

**Texas Commission on Environmental Quality
New Technology Research & Development (NTRD) Program
Monthly Project Status Report**

Contract Number: 582-11-13473-2019
Grantee: Robert Bosch LLC
Report for the Monthly period: September 2012 **Date Submitted:** October 10, 2012

Section I. Accomplishments

Provide a bulleted list of project accomplishments as well as a description of their importance to the project.

System testing:

- With 2 diesel particulate filters (DPF) and 1 selective catalytic reduction (SCR) system running several transient tug boat cycles on the test bench to demonstrate the endurance capability
- System backpressure was reduced by using 2 DPF's. Furthermore the critical turbo charger temperature (upstream turbo charger turbine) exists no longer
- No deposits and ammonia (NH₃) slip detected
- Performance results for previous tests:
 - E3 test cycle: 85% nitrogen oxide (NO_x) and 99% particulate matter (PM) conversion
 - Transient tug boat cycle: 73% NO_x and PM conversion

Indicate which part of the Grant Activities as defined in the grant agreement, the above accomplishments are related to:

Phase 2 – Task 2: Final Design Changes, Measurement of Emission Reduction

- 2.2 Final design changes to system and emissions measurement with after treatment system

Section II: Problems/Solutions

Problem(s) Identified: Report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project

a) –

Proposed Solution(s): Report any possible solution(s) to the problem(s) that were considered/encountered

a) –

Action(s) Conducted and Results: Describe the action(s) taken to resolve the problem(s) and its effect

a) –

Section III. Goals and Issues for Succeeding Period:

Provide a brief description of the goal(s) you hope to realize in the coming period and identify any notable challenges that can be foreseen

Preparation of infield testing on the vessel:

- a) Shipping of after treatment system
- b) Installation and testing on vessel

Date: 10/11/2012

Authorized Project Representative's Signature

NOTE: *Please attach any additional information that you feel should be a part of your report or that may be required to meet the deliverable requirements for tasks completed during this reporting period.*