

NVFEL Fuel Analysis Report

25278

Tier 2 gasoline

Batch#

Facility Name: US EPA NVFEL Testing Fuel Group Facility Type: In House

Owner: USEPA Phone: (734) 214-4881

2565 Plymouth Road

Ann Arbor MI 48105-2425 Washtenaw County

US

Inspector: Nancy Tschirhart Inspection Date : 10/23/2013

Time In: 00:00 Time Out: 00:00

Samples Type: Test Fuel

VOC

Inspection information logged in by NST on 8/24/2015.

Season:

Tier 2 gasoline-Tank 21 8-24 FTAG: 25278 Comments:

Test Code	Test Method	Results	Units	Fuel Code:	3	Analyst	Analysis Date
5808	Weight Percent Oxygenates by D5599	0.00	Weight Percent			DC	8/25/2015
552	MTBE by D5599	0.00	Oxygen Percent			DC	8/25/2015
562	ETBE by D5599	0.00	Oxygen Percent			DC	8/25/2015
534	Ethanol by D5599	0.00	Oxygen Percent			DC	8/25/2015
572	TAME by D5599	0.00	Oxygen Percent			DC	8/25/2015
421	Sulfur in Gasoline D2622	39.6	Parts Per Million			NST	8/26/2015
62	Vapor Pressure by D5191 (Modified)	8.95	PS I			NST	8/25/2015
65	Percent Evaporated at 200 Degrees F D86	39.3	Volume Percent			RG	8/25/2015
66	Percent Evaporated at 300 Degrees F D86	88.0	Volume Percent			RG	8/25/2015
48	Aromatics in Gasoline MSD D5769	32.30	Volume Percent			TW	8/26/2015
48	Aromatics in Gasoline MSD D5769	32.14	Volume Percent			TW	8/26/2015
49	Olefins in by FIA D1319	0.6	Volume Percent			RCG	8/25/2015
64	Benzene in Gasoline D3606	0.00	Volume Percent			TW	8/26/2015
64	Benzene in Gasoline D3606	0.00	Volume Percent			TW	8/26/2015
59	Weight Percent Oxygen by D5599	0.00	Weight Percent			DC	8/25/2015
57	TAME by D5599	0.00	Volume Percent			DC	8/25/2015
593	Volume Percent Oxygenates by D5599	0.00	Volume Percent			DC	8/25/2015
532	Ethanol by D5599	0.00	Volume Percent			DC	8/25/2015
55	MTBE by D5599	0.00	Volume Percent			DC	8/25/2015
56	ETBE by D5599	0.00	Volume Percent			DC	8/25/2015
46	Aromatics by FIA D1319	30.6	Volume Percent			RCG	8/25/2015
63	Benzene in Gasoline by GC/MSD D5769	0.05	Volume Percent			TW	8/26/2015
63	Benzene in Gasoline by GC/MSD D5769	0.05	Volume Percent			TW	8/26/2015
630	Toluene in gasoline by MSD D5769	20.04	Volume Percent			TW	8/26/2015
630	Toluene in gasoline by MSD D5769	19.91	Volume Percent			TW	8/26/2015
69	Specific Gravity @ 60 deg F D4052	0.74319	60/60F			NT	8/25/2015
692	Degrees API D4052	58.90	Degrees API			NT	8/25/2015
691	Density @ 60 deg F D4052	0.74245	g/cm-03 @ 60 deg F			NT	8/25/2015
101	Initial Boiling Point D86	89.4	Degrees F			RG	8/25/2015
110	10 Percent D86	125.6	Degrees F			RG	8/25/2015

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150	50 Percent	D86	222.6 Degrees F	RG	8/25/2015
190	90 Percent	D86	317.3 Degrees F	RG	8/25/2015
200	End Point	D86	405.9 Degrees F	RG	8/25/2015
201	Residue	D86	1.1 mL	RG	8/25/2015
202	Total Recovery	D86	97.5 mL	RG	8/25/2015
203	Loss	D86	1.4 mL	RG	8/25/2015
543	Methanol by D5599		0.00 Volume Percent	DC	8/25/2015
584	Isopropanol by D5599		0.00 Volume Percent	DC	8/25/2015
585	t-Butanol by D5599		0.00 Volume Percent	DC	8/25/2015
586	n-Propanol by D5599		0.00 Volume Percent	DC	8/25/2015
587	sec-Butanol by D5599		0.00 Volume Percent	DC	8/25/2015
588	DIPE by D5599		0.00 Volume Percent	DC	8/25/2015
589	Isobutanol by D5599		0.00 Volume Percent	DC	8/25/2015
5801	t-Amyl Alcohol by D5599		0.00 Volume Percent	DC	8/25/2015
5802	n-Butanol by D5599		0.00 Volume Percent	DC	8/25/2015
30	Lead in Gasoline by D3237		0.001 Grm Pb per Gallon	Paragon	8/27/2015
32	Weight Fraction Carbon D3343		0.86640 Weight Fraction	BK	
991	Phosphorus in Gasoline by D3231		0.0002 Grams per Gallon	Paragon	8/27/2015
221	Motor Octane		88.9 Motor Octane Number	Paragon	8/27/2015
219	Antiknock		92.75 (RON+MON)/2	CPU	8/27/2015
220	Research Octane		96.6 Research Octane Number	Paragon	8/27/2015
218	Sensitivity		7.7 RON-MON	CPU	8/27/2015
230	Net Heating Value D240		18447.00 BTU/lb	BK	8/26/2015

42.91 MJ/kg

SUGGESTED CITATION: 2013 Ford 1.6L EcoBoost Engine Tier 2 Fuel – Test Data Package. Version 2018-10. Ann Arbor, MI: US EPA, National Vehicle and Fuel Emissions Laboratory, National Center for Advanced Technology, 2018.