

“New Technologies for Safe and Cost Effective Oil Conditioning in North Dakota”

Submitted by:
StatOil

- ☐ **Request for - \$200,000; Total Project Costs - \$400,000
Project Duration: 1 year**

PROJECT DESCRIPTION

- This proposal explores cost effective robust technology solutions to improve safe operations, manage operational costs, and continue compliance with the crude oil conditioning order. This proposal provides a feasibility study to be followed by field testing and implementation. The expected results of the project is improved reliability and safety associated with oil conditioning operation, and specifically focused on the marketability, cost competitiveness, and ultimate revenues achieved from the production of Bakken crude oil in North Dakota. Specifically, the scope of work includes:
 1. Modeling of surface treatment systems and storage to clearly identify unique operational circumstances that contribute and control Reid Vapor Pressure (RVP) during processing and handling.
 2. Sonic separation at the wellhead that does not rely on temperature for oil conditioning. The technology can be an alternative or an enhancement to existing heater treater operations.
 3. Bath chemical treatment to reduce RVP and meet midstream standards. This approach is intended to provide a solution to volumes of oil that would otherwise require a more expensive transportation and processing option.

Technical Reviewers' Rating Summary					
		Technical Reviewer			
Statement	Weighting Factor	<u>G-39-02A</u>	<u>G-39-02B</u>	<u>G-39-02C</u>	<u>Average Weighted Score</u>
Objectives	9	4	3	3	27
Achievability	7	4	3	4	21
Methodology	8	3	2	3	16
Contribution	8	4	4	3	24
Awareness / Background	5	3	3	2	10
Project Management	3	2	2	2	6
Equipment / Facilities	2	3	2	3	4
Value / Industry-Budget	4	3	2	3	8
Financial Match – Budget	4	3	3	3	12
Average Weighted Score		171	141	149	153
Maximum Weighted Score				250 possible points	

TECHNICAL REVIEWER TOTALS

- G-39-02A

Average Weighted Score: 171 out of 250

FUND

- G-39-02B

Average Weighted Score: 141 out of 250

FUNDING TO BE CONSIDERED

- G-39-02C

Average Weighted Score: 149 out of 250

FUNDING TO BE CONSIDERED

DIRECTOR'S RECOMMENDATIONS

To fund the amount of \$200,000. The applicant has provided additional information as suggested by the Technical Reviewers.