# Enterprise Risk Management

***Managing Enterprise Risks as an Independent E&P Company***

Marathon Oil



## Enterprise Risk Management

*SPE HSSE-SR – October 2017*

AGENDA

- Marathon Oil – Who We Are
- ERM – What & Why
- Process & Governance
- Risk Assessment Methodology
- Tools & Technologies
- ERM – Example

PRESENTER

Jill Niswonger is the Enterprise Risk Manager for Marathon Oil Company. Her career includes roles in Upstream and Downstream with a focus on Health, Environment & Safety, Auditing, Management Systems and Risk. Prior to joining Marathon, Jill worked for a filtration company in the automotive industry. She is an active member of the Corporate Emergency Response Team and has served on committees for API, STEPS and STEER. Jill holds a BS from Bowling Green State University, a MS in Environmental Management from the University of Findlay, and is a Certified Safety Professional (CSP) with over 20 years of experience.



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# MRO – Who We Are



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## Marathon Oil Corporation

*NYSE: MRO*

- >130 years in business
- Independent exploration and production company focused on U.S. unconventional Resource Plays
- Explores for, produces and markets crude oil and condensate, natural gas liquids (NGLs) and natural gas

GOING FURTHER.
**DOING MORE.**

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## Marathon Oil Corporation

***Driving profitable growth by developing strategic assets***


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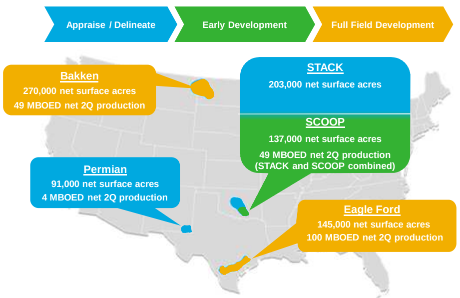
## Differentiated Position in 4 of the Lowest Cost Oil Basins

Complimentary assets well placed across the development cycle

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"Our commitment to being a responsible operator has not wavered, even as we have reshaped our portfolio, reduced capital spending and lowered costs. Running a safe, clean and ethical business allowed Marathon Oil to protect our license to operate and focus on delivering business results."

Lee Tillman
President and CEO

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# ERM – What & Why

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## What is it?

*Enterprise Risk Management*

- **Enterprise Risk Management (ERM)** – Defined by COSO* as "a process, effected by an entity's board of directors, management and other personnel, applied in strategy-setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives."
- The COSO issued 'Enterprise Risk Management – Integrated Framework' serves as the basis for Marathon Oil's ERM process.

COSO COMMITTEE OF SPONSORING ORGANIZATIONS OF THE TREADWAY COMMISSION

**Committee of Sponsoring Organization (COSO)** – a group formed in 1985 to sponsor the National Commission on Fraudulent Financial Reporting; sponsored by five major professional accounting associations headquartered in the United States.

9 **Committee of Sponsoring Organizations*

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## Enterprise Risk Management at MRO

**Objective:**
Identification & effective management of the most significant risks facing Marathon Oil

**Goals:**
- Oversight by Board
- Business manages risks
- Validate with metrics
- Apply consistent methodology
- Promote risk aware culture


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## Why do it?

*Enterprise Risk Management*

Good Business
- Companies that view their risks holistically across organizations and consider the interaction among them have competitive advantage

SOX
- Requires publicly traded corporations to utilize a control framework in their internal control assessments. The COSO Internal Control framework includes a risk assessment element

Listing Requirement
- NYSE requires the Audit Committees of its listed companies to review their risk assessment and management processes

Proxy disclosure
- Requires information regarding ERM process & the Board's role

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# Process & Governance

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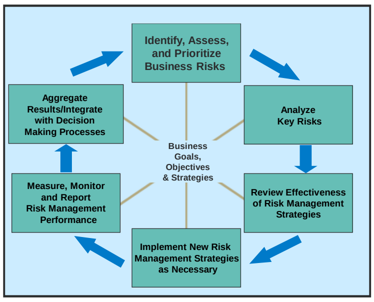
## Process

*Enterprise Risk Management*

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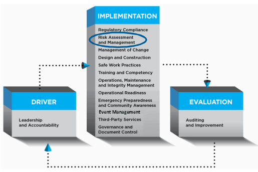
## ROMS & Business Risk Assessment & Management

**Responsible Operations Management System (ROMS) Risk Assessments:**

- Marathon Oil's operations focused management system establishes minimum global expectations which are then supported by standards
- Risk Assessments are completed per the Risk Assessment & Management Standard
- Effectiveness is evaluated using Key Performance Indicators




**Business Risk Assessments:**

- Risk Assessments are completed per the Enterprise Risk Management Standard which utilizes Risk Tables that are consistent with ROMS
- Partners with Internal Audit to plan and complete Assessments

***Results of Annual Risk Assessments serve as input to ERM process***

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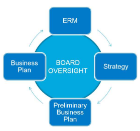
## Enterprise Risk Assessment & Management

**ERM Process:**

- Risk Assessments are completed per the ERM Risk Management Standard considering inputs from ROMS and Business Risk Assessments among others
- ERM interviews Senior Leadership with Internal Audit
- Risk Champions review risks at annual & mid-year meetings
- ERM communicates to Board of Directors for oversight
- Results are considered as part of:
  - Strategy Planning
  - Goal Setting
  - Capital Allocation
  - Disclosures
  - Audit Schedule

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## ERM Governance

*Roles and Responsibilities*

- Board of Directors
  - Oversight on strategic and operational risks
- Audit & Finance Committee
  - Oversight on ERM process
- CEO & Executive Committee
  - Management of strategic and operational risks
- CFO & VP Treasurer
  - Executive Sponsors for ERM
- Enterprise Risk Manager
  - Coordination of ERM including ownership of Framework and Process
- Risk Champions
  - Ownership and Accountability for Risk with Business Units
- Risk Assessors
  - Monitor and assess Risk with Champions and Business Units

*Collaborative approach drives and reinforces our risk culture.*

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# Risk Assessment Methodology

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## Risk Assessment Methodology

Facilitated assessments are conducted with input from SMEs

- Identify or review relevant tasks and issues
- Determine potential hazard(s) considering a credible worst case scenario (assuming 5 year horizon)
- Select <u>Consequence</u> (impact) from 1-4 considering 7 factors:

| | | | | | | |
|---|---|---|---|---|---|---|
| Safety & Occupational Health | Environmental | Reliability & Property Damage | Regulatory Compliance | Well Control | External Stakeholder | Financial |

- Select <u>Likelihood</u> (probability) from 1-5 based on scenario
- Consider both gross and net (without and with mitigation) after identifying existing controls in place

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## Risk Assessment Methodology

- Risk Score is calculated using the highest single consequence

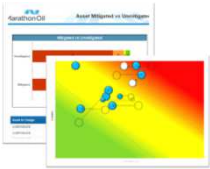
  Consequence x Likelihood = Risk

- Risk Scores are translated into a Risk Rating (A-D) which facilitates communication, and drives actions and approvals

Risk Score

| Consequence Rating | | | | | |
|---|---|---|---|---|---|
| 4 | 4 | 8 | 12 | 16 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 |
| 2 | 2 | 4 | 6 | 8 | 10 |
| 1 | 1 | 2 | 3 | 4 | 5 |
| Single Consequence Risk Rating Matrix | 1 | 2 | 3 | 4 | 5 |
| | Likelihood Rating | | | | |

A
B
C
D



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## Tools & Technologies

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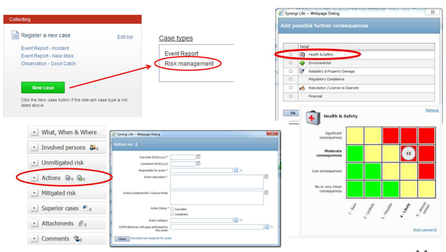
## Risk Software

- Configuration & User Acceptance Testing completed
- System moved to production in December 2016
- Still utilize Excel during facilitated sessions



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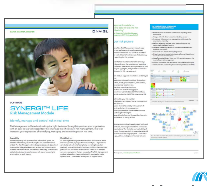
## Risk Software

Governance
- Sustainable process
- Facilitated assessments

Benefits of Tool
- Controlled data entry
- Common categories
- Established metadata
- Action tracking
- Canned reports
- Interactive dashboard
- Drill-down capability
- Advanced analytics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## Reporting Facilitates Communication

*The method of communication must be fit for purpose.*

Examples include:
- Heatmaps
- Summaries
- Charts & Graphs
- Dashboards

*It's important to retain the ability to access the underlying supporting details.*

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# ERM – Example

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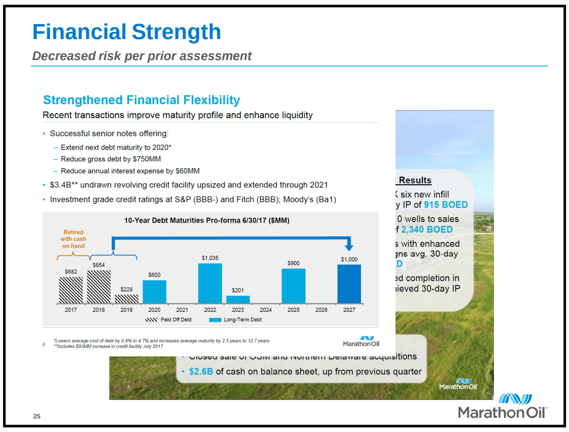
Financial Strength
Decreased risk per prior assessment
Strengthened Financial Flexibility
Recent transactions improve maturity profile and enhance liquidity
• Successful senior notes offering:
– Extend next debt maturity to 2020*
– Reduce gross debt by $750MM
– Reduce annual interest expense by $60MM
• $3.4B** undrawn revolving credit facility upsized and extended through 2021
• Investment grade credit ratings at S&P (BBB-) and Fitch (BBB); Moody's (Ba1)
10-Year Debt Maturities Pro-forma 6/30/17 ($MM)
Retired with cash on hand
$682 $854 $228 $600 $1,035 $201 $900 $1,000
2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Paid Off Debt
Long-Term Debt
*Lowers average cost of debt by 0.4% to 4.7% and increases average maturity by 2.5 years to 12.7 years
**Includes $93MM increase in credit facility July 2017
• $2.6B of cash on balance sheet, up from previous quarter
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THANK YOU
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