

Proposal for a Surfactant-Based EOR Pilot Testing Program

Submitted by:

Devon

Principal Investigator: Brad Musgrove

- ☐ **Total Funding Request - \$1,535,000**
- ☐ **Total Project Costs - \$3,370,000**
- ☐ **Project Duration: 2 Years**

PROJECT DESCRIPTION

Devon Energy proposes a testing campaign followed by a field pilot to demonstrate the technical and economic viability of surfactant-based Enhanced Oil Recovery (EOR) in the Williston Basin, North Dakota. The project will study and select the appropriate surfactant and methodology, then proceed to inject a surfactant solution targeting the Middle Bakken and/or Three Forks formations on three wells. The objective is to increase oil recovery by mobilizing residual hydrocarbons, optimize operational parameters, and provide a scalable blueprint for broader EOR deployment in North Dakota. The pilot leverages Devon's infrastructure and technical expertise, with a strong focus on risk management, stakeholder engagement, and cost-sharing.

TECHNICAL REVIEWERS' RATING SUMMARY

Statement	Weighting Factor	<u>TR G-62-O1</u>	<u>TR G-62-O2</u>	<u>TR G-62-O3</u>	<u>Average Weighted Score</u>
Objectives	9	3	5	4	36
Achievability	7	4	4	3	21
Methodology	8	3	3	3	24
Contribution	8	4	5	4	32
Awareness/ Background	5	4	3	3	15
Project Management	3	2	3	2	6
Equipment / Facilities	2	3	5	3	6
Value/Industry- Budget	4	3	5	4	16
Financial Match – Budget	4	3	3	4	12
<i>Average Weighted Score</i>		167	203	172	180
<i>Maximum Weighted Score</i>				250 possible points	

TECHNICAL REVIEWER TOTALS

- G-62-01

Average Weighted Score: **167 out of 250**

FUNDING TO BE CONSIDERED

- G-62-02

Average Weighted Score: **203 out of 250**

FUND

- G-62-03

Average Weighted Score: **172 out of 250**

FUNDING TO BE CONSIDERED

TECHNICAL REVIEWER COMMENTS

Reviewer G-62-01

The Devon Energy proposal is a technically sound, well-scoped, and strategically aligned project that addresses a key opportunity for Enhanced Oil Recovery in North Dakota's unconventional reservoirs. Its strengths include: A clear and achievable plan. Strong technical methodology and partnerships. Experienced team with operational control. High potential for scalability and economic impact. The project is recommended for funding consideration, with particular value in its ability to inform broader surfactant EOR deployment strategies across the Williston Basin.

Recommendation: FUNDING TO BE CONSIDERED

TECHNICAL REVIEWER COMMENTS

Reviewer G-62-02

The technical team at Devon and their EOR experience is of great value for the proposed project. Testing surfactant based EOR has more upside than downside and it is a niche of the industry that is constantly evolving. What may not have worked 5 years ago can become a viable solution due to delivery methods, formula changes, or a better understanding of the reservoir to name a few. While I thought the application hit all the points, it would have been nice to have more detail about the proposed project itself. For example, a map view diagram of the wells and what the current thinking is for which wells would be tested with the surfactant, why, preliminary volume estimates of what a treatment would look like. It also would have helped to hear about any examples where Devon has tried the surfactant based EOR in their portfolio or referenced other industry examples. Any details that would have shown why Devon thinks this project could ultimately be successful.

Recommendation: FUND

TECHNICAL REVIEWER COMMENTS

Reviewer G-62-03

The applicant has the scalability to improve the probability of success with this project. The partner TORP has knowledge and experience to increase the probability of success. The undetermined location of the proposed project creates some uncertainty.

Recommendation: FUNDING TO BE CONSIDERED

Director's Recommendation:

☐ Fund in the amount of \$1,458,250