

NTRD Program Disclaimers

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

Contract Number: _____582-5-70807-0007_____

Grantee: _____Lamar University_____

Date Submitted: _____November 15, 2005_____

Report for the **Monthly** period:

Starting Date ___October 15, 2005___ Ending Date ___November 14, 2005___

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

- **Test Unit Re-examined and Re-calibrated** – Hurricane Rite substantially damaged the laboratory building in September but did not seem to cause any noticeable damage to the test unit installed in August for the project. Nonetheless, the test unit was thoroughly re-examined and re-calibrated. Several tests were conducted and PM samples were taken to compare with the previous results. They were found almost identical.
- **Temperature Profile in SiC Wall Filter Measured** - Temperature profile measurements in a 50mm Diameter x 150 mm Length SiC wall filter are in progress. This would lead to a proper wave guide design to obtain uniform temperature profile in the filter.
- **SiC Wall Filter Holder (quartz) Received** - A SiC wall filter holder made out of quartz has been received from Technical Glass Co. This holder is designed to hold a wall filter (50mmD x 150mmL) to be installed in the microwave oven.

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

The above accomplishments are related to Tasks 1, 2 and 3 described in the Scope of Work of the project.

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>The newly received Testo 350 Portable Emission Analyzer showed an error message in oxygen concentration in the diesel exhaust during the engine tests. The problem was immediately reported to the manufacturer. The problem did not cause any significant effect on the progress of the project.</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>The manufacturer sent two technicians to Lamar University to check on the analyzer on October 21, 2005. However, after replacing the oxygen sensor, the oxygen concentration still indicates an error. The analyzer was subsequently taken back to the manufacturer for repair.</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>The analyzer is expected to be repaired and returned to our laboratory later this month.</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)*

The goals for the next month are to:

1. Establish a pressure drop vs. time characteristic curve for the PM filter;
2. Determine the PM filtration efficiency; and
3. Conduct preliminary PM destruction experiments using microwave irradiation.

The next Monthly Progress Report will be submitted to TCEQ by December 15, 2005.



Date: _____ 11/14/05 _____

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.*