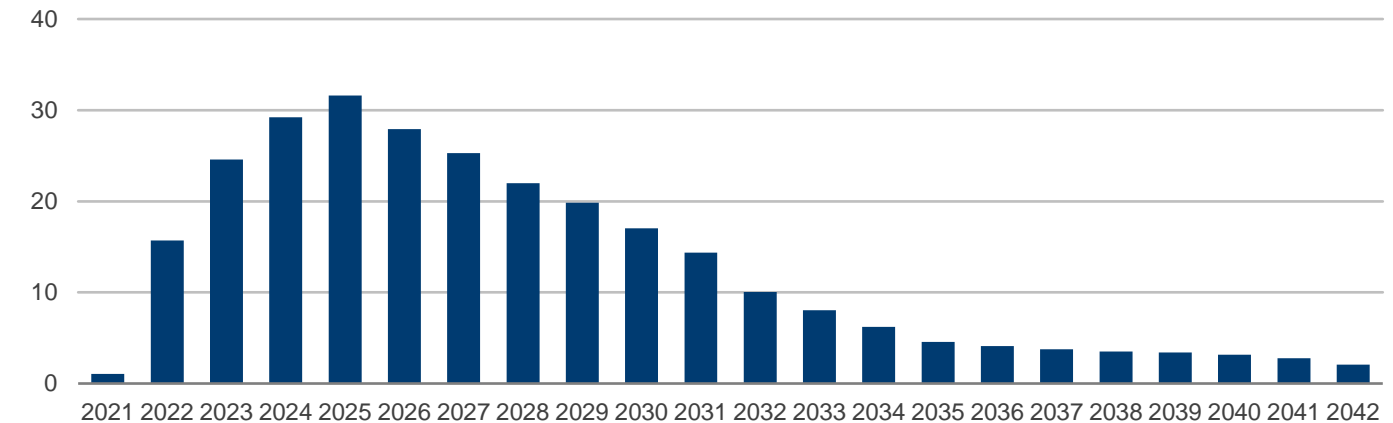
### St. Malo Waterflood

- Completing first producer well of campaign
- Preparing to drill second injector well
- Preparing to begin producer well workover

Major Projects Net CAPEX \$MM



Major Projects Net Production MBOEPD



Major projects include Khaleesi, Mormont, Samurai and St. Malo waterflood. Tables above do not include King's Quay.



# EXPLORATION UPDATE



# Exploration Update

## Gulf of Mexico

### FY 2021 Capital Budget

- \$75 MM CAPEX

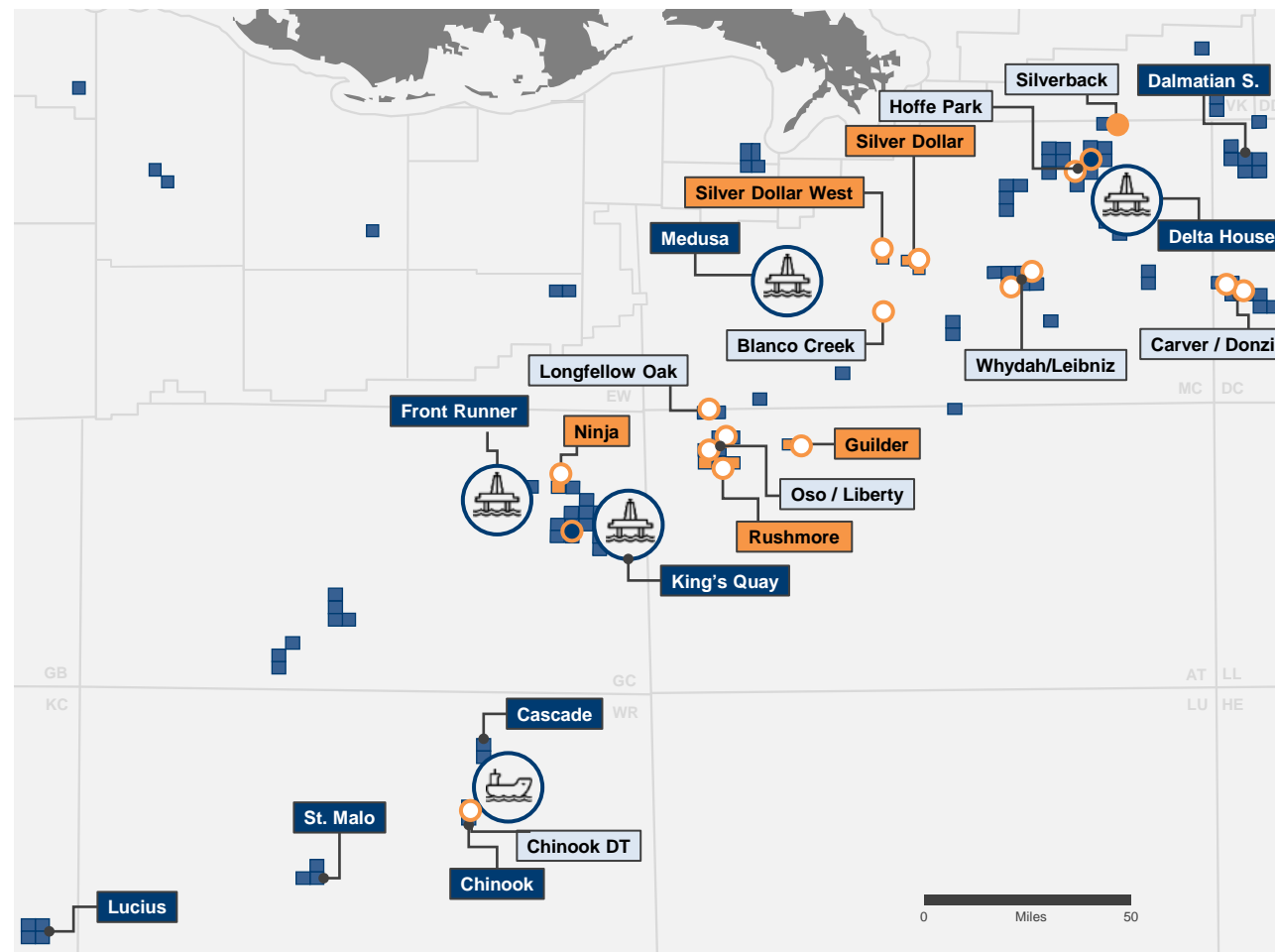
### Interests in 126 Gulf of Mexico OCS Blocks

- ~725,000 total gross acres, 54 exploration blocks
- ~1 BBOE gross resource potential
  - 15 key prospects

### OCS Lease Sale – November 2020

- Successfully bid on eight blocks with five prospects in the deepwater Gulf of Mexico lease sale
  - Net cost of \$5.3 MM for 100% WI
  - Average gross resource potential of more than 90 MMBOE per prospect
  - All blocks formally awarded 1Q 2021
- Provides standalone and near-field opportunities

### Gulf of Mexico Exploration Area



● 2021 Well ● Discovery ○ Key Exploration Project ■ Murphy WI Block 🚢 Offshore Platform 🚢 FPSO  
■ November Lease Sale Blocks



# 2021 CAPITAL PLAN



# 2021 Capital Program



## 2021 GUIDANCE

Production  
1Q 2021 **149 - 157 MBOEPD**

Production  
FY 2021 **155 - 165 MBOEPD**

CAPEX  
FY 2021 **\$675 - \$725 Million**

### Focusing CAPEX on High-Margin Assets

- \$325 MM allocated to Gulf of Mexico
  - 2021 Gulf of Mexico spending primarily directed toward major projects, providing long-term production volumes
- \$170 MM allocated to Eagle Ford Shale
- \$85 MM allocated to Tupper Montney

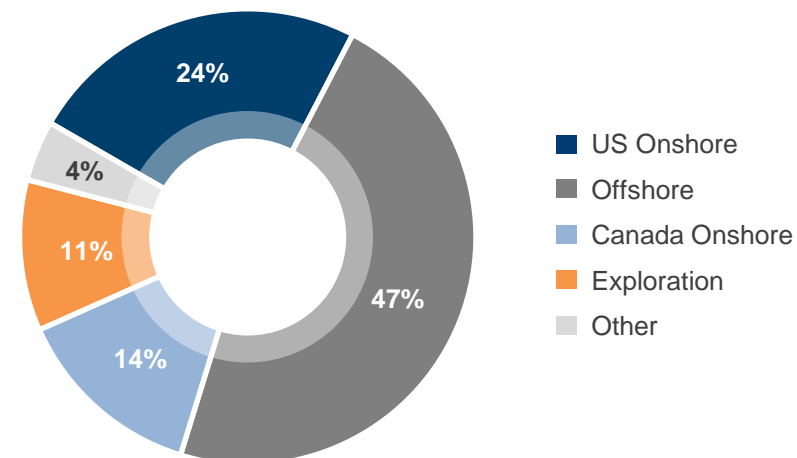
### Producing from our Oil-Weighted Portfolio

- 52% oil-weighted production in 2021, 59% liquids-weighted production in 2021

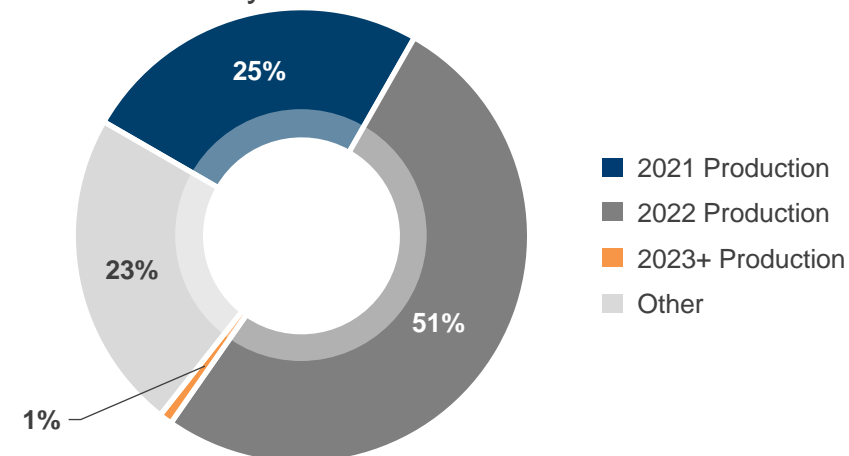
### Managing Risk With Commodity Hedges to Underpin Capital Returns

*Note: Production volumes, sales volumes, reserves and financial amounts exclude noncontrolling interest, unless otherwise stated*

2021 Total CAPEX



CAPEX by Production Year



*Note: 2022 production includes St. Malo waterflood, Khaleesi, Mormont and Samurai projects. 2023+ production includes exploration*



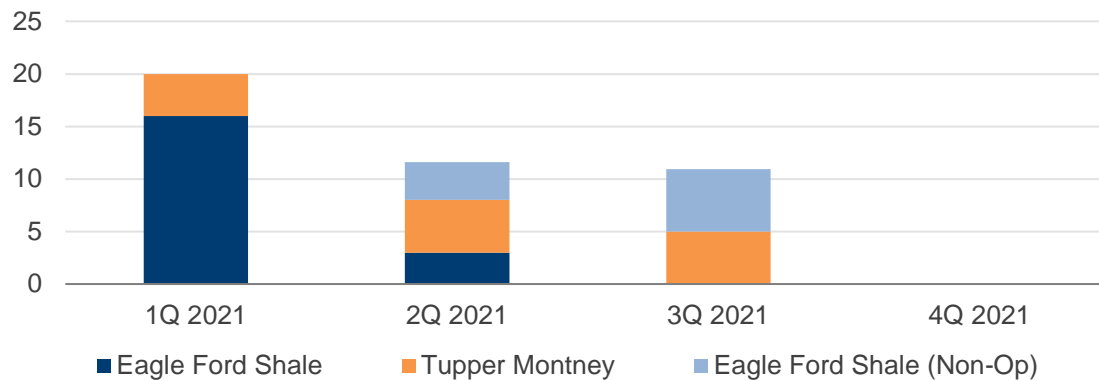
# North America Onshore

## Balancing Investments for Free Cash Generation

### 2021 Onshore Capital Budget \$265 MM

- \$170 MM Eagle Ford Shale
  - 19 operated wells + 53 gross non-operated wells online
  - Includes field development costs
- \$85 MM Tupper Montney
  - 14 operated wells online
  - Includes field development costs
- \$9 MM Kaybob Duvernay
  - Field development ahead of completions in 2022
- \$1 MM Placid Montney
  - Field maintenance

### 2021 Wells Online



Note: Non-op well cadence subject to change per operator plans  
Eagle Ford Shale non-operated wells adjusted for 18% average working interest

### Eagle Ford Shale Operated Well Locations

Area	Net Acres	Reservoir	Inter-Well Spacing (ft)	Remaining Wells
Karnes	10,092	Lower EFS	300	106
		Upper EFS	600	142
		Austin Chalk	1,200	97
Tilden	64,770	Lower EFS	600	264
		Upper EFS	500	138
		Austin Chalk	600	100
Catarina	48,375	Lower EFS	550	238
		Upper EFS	950	219
		Austin Chalk	1,200	112
<b>Total</b>	<b>123,237</b>			<b>1,416</b>

\*As of December 31, 2020

### Kaybob Duvernay Well Locations

Area	Net Acres	Inter-Well Spacing (ft)	Remaining Wells
Two Creeks	35,232	984	104
Kaybob East	37,744	984	152
Kaybob West	25,984	984	107
Kaybob North	25,536	984	98
Simonette	32,116	984	108
Saxon	12,298	984	57
<b>Total</b>	<b>168,910</b>		<b>626</b>

\*As of December 31, 2020

# Tupper Montney Project

## Low Carbon Intensity Development Drives Attractive Cash Margins

### Why Sanction Tupper Montney Now?

- Employ capital allocation process that maximizes free long term cash flow
  - Generates greater cash margin per well than Eagle Ford Shale at conservative prices
- Long history of continuous improvement
  - Increasing laterals to ~11,000'
  - Improved drilling and completion costs to ~\$5 MM / well
  - Lowered all-in costs\* to \$1.44/MCFE
  - Increased average ultimate recovery to ~21 BCF / well

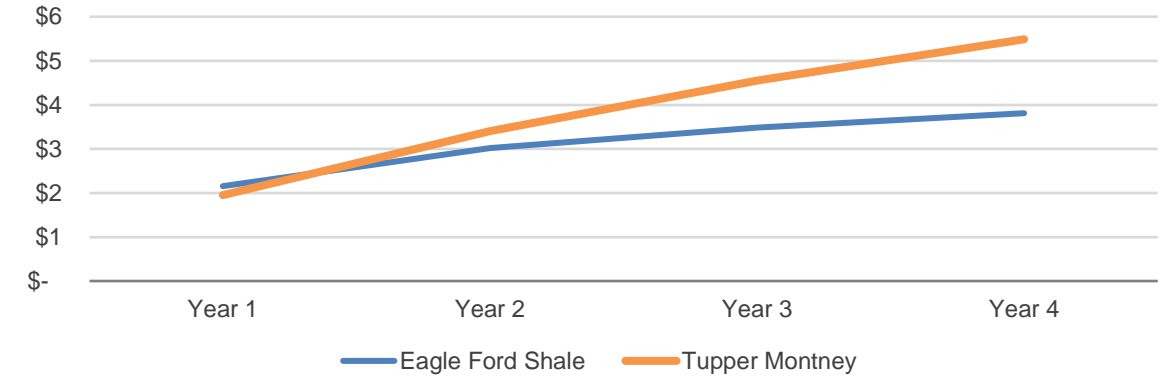
### Improved Macro Economics for Region

- Increased local take-away capacity and debottlenecking completed
  - 600 MMCFD westward export 2020 – 2022
  - 1.3 BCFD eastward export 2021 – 2022
- Declining regional production 2 BCFPD lower Y-o-Y
- Improved domestic demand due to coal to natural gas switching
- Construction underway for LNG Canada project, estimated in service in 2025
- Lowest AECO to Henry Hub basis differential in 5 years

### Lowest Carbon Intensity Asset

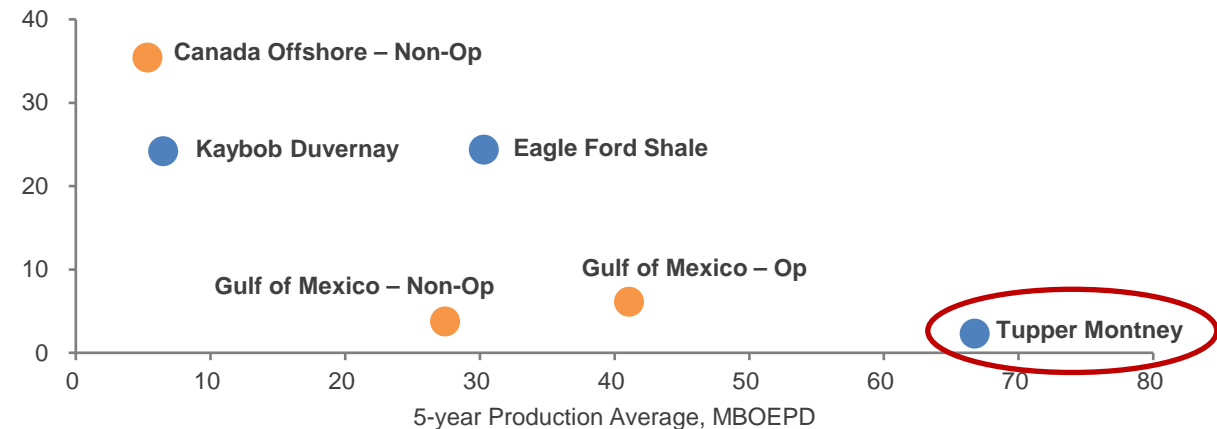
- Lowest greenhouse gas intensity asset in current portfolio

### Annual Cumulative Cash Margin Per Well \$MM



Cash margins based on average price \$44/WTI, \$1.78/MCF AECO

### Average 5-Year GHG Intensity by Asset Tonnes CO<sub>2</sub>e / MBOE



Note: 5-year average intensity based on internal estimates

\* All-in costs = LOE + transportation, gathering, processing + G&A

# Tupper Montney Development

## High Impact Development Drives Future Cash Flows

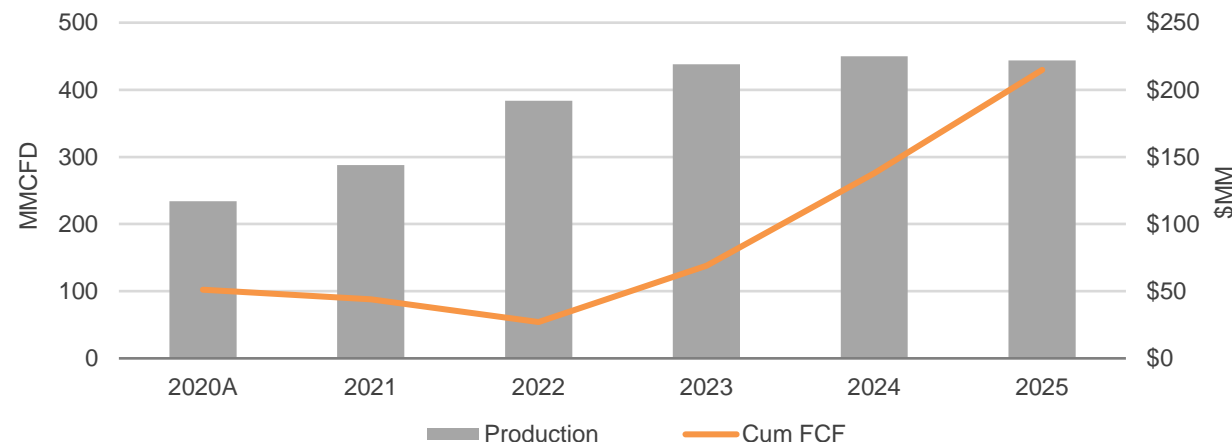
### Tupper Montney Development Plan

- Commitment to infrastructure approved 2Q 2018; sanctioned 4Q 2020
- 2021 capital budget \$85 MM
- Free cash flow generated in 2020 of ~\$50 MM covers cumulative free cash flow requirement of \$24 MM for 2021 - 2022
- Average annual capex of ~\$68 MM from 2020 - 2025
- Cumulative free cash flow of ~\$215 MM from 2020 - 2025

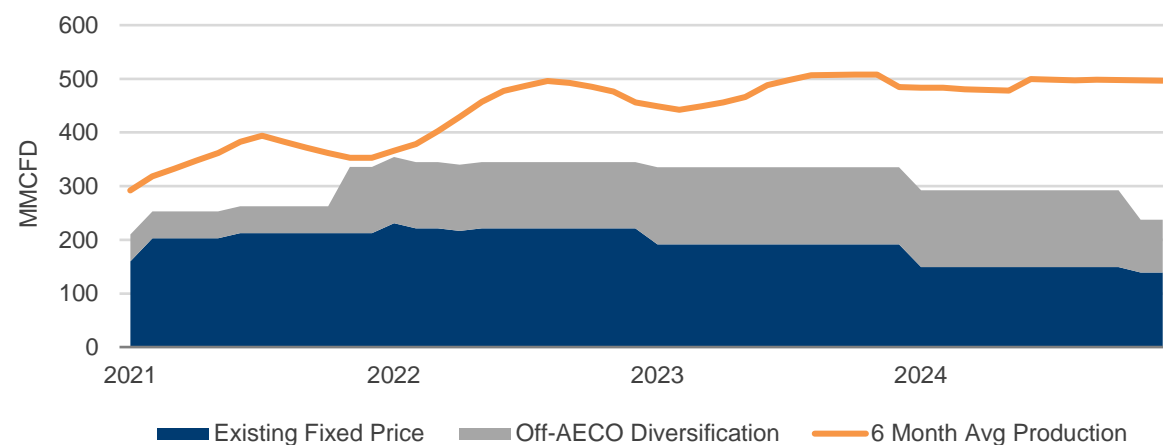
### Low Execution Risk

- Increased average ultimate recovery to ~21 BCF / well
- Reduced drilling and completions cost to ~\$5 MM / well
- Low subsurface risk from proven resource
- Ample existing take-away and infrastructure in place
- Mitigate price risk with fixed price forward sales contracts through 2024

Tupper Montney Production and Cumulative FCF



Tupper Montney Development Hedging and Production



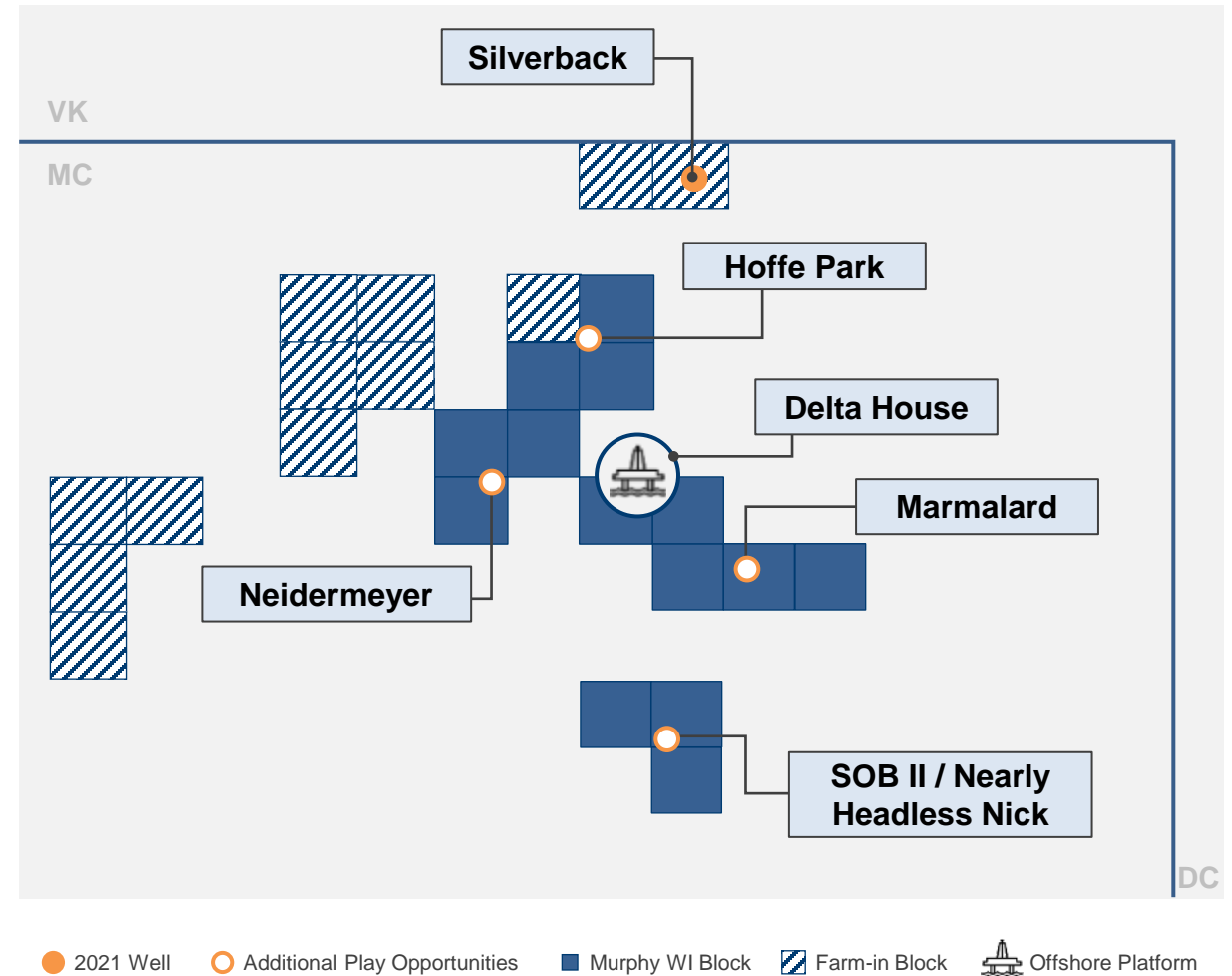
Note: Free cash flow = operating cash flow (-) CAPEX (-) abandonment  
 FCF based on average price \$1.98/MCF hedged, \$1.78/MCF AECO  
 Note: Future production volumes based on current sanctioned plan

# 2021 Exploration Plan

## Silverback Farm-In

### Silverback (Mississippi Canyon 35)

- Farm-in for 10% WI, non-operated
- Attractive play-opening trend
- Acreage is adjacent to large position held by Murphy and partners
  - Additional play opportunities
- Farm-in results in access to 12 blocks via Silverback well participation





# 2021 Exploration Plan

Sergipe-Alagoas Basin, Brazil

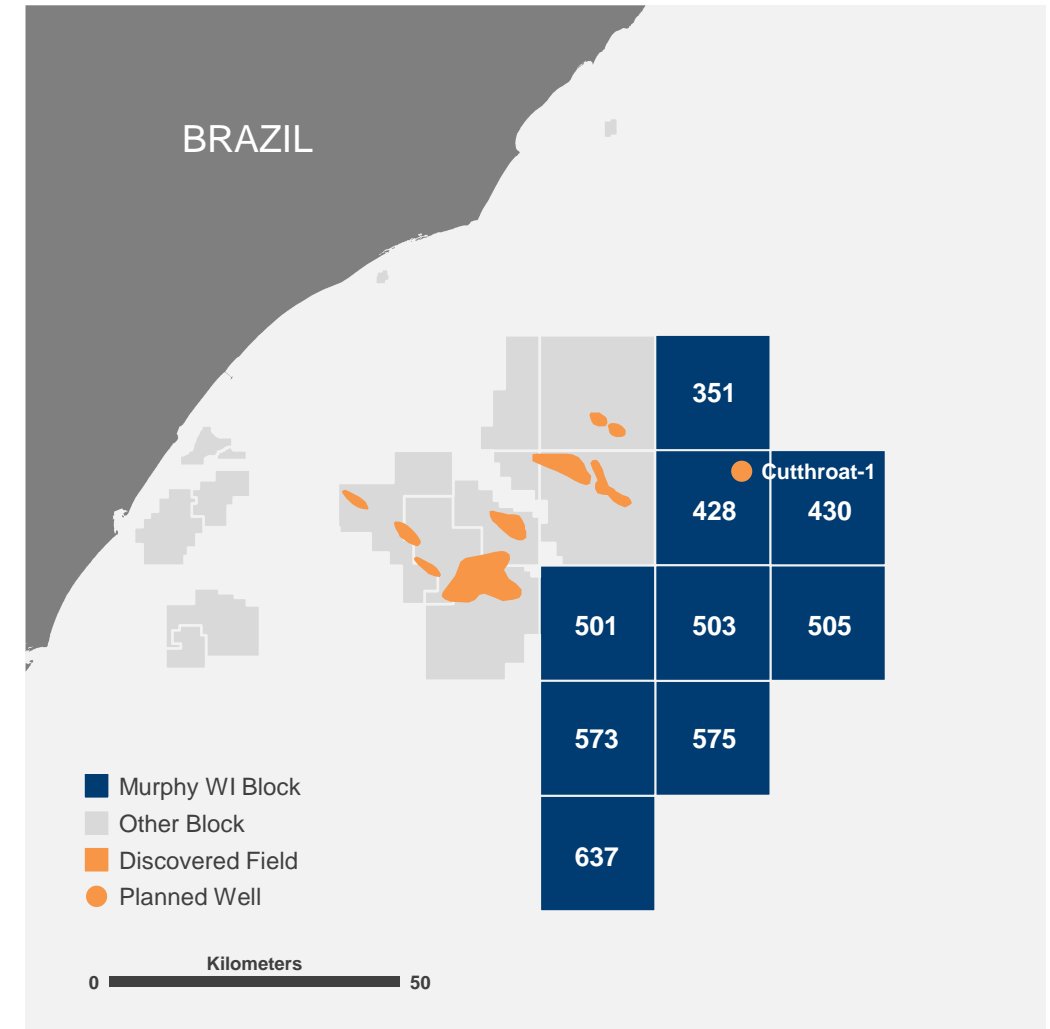
## Asset Overview

- ExxonMobil 50% (Op), Enauta Energia S.A. 30%, Murphy 20%
- Hold WI in 9 blocks, spanning >1.6 MM acres
- >2.8 BN BOE discovered in basin
- >1.2 BN BOE in deepwater since 2007
- Material opportunities identified on Murphy blocks

## 2021 Drilling Program

- On track for drilling Cutthroat-1 in 2H 2021
- Continuing to mature inventory

Sergipe-Alagoas Basin



All blocks begin with SEAL-M

# 2021 Exploration Plan

Salina Basin, Mexico

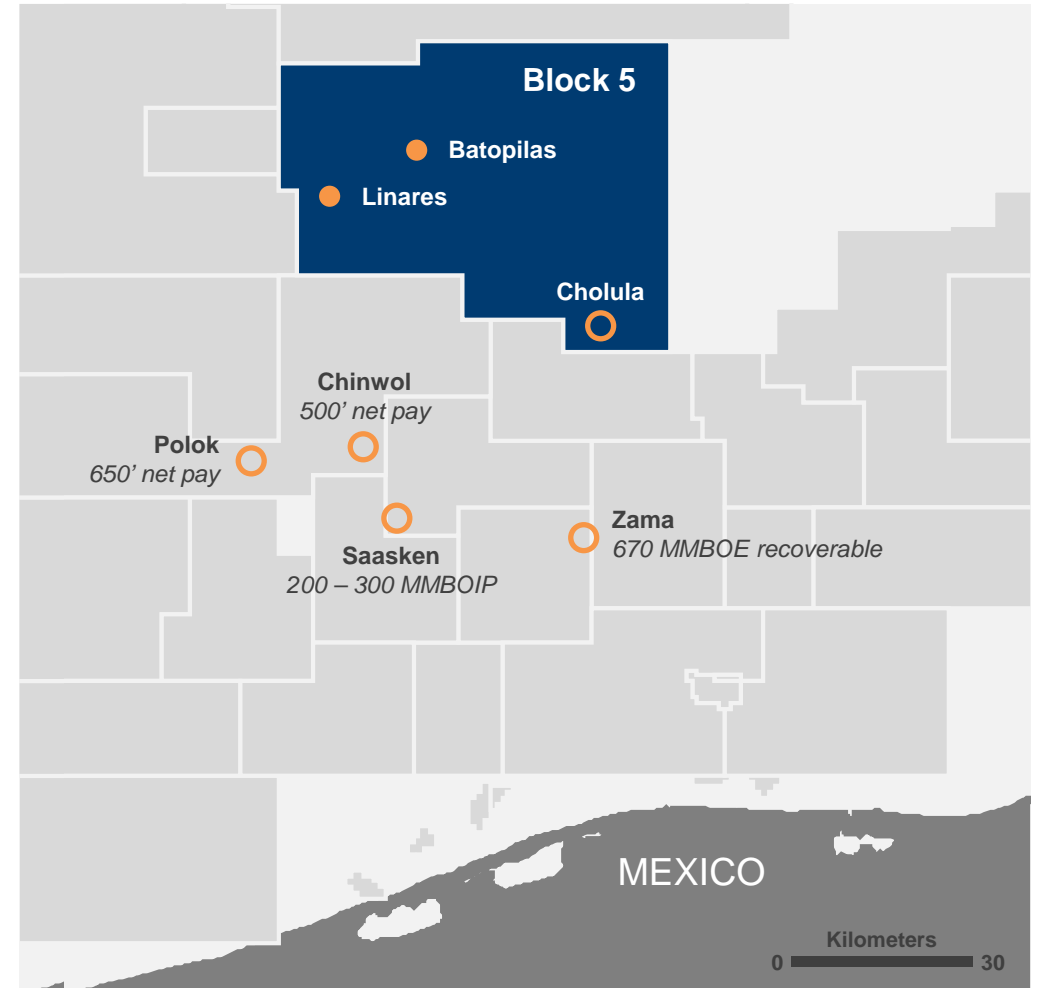
## Block 5 Overview

- Murphy 40% (Op), Petronas 30%, Wintershall Dea 30%
- 34 leads / prospects
- Mean to upward gross resource potential
  - 800 MMBO – 2,000 MMBO
- Proven oil basin in proximity to multiple oil discoveries in Miocene section
- Targeting exploration drilling campaign in late 2021 / early 2022
  - Initial prospects identified – Batopilas and Linares
  - Progressing permitting and regulatory approvals

## Cholula Appraisal Program

- Discretionary 3-year program approved by CNH
- Up to 3 appraisal wells + geologic/engineering studies

Salina Basin



■ Murphy WI Block   ■ Other Block   ● Planned Well   ○ Discovery

# LOOKING AHEAD



**Leaning Into Challenges**  
with Sustainable Solutions

# Strategic Multi-Year Plan Overview 2021 – 2024

## Dynamic Plan to Manage Cash Flow and CAPEX After Dividend

- Generating cumulative free cash flow after dividend at a conservative price
- Achieving significant free cash flow after dividend in an oil price recovery enabling sizeable debt reduction
- Managing commodity risk through hedging program

## Delivering Consistent Liquids-Weighted Production

- Oil weighting ~50%; liquids weighting ~55% in 2021 – 2024
- Targeting flatter long-term production profile before Tupper Montney development volumes

## Annual Average CAPEX ~\$600 MM

- 2022 is peak year due to completion of major projects offshore plus onshore Tupper Montney development
- 2023 – 2024 CAPEX declines considerably from near-term levels

## Complementary Assets Provide Optionality

- Total production CAGR ~6% in 2021 – 2024
- Maintaining flatter oil production, with ~3% CAGR company-wide across the portfolio in 2021 – 2024
- Increasing natural gas production by ~8% CAGR in 2021 – 2024

## Exploration – Focused Strategy

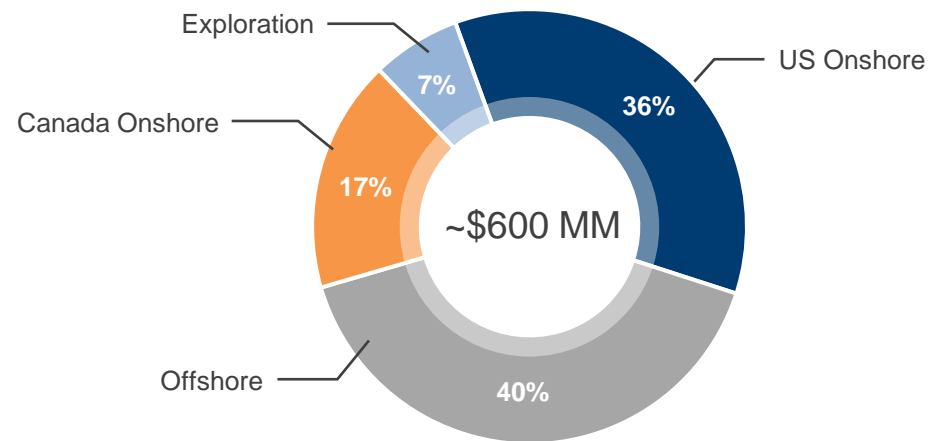
- Multi-basin portfolio in various stages to support company longevity
- CAPEX ~\$70 MM in 2021, flexible as needed
- Ongoing plan of 3 – 5 wells annually

Note: Assumes WTI \$42/BBL - \$46/BBL

Note: Production volumes, sales volumes, reserves and financial amounts exclude noncontrolling interest, unless otherwise stated

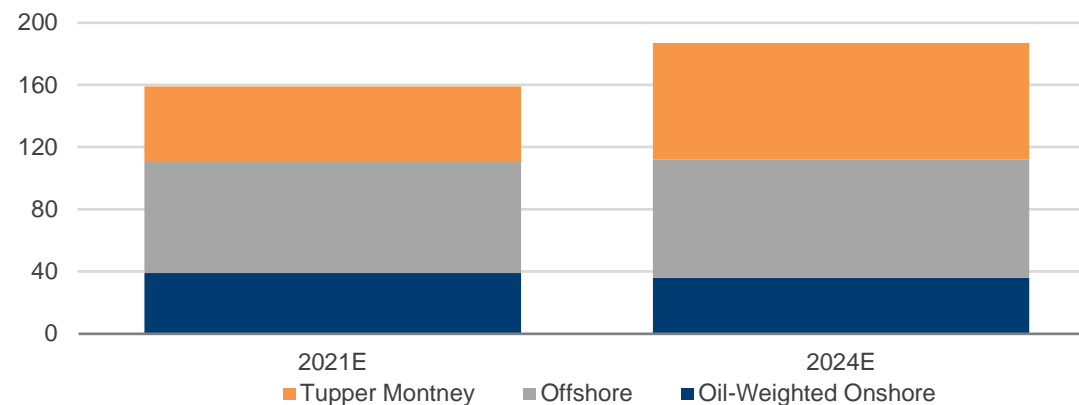
## Annual Average Capital Spend

2021 – 2024



Note: Excludes corporate CAPEX

## 2021E – 2024E Production MBOEPD



Note: Oil-weighted onshore includes Eagle Ford Shale and Kaybob Duvernay



# Murphy Priorities and Advantages

## PRIORITIES

Managing capital expenditures to maintain appropriate liquidity and support a flatter oil production profile

Delivering a right-sized dividend to shareholders

Focusing on debt reduction in a long-term oil price recovery

Significantly lowering G&A costs

Allocating capital in 2021 to generate maximum long-term free cash flow



## ADVANTAGES

Advantaged low-carbon footprint led by multi-basin portfolio

Global assets have the added flexibility being on both federal and private lands

Unique offshore company-making exploration

Top-tier safety and environmental performance

# INVESTOR UPDATE

MARCH 2021

**ROGER W. JENKINS**

PRESIDENT & CHIEF EXECUTIVE OFFICER

**Leaning Into Challenges**  
with Sustainable Solutions

# Appendix



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Non-GAAP Definitions and Reconciliations

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Current Hedging Positions

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Acreage Maps

# Non-GAAP Financial Measure Definitions and Reconciliations

The following list of Non-GAAP financial measure definitions and related reconciliations is intended to satisfy the requirements of Regulation G of the Securities Exchange Act of 1934, as amended. This information is historical in nature. Murphy undertakes no obligation to publicly update or revise any Non-GAAP financial measure definitions and related reconciliations.



# Non-GAAP Reconciliation

## EBITDA and EBITDAX

Murphy defines EBITDA as net income (loss) attributable to Murphy<sup>1</sup> before interest, taxes, depreciation and amortization (DD&A). Murphy defines EBITDAX as net income (loss) attributable to Murphy before interest, taxes, depreciation and amortization (DD&A) and exploration expense.

Management believes that EBITDA and EBITDAX provide useful information for assessing Murphy's financial condition and results of operations and are widely accepted financial indicators of the ability of a company to incur and service debt, fund capital expenditure programs, pay dividends and make other distributions to stockholders.

EBITDA and EBITDAX, as reported by Murphy, may not be comparable to similarly titled measures used by other companies and should be considered in conjunction with net income, cash flow from operations and other performance measures prepared in accordance with generally accepted accounting principles (GAAP). EBITDA and EBITDAX have certain limitations regarding financial assessments because they exclude certain items that affect net income and net cash provided by operating activities. EBITDA and EBITDAX should not be considered in isolation or as a substitute for an analysis of Murphy's GAAP results as reported.

\$ Millions	Three Months Ended – Dec 31, 2020	Three Months Ended – Dec 31, 2019
Net (loss) income attributable to Murphy (GAAP)	(171.9)	(71.7)
Income tax (benefit) expense	(44.9)	(24.0)
Interest expense, net	44.5	74.2
DD&A expense	207.6	310.1
<b>EBITDA attributable to Murphy (Non-GAAP)</b>	<b>35.3</b>	<b>288.6</b>
Exploration expense	24.8	19.5
<b>EBITDAX attributable to Murphy (Non-GAAP)</b>	<b>60.1</b>	<b>308.1</b>

<sup>1</sup> 'Attributable to Murphy' represents the economic interest of Murphy excluding a 20% noncontrolling interest in MP GOM.

# Non-GAAP Reconciliation

## ADJUSTED EBITDA

Murphy defines Adjusted EBITDA as net income (loss) attributable to Murphy<sup>1</sup> before interest, taxes, depreciation and amortization (DD&A), impairment expense, discontinued operations, foreign exchange gains and losses, mark-to-market gains and losses on crude oil derivative contracts, accretion of asset retirement obligations and certain other items that management believes affect comparability between periods.

Adjusted EBITDA is used by management to evaluate the company's operational performance and trends between periods and relative to its industry competitors.

Adjusted EBITDA may not be comparable to similarly titled measures used by other companies and it should be considered in conjunction with net income, cash flow from operations and other performance measures prepared in accordance with generally accepted accounting principles (GAAP). Adjusted EBITDA has certain limitations regarding financial assessments because it excludes certain items that affect net income and net cash provided by operating activities. Adjusted EBITDA should not be considered in isolation or as a substitute for an analysis of Murphy's GAAP results as reported.

<i>\$ Millions, except per BOE amounts</i>	Three Months Ended – Dec 31, 2020	Three Months Ended – Dec 31, 2019
<b>EBITDA attributable to Murphy (Non-GAAP)</b>	35.3	288.6
Mark-to-market loss (gain) on crude oil derivative contracts	173.8	133.5
Restructuring expenses	3.6	-
Accretion of asset retirement obligations	10.9	10.7
Mark-to-market loss (gain) on contingent consideration	15.7	8.2
Unutilized rig charges	2.8	-
Discontinued operations loss (income)	0.2	(36.9)
Inventory loss	3.5	-
Retirement obligation (gains) losses	(2.8)	-
Foreign exchange losses (gains)	3.2	-
<b>Adjusted EBITDA attributable to Murphy (Non-GAAP)</b>	<b>246.2</b>	<b>404.1</b>
Total barrels of oil equivalents sold from continuing operations attributable to Murphy (thousands of barrels)	13,711	17,617
<b>Adjusted EBITDA per BOE (Non-GAAP)</b>	<b>17.96</b>	<b>22.94</b>

<sup>1</sup> 'Attributable to Murphy' represents the economic interest of Murphy excluding a 20% noncontrolling interest in MP GOM.

# Non-GAAP Reconciliation

## ADJUSTED EBITDAX

Murphy defines Adjusted EBITDAX as net income (loss) attributable to Murphy<sup>1</sup> before interest, taxes, depreciation and amortization (DD&A), exploration expense, impairment expense, discontinued operations, foreign exchange gains and losses, mark-to-market gains and losses on crude oil derivative contracts, accretion of asset retirement obligations and certain other items that management believes affect comparability between periods.

Adjusted EBITDAX is used by management to evaluate the company's operational performance and trends between periods and relative to its industry competitors.

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<i>\$ Millions, except per BOE amounts</i>	Three Months Ended – Dec 31, 2020	Three Months Ended – Dec 31, 2019
<b>EBITDAX attributable to Murphy (Non-GAAP)</b>	60.1	308.1
Mark-to-market loss (gain) on crude oil derivative contracts	173.8	133.5
Restructuring expenses	3.6	-
Accretion of asset retirement obligations	10.9	10.7
Mark-to-market loss (gain) on contingent consideration	15.7	8.2
Unutilized rig charges	2.8	-
Discontinued operations loss (income)	0.2	(36.9)
Inventory loss	3.5	-
Retirement obligation (gains) losses	(2.8)	-
Foreign exchange losses (gains)	3.2	-
<b>Adjusted EBITDAX attributable to Murphy (Non-GAAP)</b>	<b>271.0</b>	<b>423.6</b>
Total barrels of oil equivalents sold from continuing operations attributable to Murphy (thousands of barrels)	13,711	17,617
<b>Adjusted EBITDAX per BOE (Non-GAAP)</b>	<b>19.77</b>	<b>24.04</b>

<sup>1</sup> 'Attributable to Murphy' represents the economic interest of Murphy excluding a 20% noncontrolling interest in MP GOM.

# Glossary of Abbreviations

**BBL:** Barrels (equal to 42 US gallons)

**BCF:** Billion cubic feet

**BCFE:** Billion cubic feet equivalent

**BN:** Billions

**BOE:** Barrels of oil equivalent (1 barrel of oil or 6,000 cubic feet of natural gas)

**BOEPD:** Barrels of oil equivalent per day

**BOPD:** Barrels of oil per day

**CAGR:** Compound annual growth rate

**D&C:** Drilling & completion

**DD&A:** Depreciation, depletion & amortization

**EBITDA:** Income from continuing operations before taxes, depreciation, depletion and amortization, and net interest expense

**EBITDAX:** Income from continuing operations before taxes, depreciation, depletion and amortization, net interest expense, and exploration expenses

**EFS:** Eagle Ford Shale

**EUR:** Estimated ultimate recovery

**F&D:** Finding & development

**G&A:** General and administrative expenses

**GOM:** Gulf of Mexico

**LOE:** Lease operating expense

**MBOE:** Thousands barrels of oil equivalent

**MBOEPD:** Thousands of barrels of oil equivalent per day

**MCf:** Thousands of cubic feet

**MCFD:** Thousands cubic feet per day

**MM:** Millions

**MMBOE:** Millions of barrels of oil equivalent

**MMCF:** Millions of cubic feet

**MMCFD:** Millions of cubic feet per day

**NA:** North America

**NGL:** Natural gas liquid

**ROR:** Rate of return

**R/P:** Ratio of reserves to annual production

**TCF:** Trillion cubic feet

**TCPL:** TransCanada Pipeline

**TOC:** Total organic content

**WI:** Working interest

**WTI:** West Texas Intermediate (a grade of crude oil)



# Balance Sheet Stability

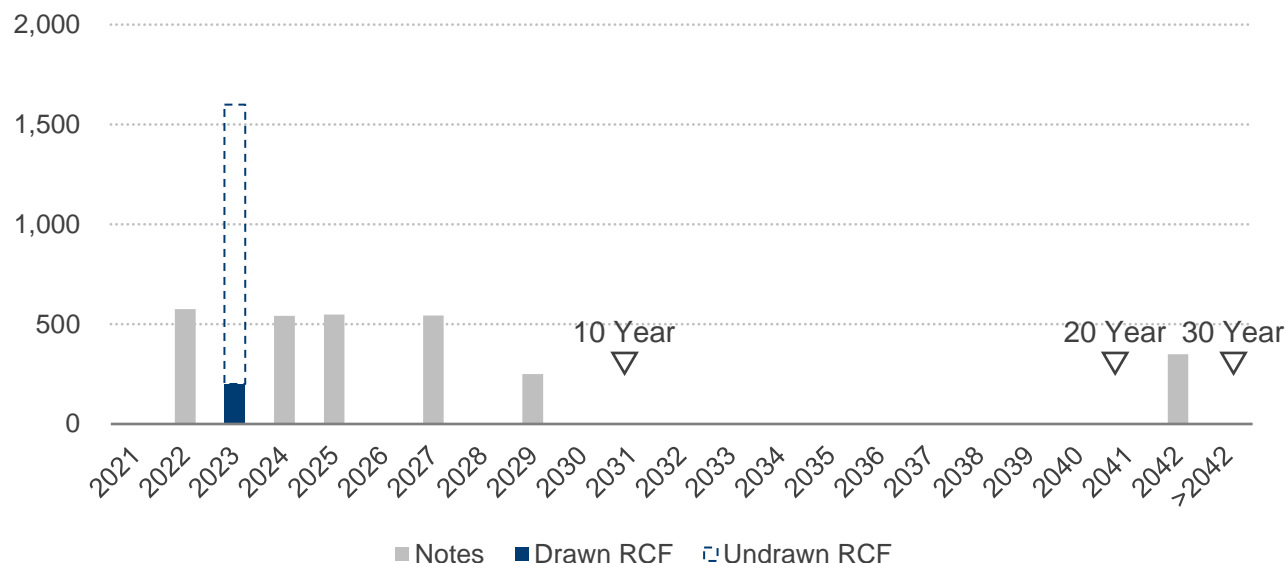
## Solid Foundation for Commodity Price Cycles

- \$1.6 BN senior unsecured credit facility matures Nov 2023, \$200 MM drawn at Dec 31, 2020
- All debt is unsecured, senior credit facility not subject to semi-annual borrowing base redeterminations
- \$311 MM of cash and cash equivalents
- Long-term goal of de-levering with excess cash flow
- 80% of senior notes due in 2024 and beyond
  - Next maturities June 2022 with ~\$260 MM due and Dec 2022 with ~\$320 MM due
- 41% total debt to cap, 39% net debt to cap

### Maturity Profile\*

Total Bonds Outstanding \$BN	\$2.8
Weighted Avg Fixed Coupon	5.9%
Weighted Avg Years to Maturity	6.8

Note Maturity Profile \$MM



\* As of December 31, 2020

# 1Q 2021 Guidance

Producing Asset	Oil (BOPD)	NGLs (BOPD)	Gas (MCFD)	Total (BOEPD)
US – Eagle Ford Shale	20,600	4,300	23,400	28,800
– Gulf of Mexico excluding NCI <sup>1</sup>	50,900	5,800	68,500	68,100
Canada – Tupper Montney	–	–	245,600	40,900
– Kaybob Duvernay and Placid Montney	6,100	1,200	21,000	10,800
– Offshore	4,400	–	–	4,400

1Q Production Volume (BOEPD) <i>excl. NCI</i> <sup>1</sup>	149,000 – 157,000
1Q Exploration Expense (\$MM)	\$15
Full Year 2021 CAPEX (\$MM) <i>excl. NCI</i> <sup>2</sup>	\$675 – \$725
Full Year 2021 Production Volume (BOEPD) <i>excl. NCI</i> <sup>3</sup>	155,000 – 165,000

<sup>1</sup> Excludes noncontrolling interest of MP GOM of 8,400 BOPD oil, 600 BOPD NGLs and 5,000 MCFD gas

<sup>2</sup> Excludes noncontrolling interest of MP GOM of \$43 MM

<sup>3</sup> Excludes noncontrolling interest of MP GOM of 8,400 BOPD oil, 600 BOPD NGLs and 4,700 MCFD gas

# Current Hedging Positions

## United States

Commodity	Type	Volumes (BBL/D)	Price (BBL)	Start Date	End Date
WTI	Fixed Price Derivative Swap	45,000	\$42.77	1/1/2021	12/31/2021
WTI	Fixed Price Derivative Swap	20,000	\$44.88	1/1/2022	12/31/2022

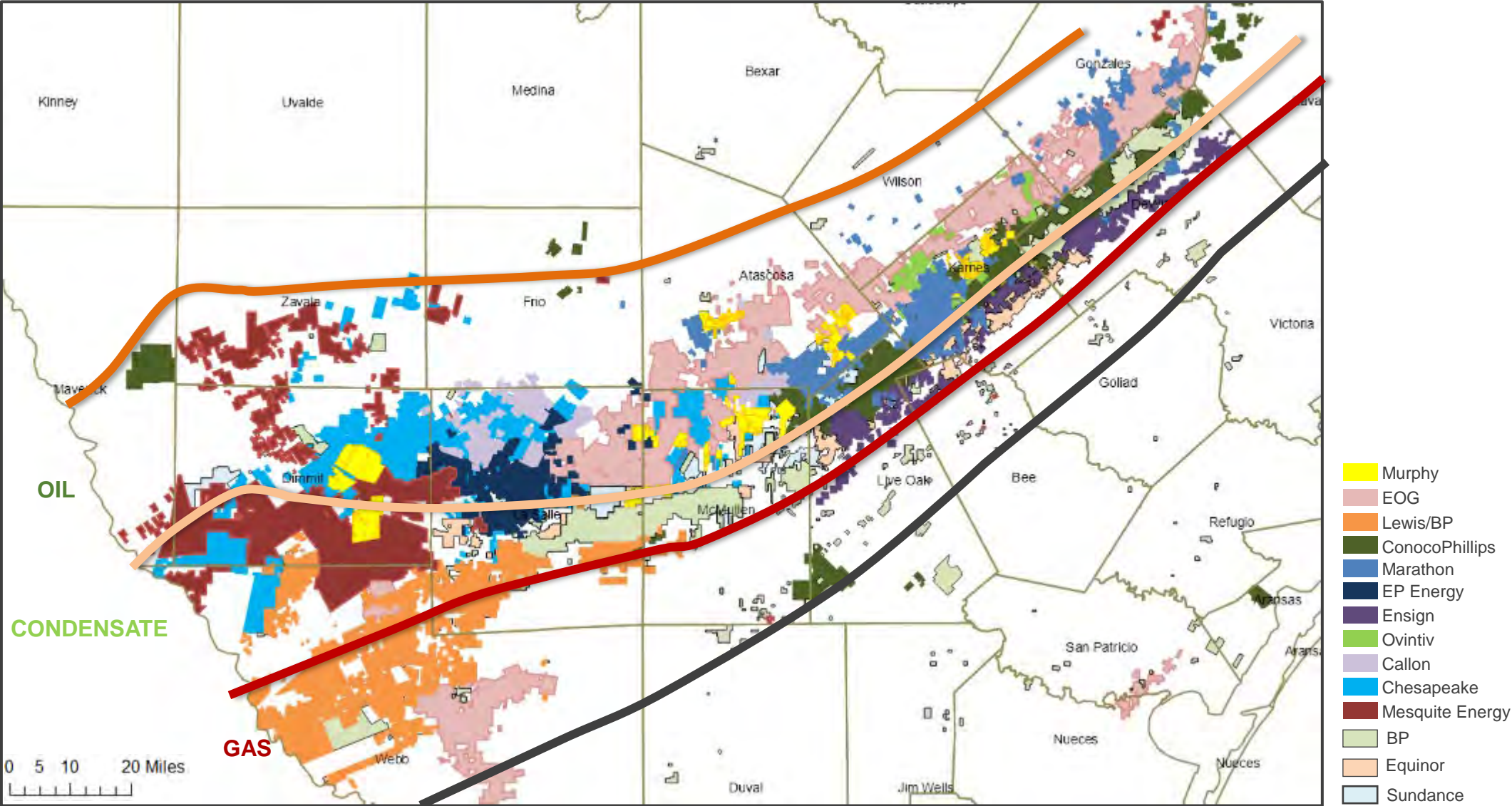
## Montney, Canada

Commodity	Type	Volumes (MMCF/D)	Price (MCF)	Start Date	End Date
Natural Gas	Fixed Price Forward Sales at AECO	160	C\$2.54	1/1/2021	1/31/2021
Natural Gas	Fixed Price Forward Sales at AECO	203	C\$2.55	2/1/2021	5/31/2021
Natural Gas	Fixed Price Forward Sales at AECO	212	C\$2.55	6/1/2021	12/31/2021
Natural Gas	Fixed Price Forward Sales at AECO	222	C\$2.41	1/1/2022	12/31/2022
Natural Gas	Fixed Price Forward Sales at AECO	192	C\$2.36	1/1/2023	12/31/2023
Natural Gas	Fixed Price Forward Sales at AECO	147	C\$2.41	1/1/2024	12/31/2024

\* As of January 26, 2020

# Eagle Ford Shale

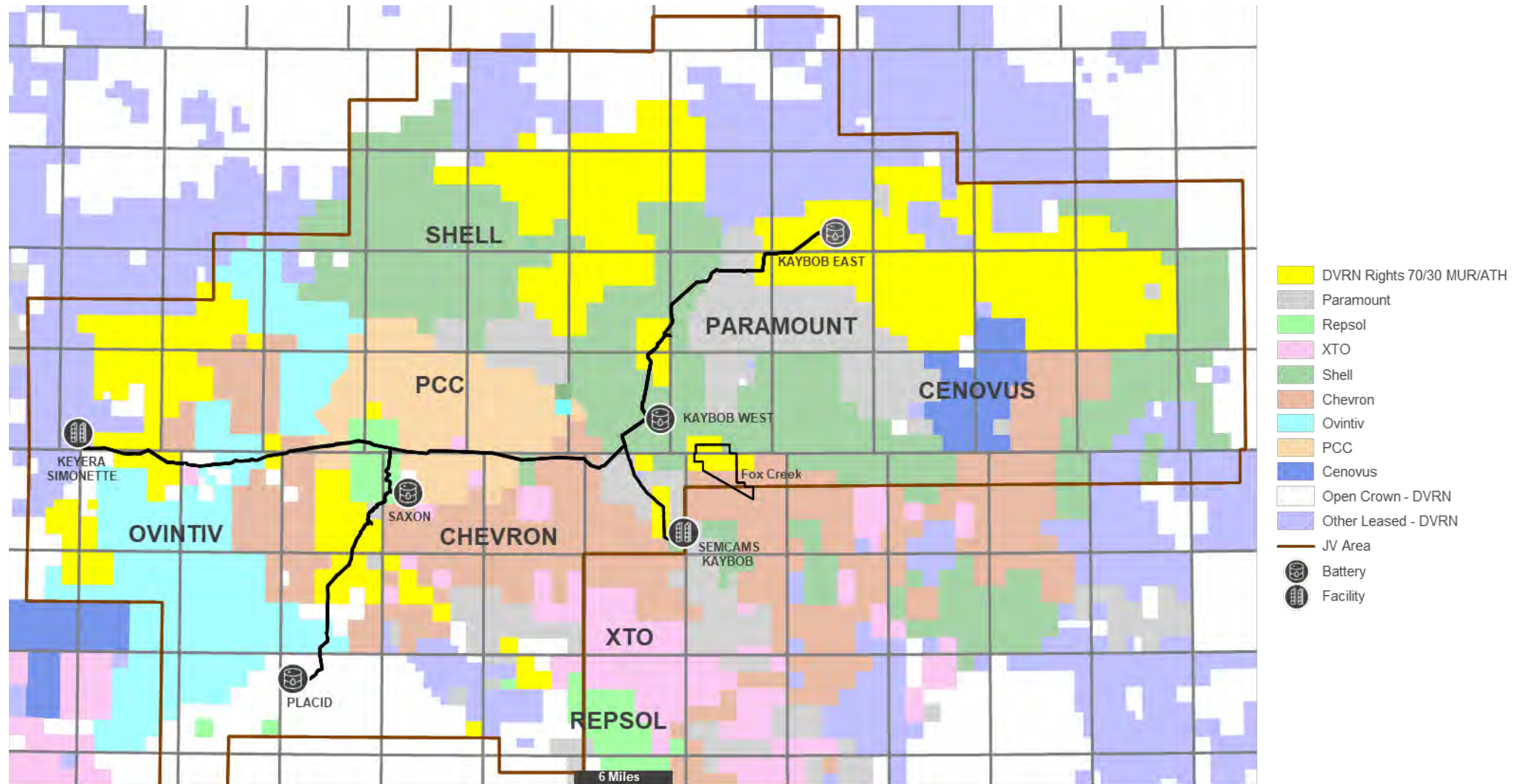
Peer Acreage





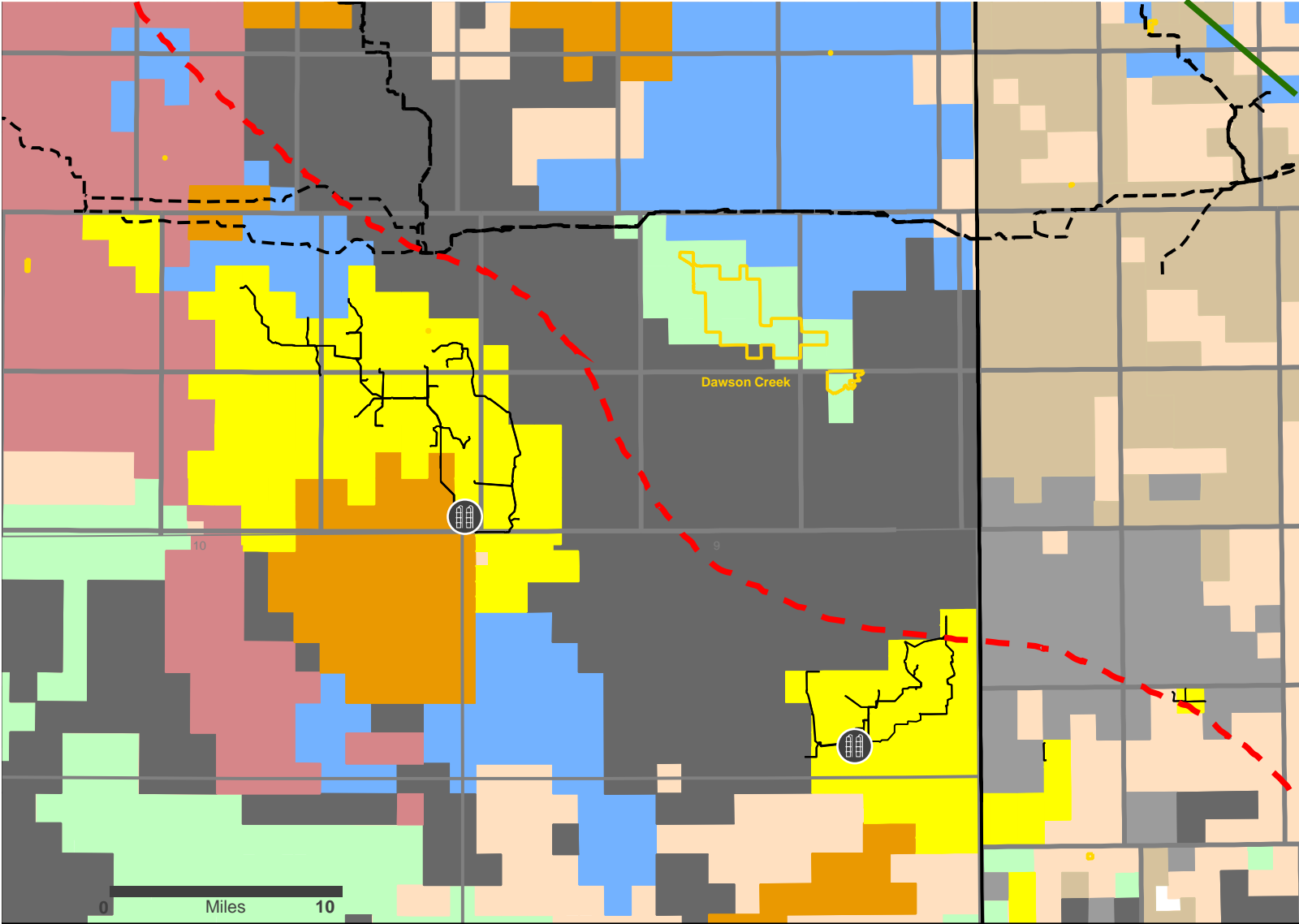
# Kaybob Duvernay

## Peer Acreage



# Tupper Montney

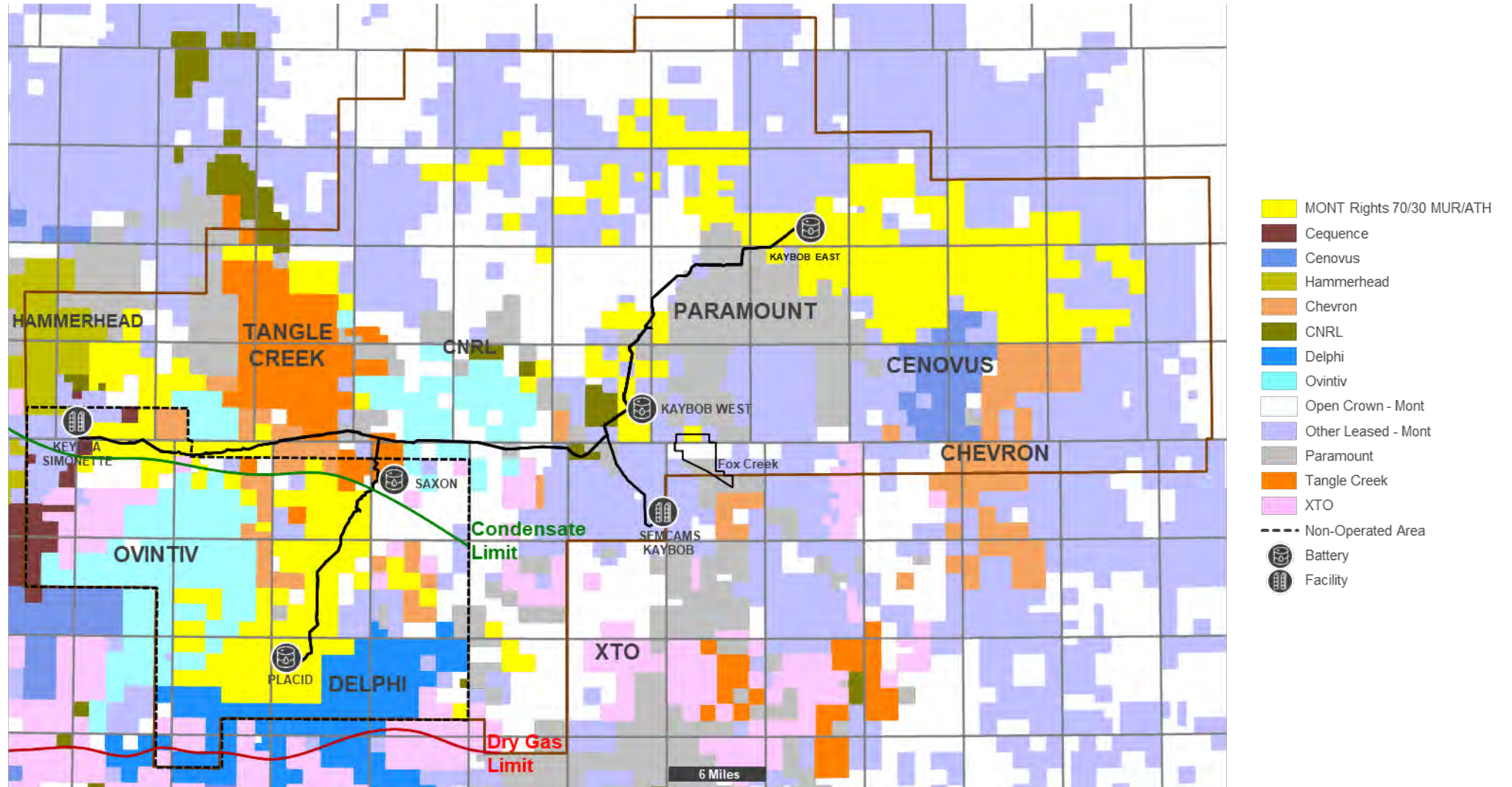
Peer Acreage



- Advantage Montney Crown Land
- Arc Montney Crown Land
- Birchcliff Montney Crown Land
- Ovintiv Montney Crown Land
- Tourmaline Montney Crown Land
- Shell Montney Crown Land
- Other Competitor Montney Crown Land
- Open Crown - Montney
- Murphy Montney Land
- Dry Gas Limit
- TCPL Pipeline
- Alliance Pipeline
- Murphy Pipeline
- Battery
- Facility

# Placid Montney

## Peer Acreage



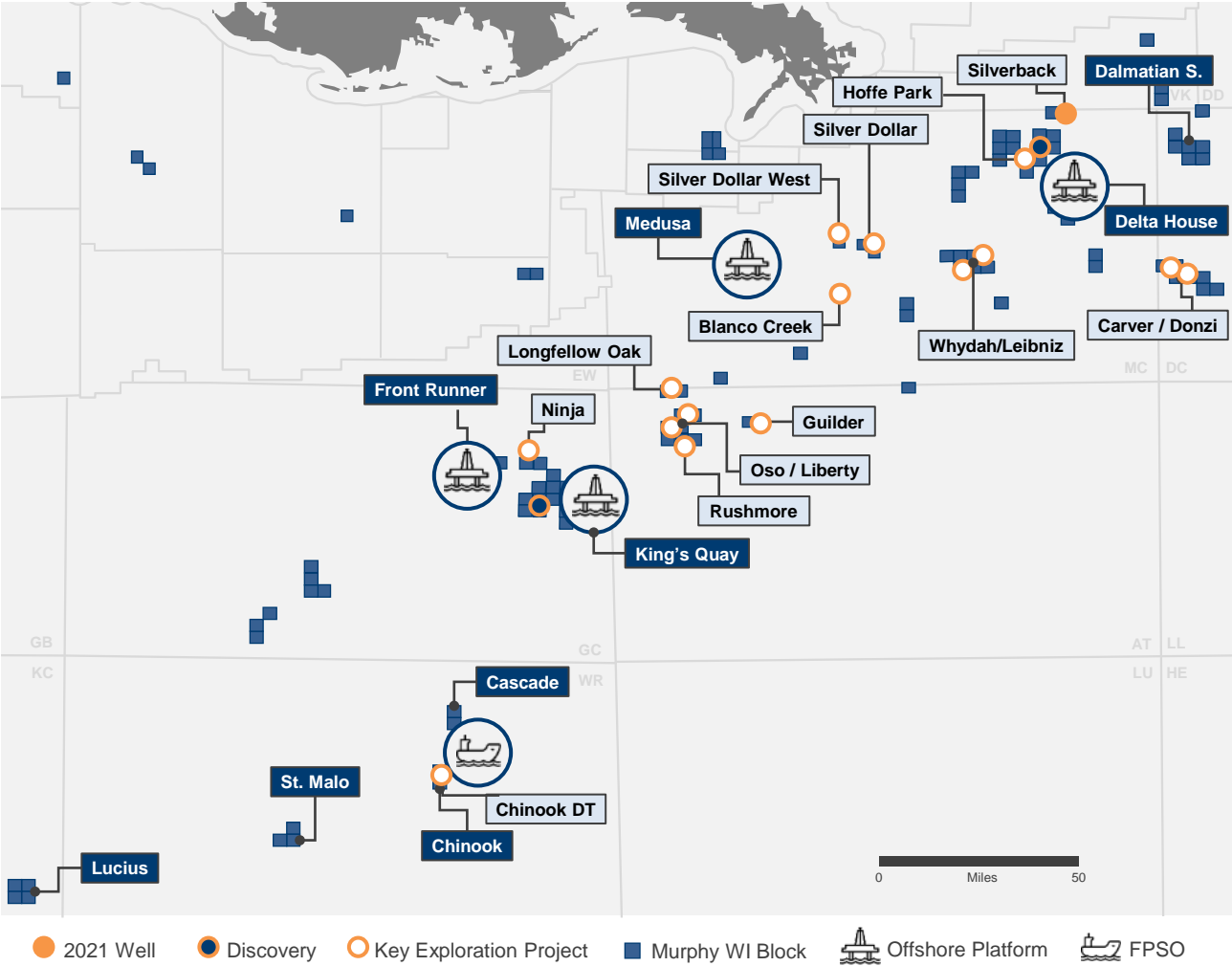
# Gulf of Mexico

## Murphy Blocks

PRODUCING ASSETS		
Asset	Operator	Murphy WI <sup>1</sup>
Cascade	Murphy	80%
Chinook	Murphy	80%
Clipper	Murphy	80%
Cottonwood	Murphy	80%
Dalmatian	Murphy	56%
Front Runner	Murphy	50%
Habanero	Shell	27%
Kodiak	Kosmos	48%
Lucius	Anadarko	13%
Marmalard	Murphy	27%
Marmalard East	Murphy	68%
Medusa	Murphy	48%
Neidermeyer	Murphy	53%
Powerball	Murphy	75%
Son of Bluto II	Murphy	27%
St. Malo	Chevron	20%
Tahoe	W&T	24%
Thunder Hawk	Murphy	50%

Note: Anadarko is a wholly-owned subsidiary of Occidental Petroleum  
 1 Excluding noncontrolling interest

Gulf of Mexico Exploration Area





# 2021 Exploration Plan

Potiguar Basin, Brazil

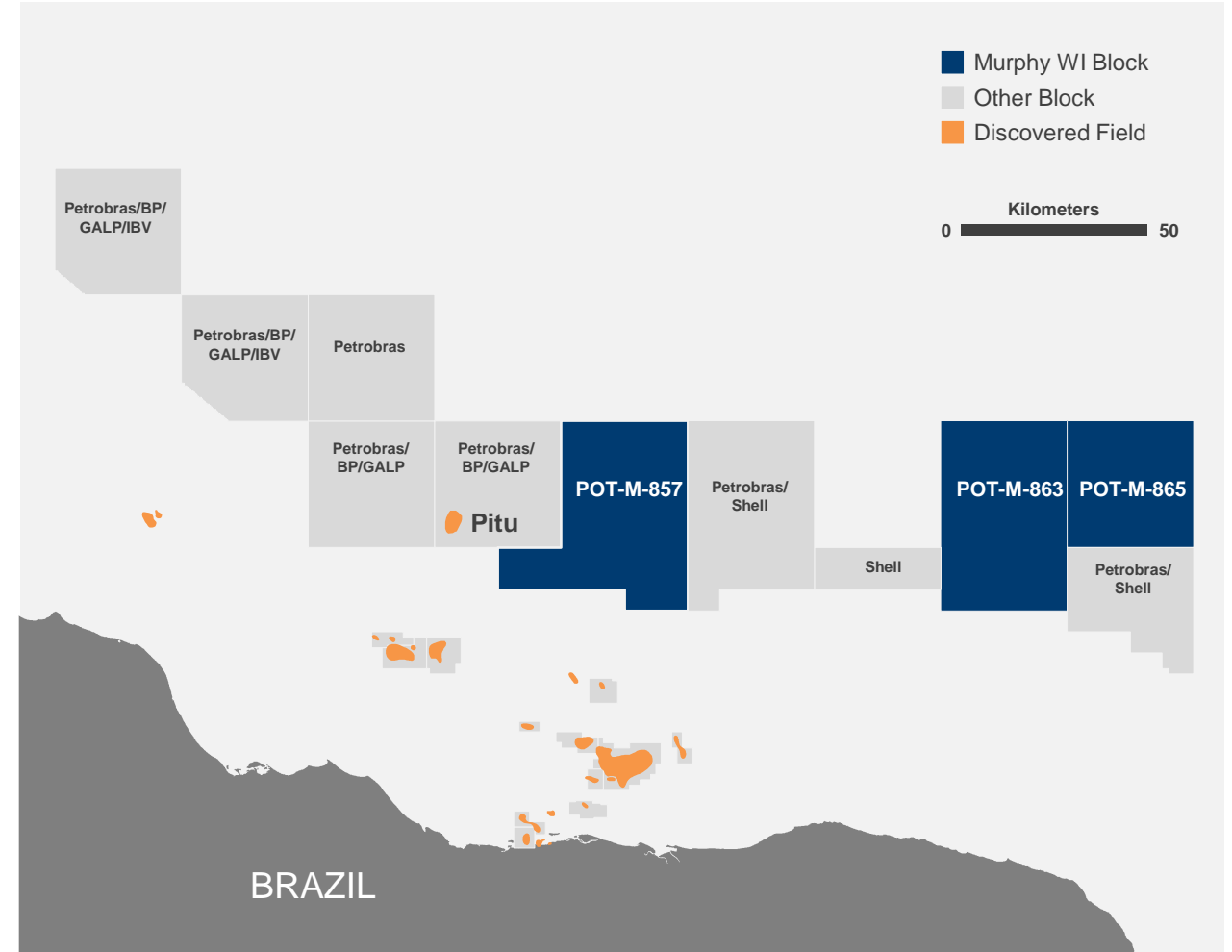
## Asset Overview

- Wintershall Dea 70% (Op), Murphy 30%
- Hold WI in 3 blocks, spanning ~775 M gross acres
- Proven oil basin in proximity to Pitu oil discovery

## Extending the Play into the Deepwater

- >2.1 BBOE discovered in basin
  - Onshore and shelf exploration
  - Pitu step-out into deepwater
- Interpreting final seismic data
- Targeting late 2022 to early 2023 spud

Potiguar Basin



# Development Update

Cuu Long Basin, Vietnam

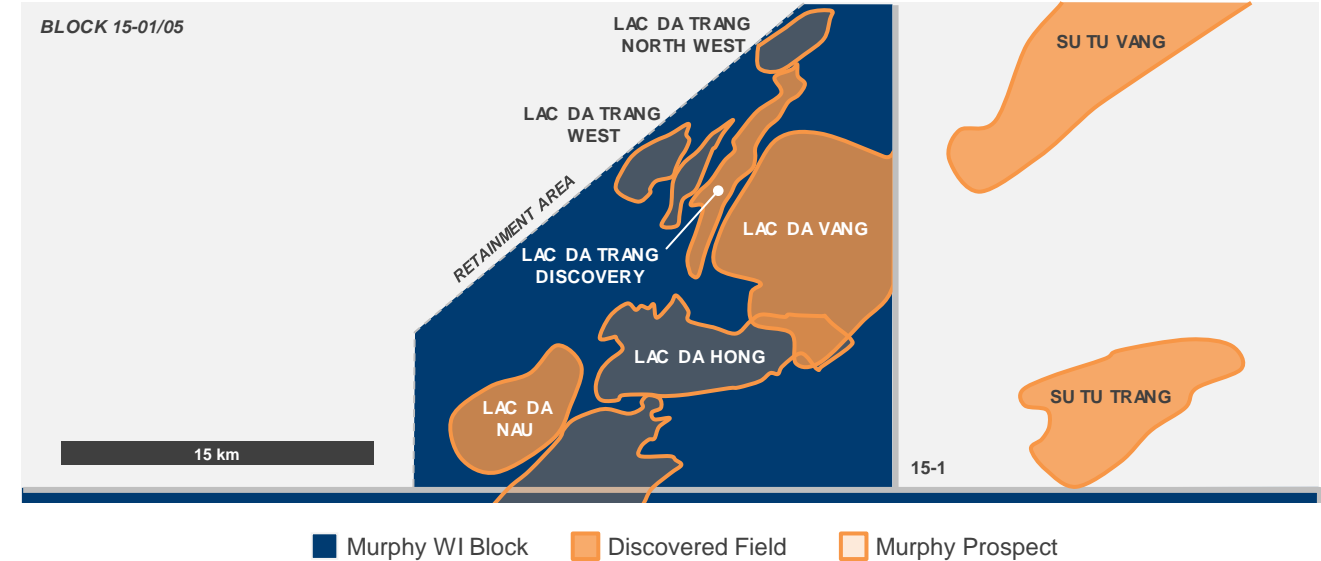
## Asset Overview

- Murphy 40% (Op), PVEP 35%, SKI 25%

## Block 15-1/05

- Received approval of the Lac Da Vang (LDV) retainment/development area
  - 100 MMBL recoverable reserves
- LDV field development plan submitted 3Q 2020
  - Targeting well campaign in 2022
- LDT-1X discovery in 2019
  - 40 – 80 MMBO gross discovered resource
- Maturing remaining block prospectivity
- LDT-1X discovery and other exploration upside has potential to add bolt-on resources to LDV

## Cuu Long Basin



# Exploration Update

Cuu Long Basin, Vietnam

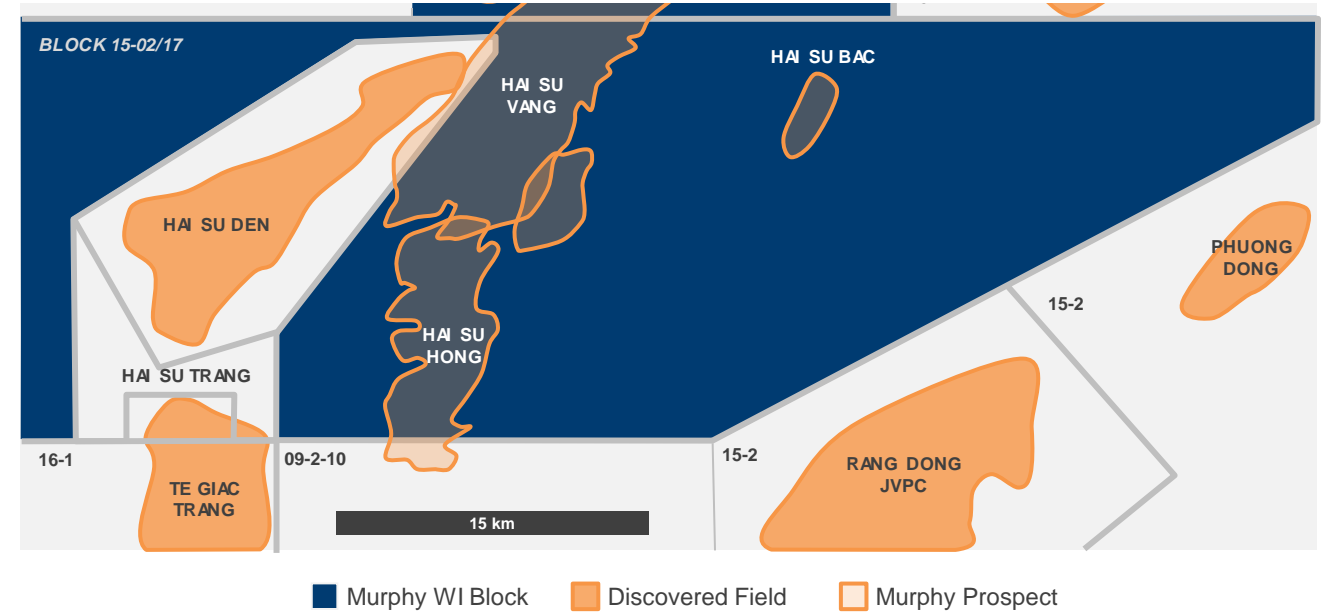
## Asset Overview

- Murphy 40% (Op), PVEP 35%, SKI 25%

## Block 15-2/17

- Signed joint operating agreement with partners in 4Q 2020
  - 3-year primary exploration period
  - 1 well commitment in 2022
- Seismic reprocessing, geological/geophysical studies in 1Q 2021

Cuu Long Basin



# INVESTOR UPDATE

MARCH 2021

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PRESIDENT & CHIEF EXECUTIVE OFFICER

**Leaning Into Challenges**  
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