

NTRD Program Disclaimers

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

Contract Number: 582-5-65591-0001

Grantee: Catalytica Energy Systems

Date Submitted: 1/10/05

Report for the **Monthly** period: December, 2004

Starting Date 10/18/04

Ending Date 10/31/05

Section I. Accomplishments *(Please provide a bulleted list of project accomplishments as well as a description of their importance to the project.)*

Task 2 Accomplishments:

- Complete engine mapping of the recently installed DT466 engine at the Gilbert dyno test facility. The purpose of engine mapping is to determine the speed/torque characteristics of the engine and compare it to the published OEM data. The results show that the installed engine is within the limits of the published data
- Completed AVL8 test point definition for the DT466 engine. The AVL8 is an industry standard steady-state test protocol that CESI will be using to test the Denton test articles prior to transient FTP testing.

Task 3 Accomplishments

- Completed 90% of the design work for the Denton truck mounted field units and the specification of supporting system equipment.

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

The accomplishments listed above are all part of Tasks 2 through 3 in the Grant Agreement. Task 1 has been completed.

Section II: Problems/Solutions

<p>Problem(s) Identified</p> <p><i>(Please report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project)</i></p>	<p><i>(1) Design space and duty cycle result in rejection of International DT466 powered dump truck (1997, VIN 1HTSHAAR3VH489896) for this project per agreement and discussion with TCEQ-NTRD's Morris Brown December 2004.</i></p>
<p>Proposed Solution(s)</p> <p><i>(Please report any possible solution(s) to the problem(s) that were considered/encountered)</i></p>	<p><i>(1) City of Denton has additional International DT466 powered refuse trucks. CESI proposes adding a second refuse truck to the project to allow for increased value from the resulting field demonstration. This change will allow for increased demo mileage and statistical significance from the resulting reductions. CESI is currently working with City of Denton to identify which 1997 or 1998 International DT466 powered refuse truck will drive the most miles during intended demo period.</i></p>
<p>Action(s) Conducted and Results</p> <p><i>(Please describe the action(s) taken to resolve the problem(s) and its effect)</i></p>	<p><i>(1) Once an additional refuse truck is identified for the project, CESI will submit the vehicle specifics to TCEQ-NTRD per previous agreement with Morris Brown.</i></p>

Section III. **Goals and Issues for Succeeding Period:** *(Please 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)*

- (1) *Begin Task 2 Dynamometer testing activities*
 - a. *Initiate system performance testing using steady-state AVL8 test cycles*
- (2) *Begin Task 3 fabrication of Denton test articles*
 - a. *Begin the fabrication process on the two Denton container modules and the procurement of the supplementary truck mounted equipment.*



Date: 1/10/05

Authorized Project Representative's Signature

Attachment (no attachments in this report)