

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-T036

Grantee: World Energy Alternatives, LLC

Date Submitted: September 11, 2006

Report for the **Monthly** period:

Starting Date - August 14, 2006

Ending Date - September 10, 2006

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

- WVU commenced testing for World Energy Envirodiesel™, a candidate fuel (B20) that would fulfill requirements as a TxLED fuel for the State of Texas, on August 18, 2006.

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 Task 2 of the Grant Activities as defined in the grant agreement.

Section II: Problems/Solutions

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| <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>WVU ran a total of 19 hot run tests on the candidate fuel. After the first 3 test runs, WVU determined that the fuel had separated, with B80 at the bottom of the drum. The remaining runs were conducted using B20 (by density test). It was apparent that the possibility of successfully completing the testing would not occur; the candidate fuel was testing higher than the allowed value for NOx required by TCEQ in a TxLED fuel. It was speculated that the biodiesel had started to oxidize or degrade, given the age of the product (9 months) and knowledge that product deterioration can occur after 6 months, even with a high quality product. Testing was interrupted to save resources/time and the project team discussed the next steps.</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>Conduct a new round of scoping with new biodiesel procured using the original reference fuel from the first round of testing. If scoping shows positive results, another round of testing will begin once a new test plan and protocol is approved by TCEQ.</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>New biodiesel was procured. Scoping will occur between September 12, 2006 and September 15, 2006. Once scoping is complete, a full ASTM analysis of the biodiesel will be completed and a triplicate analysis of the candidate fuel will be conducted. A new test plan and protocol will be submitted to TCEQ for approval and a test date will be secured for testing in the laboratory.</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 goal for the coming period is to complete scoping of the candidate fuel using new biodiesel procured. Analyses will be completed on both the biodiesel and candidate fuel and a test plan will be submitted to TCEQ for approval.

_____ Date: _____
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.*