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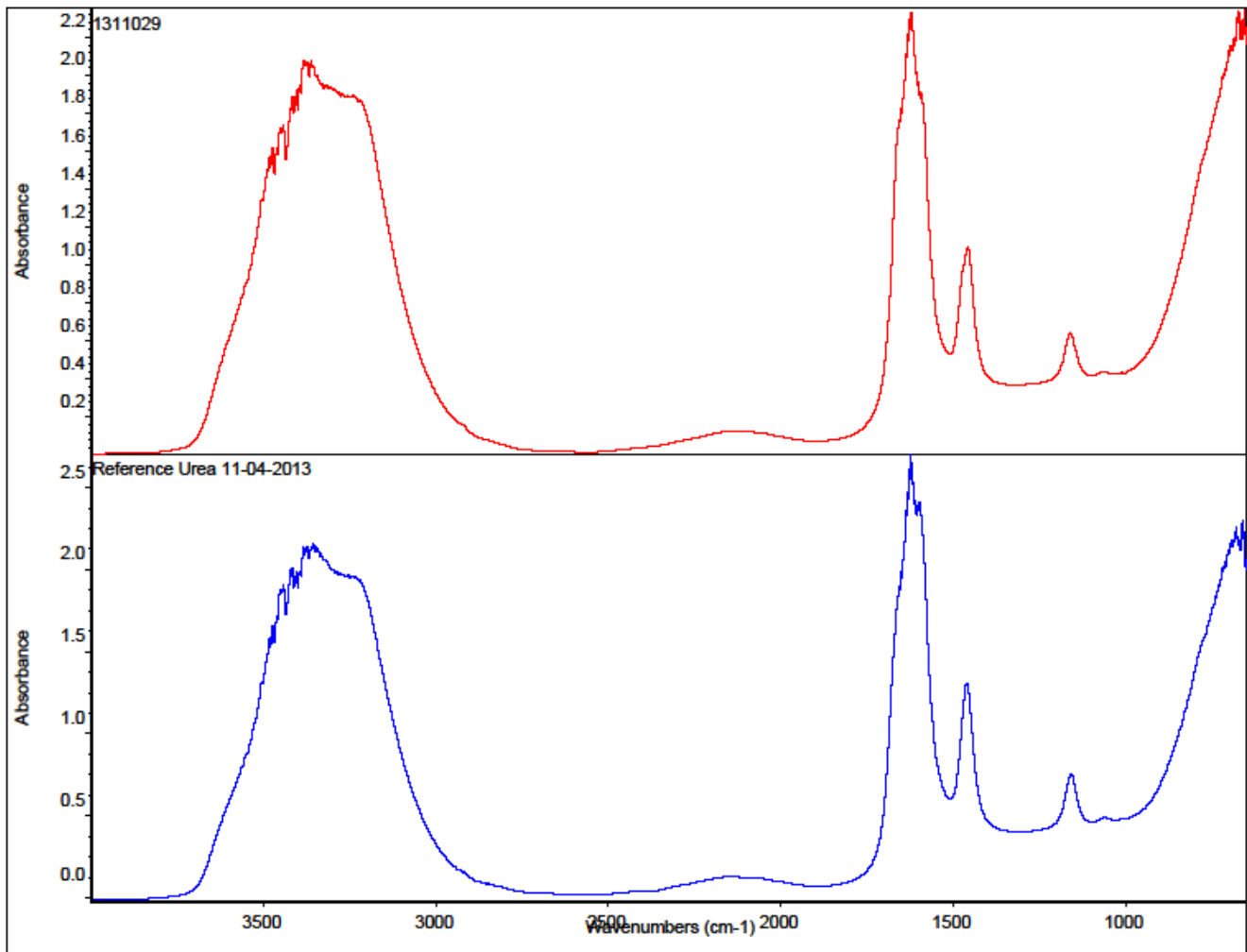
|                      |  |                      |            |
|----------------------|--|----------------------|------------|
| <b>Contact:</b>      | Sharon Stegmuller                                  | <b>Sample ID</b>     | Lot #00026 |
| <b>Company:</b>      | DEF Products LLC                                   | <b>Batch #</b>       | Lot #00026 |
| <b>Address:</b>      | 422 E Barioni Blvd                                 | <b>Date sampled</b>  | 10/28/2013 |
| <b>City, ST, Zip</b> | Imperial, 92251 92251                              | <b>Date Received</b> | 11/4/2013  |
| <b>E-Mail</b>        | Raymond14@gmail.com,<br>sharonstegmuller@gmail.com | <b>Date Promised</b> | 11/7/2013  |
| <b>Phone / Fax</b>   | 760 355-7997 / 760 355-4588                        | <b>Amalgatech ID</b> | 1311029    |
|                      |  | <b>Report Date</b>   | 11/4/2013  |

### Diesel Exhaust Fluid per ISO 22241<sup>\*1</sup>

| Characteristics                        | Unit              | Test Methods                                     | Limits                 |        | Acceptance Range <sup>2</sup> |        | Results                |
|--|-------------------|--|------------------------|--------|-------------------------------|--------|------------------------|
|  |                   |  | min.                   | max.   | min.                          | max.   |                        |
| Urea content                           | %<br>(m/m)        | ISO 22241-2<br>Annex A<br>ISO 22241-2<br>Annex B | 31.8                   | 33.2   | 30.8                          | 34.2   | 32.4                   |
| Density at 20°C                        | kg/m <sup>3</sup> | ISO 3675 or<br>ISO 12185                         | 1087.0                 | 1093.0 | 1086.5                        | 1093.5 | 1089.3                 |
| Refractive index at 20°C               | ---               | ISO 22241-2<br>Annex C                           | 1.3814                 | 1.3843 | 1.3804                        | 1.3853 | 1.3826                 |
| Alkalinity as NH <sub>3</sub>          | %m/m              | ISO 22241-2<br>Annex D                           | ---                    | 0.2    | ---                           | 0.24   | 0.04                   |
| Biuret                                 | %m/m              | ISO 22241-2<br>Annex E                           | ---                    | 0.3    | ---                           | 0.34   | 0.083                  |
| Aldehydes                              | mg/kg             | ISO 22241-2<br>Annex F                           | ---                    | 5.0    | ---                           | 7.4    | 0.1                    |
| Insoluble matter                       | mg/kg             | ISO 22241-2<br>Annex G                           | ---                    | 20     | ---                           | 27.6   | 8.3                    |
| Phosphate (PO <sub>4</sub> )           | mg/kg             | ISO 22241-2<br>Annex H                           | ---                    | 0.5    | ---                           | 0.53   | 0.05                   |
| Calcium                                | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.5    | ---                           | 0.55   | 0.29                   |
| Iron                                   | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.5    | ---                           | 0.65   | 0.02                   |
| Copper                                 | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.2    | ---                           | 0.24   | 0.00                   |
| Zinc                                   | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.2    | ---                           | 0.26   | 0.00                   |
| Chromium                               | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.2    | ---                           | 0.26   | 0.00                   |
| Nickel                                 | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.2    | ---                           | 0.26   | 0.00                   |
| Aluminum                               | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.5    | ---                           | 0.65   | 0.03                   |
| Magnesium                              | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.5    | ---                           | 0.65   | 0.10                   |
| Sodium                                 | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.5    | ---                           | 0.75   | 0.00                   |
| Potassium                              | mg/kg             | ISO 22241-2<br>Annex I                           | ---                    | 0.5    | ---                           | 0.75   | 0.00                   |
| Identity                               | ---               | ISO 22241-2<br>Annex J                           | Identical to reference |        | Identical to reference        |        | Identical to reference |
| <b>Comments by Amalgatech:</b><br>PASS |                   |  |                        |        |                               |        |                        |

<sup>2</sup> Acceptance Range = Limit adjusted for reproducibility per Annex B

Supporting Graph:



**Important note:** [Amalgatech is accredited by A2LA to ISO/IEC 17025:2005](#) (CHEMICAL TESTING, Cert 2168.01). Amalgatech receives samples that are identified by the customer/sender and takes these identifications in good faith, reporting data to the customer using the customer's identification. Our laboratory services are not intended for marketing and are not product certifications. We are accredited to perform most ASTM coolant tests. Any test performed for which Amalgatech is not accredited is identified with an asterisk (\*). This report is © Amalgatech division, Amalgamated Laboratories, Inc. 2011. It may not be reproduced, altered, copied or disseminated except in whole. Use of the report is permitted, including copying, as long as the entire report, including this information section, is always provided in its entirety.

NOTE <sup>1</sup> Amalgatech has performed the test in accordance with the revision of the standard in place at the time the test was performed. Amalgatech uses only active standards.

Respectfully submitted,

AMALGATECH DIVISION  
AMALGAMATED LABORATORIES, INC.

Ed Eaton  
Chief Engineer