

Russell Hollingworth
Bakken Facilities & Construction Manager



Marathon Oil Company
990 Town and Country Blvd
Houston, TX 77024
hollingworth@marathonoil.com

August 10, 2023

Interstate Oil & Gas Compact Commission
900 NE 23rd Street
Oklahoma City, OK 73105

RE: 2023 Chair's Stewardship Awards

Dear Chair's Stewardship Awards Committee:

Marathon Oil Corporation ("Marathon") knows how important it is to deliver reliable, affordable energy to meet growing global demand while minimizing environmental impacts of exploration, production and energy use. Our reputation, built on our core values to collaborate, take ownership, be bold and deliver results, enables us to maintain the trust of our stakeholders and to generate long-term value in our business. To achieve this, we aim to continually evaluate the impact of our operations on the people living in our communities and have a long-standing commitment to harnessing innovation to lessen that impact on both people and the environment.

Marathon is committed to reducing our GHG emissions footprint, while helping to supply the world with reliable and affordable energy. We understand that market changes could result from U.S. policy, global agreements and evolving domestic and international climate change laws and regulations. At the same time, we recognize the need for reliable and responsibly produced energy and petrochemical feedstock.

In February 2022, consistent with our objective to help successfully meet the global energy demand, we set new aggressive near- (2022), medium- (2025) and long-term (2030) goals for critical environmental performance metrics, including our methane intensity, GHG intensity and annual gas capture percentage (flaring intensity). These objectives are intended to help drive strong environmental performance, promote transparency and accountability, and enhance internal alignment and employee innovation.

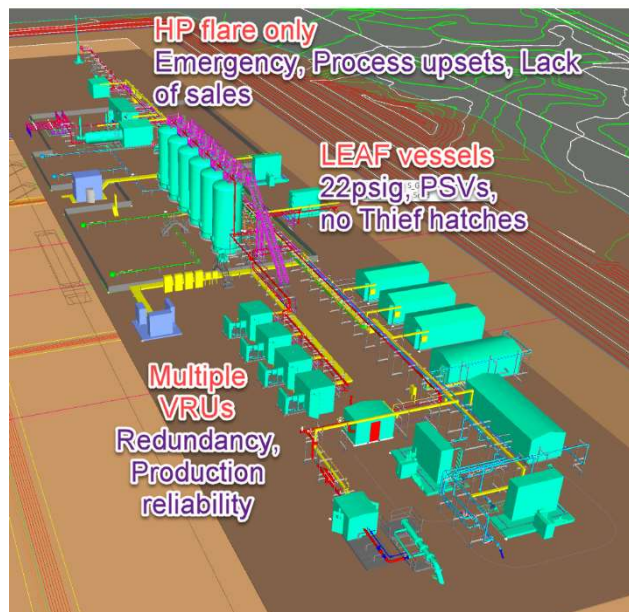


Figure 1: Lowest Emitting Automated Facility design

To meet these environmental performance metrics and continue to be a leader in oil production in the Williston Basin, the Marathon production facilities team engineered a new facility design, the Lowest Emitting Automated Facility (“LEAF”). LEAF is a step change in oil facility design and operational philosophy that is groundbreaking for emissions reductions, provides enhanced facility safety, and allows operational flexibility with greater levels of reliability complemented with easier operations.



Figure 2: LEAF Production Facility in the Field.

Traditional oil production facilities have continuous flaring from atmospheric tanks and often a potential to flare from a vapor recovery tower (VRT). To manage this type of facility, typically multiple flares must be on the well site. The LEAF design reduces the need for multiple flares and instead, only a single HP flare is required. This is achieved by replacing the typical oil storage tanks with oil process vessels designed and operated at above atmospheric pressure. The utilization of such oil processing vessels allows for vapors produced in the process vessels to be captured and sent to gas sales via Vapor Recovery Units (VRUs). This collection of gas in the processing vessels results in gas capture rate generally unattainable by traditional oil production facilities, often times approaching 100%.

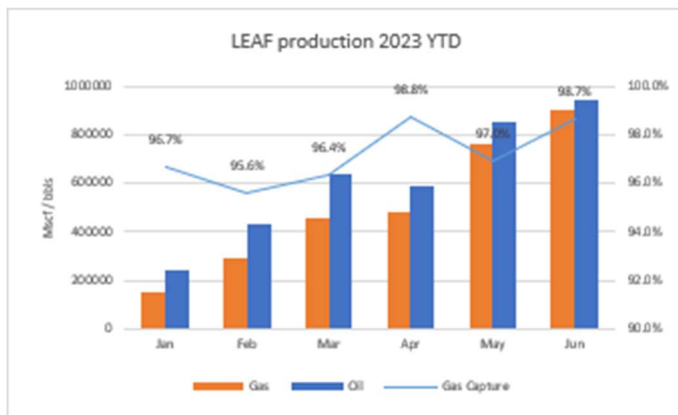


Figure 2: Bakken LEAF production growth in 2023 with gas capture percentage.

As Marathon continues to introduce the LEAF design into more locations within the Williston Basin, we expect it will continue to exceed expectations for performance and reliability. Monthly production volumes supported by LEAF facilities is increasing and with that, our gas capture will continue to improve. As a general rule, the transition to a LEAF facility is yielding an increase in gas capture of roughly 2% per month.

A second aspect of the advances the LEAF design brings to oil production facilities is the incorporation of electronic actuated control valves. The fully automated facility enables Marathon personnel to remotely monitor and tune the facility operation creating a stable and safe operation requiring minimal human intervention.

Additional benefits from the LEAF design are centered on the safety of our operations. Across the resource plays, multiple operators have experienced burn back events within the low-pressure flare pipework. In extreme cases this can result in catastrophic damage to facilities and the potential for loss of life. The LEAF design and operation fundamentally eliminates the potential for burn back events by continuously operating the LEAF oil process vessels above atmospheric pressure, thereby removing the potential for oxygen ingress.

With the LEAF design now a proven concept, Marathon is in the optimization phase with several additional opportunities being engineered to further enhance operation and reduce cost. One example is to incorporate the LEAF design concept into existing oil production sites with appropriately sized equipment to handle reduced production levels with smaller oil processing vessels and VRUs.

The LEAF design was developed with one eye always on the future. The facilities are designed to be compliant with changing state and federal regulations and will continue to improve with deployment. As the need for reliable and responsible energy production continues, the LEAF design will play an important role in meeting these needs.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Hollingworth", is written over a solid black horizontal line.

Russell Hollingworth
Bakken Facilities & Construction Manager

CC: Zac Weis