Amalgatech LLC
2965 West Osborn
Phoenix, AZ 85017
Phone: 602-252-0280 Fax: 602-252-0282 E-mail *info@amalgatech.com*

Contact:	*Ray Pederson*	*Sample ID*	*Lot # 310222015*
Company:	*DEF Products*	*Batch #*	*Lot # 310222015*
Address:	*422 East Barioni Drive*	*Date sampled*	*10/22/2015*
		Date Received	*11/9/2015*
City, ST, Zip	*Imperial, CA 92251*	*Date Promised*	*11/14/2015*
E-Mail	*defproducts@gmail.com*	*Amalgatech ID*	*1511116*
Phone / Fax	*760427-4479 /*	*Report Date*	*11/10/2015*

Diesel Exhaust Fluid per ISO 22241[1]

Characteristics	Unit	Test Methods	Limits		Acceptance Range[2]		Results
			min.	max.	min.	max.	
Urea content	% (m/m)	ISO 22241-2 Annex A ISO 22241-2 Annex B	31.8	33.2	30.8	34.2	31.1
Density at 20°C	kg/m^3	ISO 3675 or ISO 12185	1087.0	1093.0	1086.5	1093.5	1086.5
Refractive index at 20°C	---	ISO 22241-2 Annex C	1.3814	1.3843	1.3804	1.3853	1.3810
Alkalinity as NH_3	%m/m	ISO 22241-2 Annex D	---	0.2	---	0.24	0.03
Biuret	%m/m	ISO 22241-2 Annex E	---	0.3	---	0.34	0.296
Aldehydes	mg/kg	ISO 22241-2 Annex F	---	5.0	---	7.4	0.5
Insoluble matter	mg/kg	ISO 22241-2 Annex G	---	20	---	27.6	6.2
Phosphate (PO_4)	mg/kg	ISO 22241-2 Annex H	---	0.5	---	0.53	0.06
Calcium	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.55	0.14
Iron	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.65	0.04
Copper	mg/kg	ISO 22241-2 Annex I	---	0.2	---	0.24	0.01
Zinc	mg/kg	ISO 22241-2 Annex I	---	0.2	---	0.26	0.00
Chromium	mg/kg	ISO 22241-2 Annex I	---	0.2	---	0.26	0.05
Nickel	mg/kg	ISO 22241-2 Annex I	---	0.2	---	0.26	0.08
Aluminum	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.65	0.06
Magnesium	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.65	0.01
Sodium	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.75	0.04
Potassium	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.75	0.29
Identity	---	ISO 22241-2 Annex J	Identical to reference		Identical to reference		Identical to Reference

Comments by Amalgatech:
Urea Content is lower than the spec limit but within the acceptance range for ISO22241; Density is lower than the spec limit but within the acceptance range for ISO22241; Refractive Index is lower than the spec limit but within the acceptance range for IS

[2] Acceptance Range = Limit adjusted for reproducibility per Annex B

Supporting Graph:
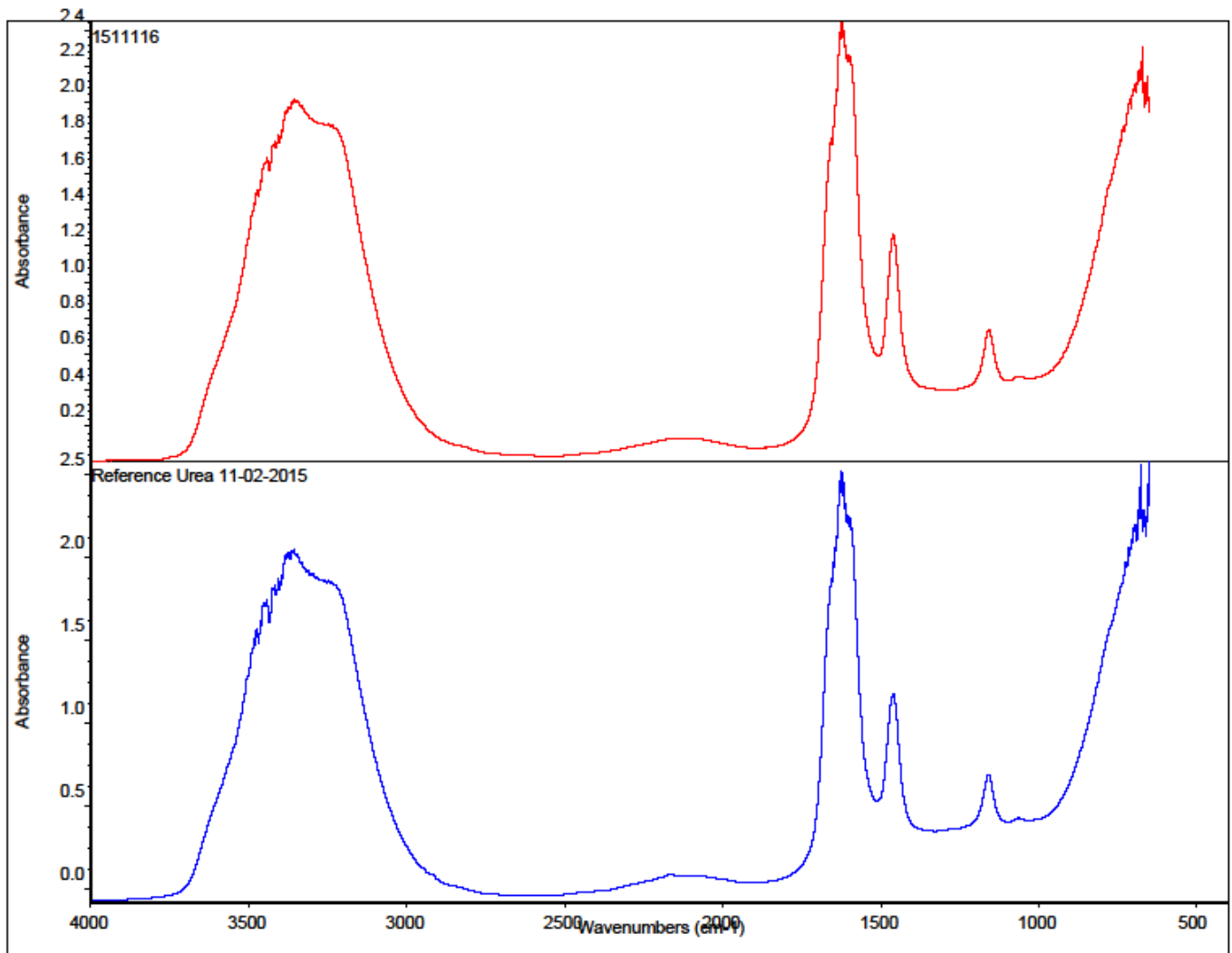
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NOTE [1] Amalgatech has performed the test in accordance with the revision of the standard in place at the time the test was performed. Amalgatech uses only active standards.

 Respectfully submitted,

AMALGATECH

Ed Eaton
Chief Engineer