

LEV III

Batch#

Facility Name: US EPA NVFEL Facility Type: In House

Owner: USEPA Phone: (734) 214-4881

2565 Plymouth Road

Ann Arbor MI 48105-2425 Washtenaw County

US

Inspector: N. Tschirhart Inspection Date : 6/6/2013

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

Samples Type: Test Fuel

VOC

Inspection information logged in by NST on 3/5/2014.

Season:

LEV III-E10 regular

FTAG: 24054

Comments:

Test Code	Test Method	Results	Units	Fuel_ 64 Code:	Analyst	Analysis Date
598	TAME by D4815	0.00	Volume Percent		TS	3/18/2014
5804	sec-Butanol by D4815	0.00	Oxygen weight Percent		TS	3/18/2014
5803	sec-Butanol by D4815	0.00	Volume Percent		TS	3/18/2014
5806	n-Propanol by D4815	0.00	Volume Percent		TS	3/18/2014
5806	n-Propanol by D4815	0.00	Volume Percent		TS	3/18/2014
600	DIPE by D4815	0.00	Volume Percent		TS	3/18/2014
600	DIPE by D4815	0.00	Volume Percent		TS	3/18/2014
428	Sulfur in Gasoline by D5453	10.39	Parts Per Million		NS	3/20/2014
598	TAME by D4815	0.00	Volume Percent		TS	3/18/2014
5804	sec-Butanol by D4815	0.00	Oxygen weight Percent		TS	3/18/2014
597	ETBE by D4815	0.00	Volume Percent		TS	3/18/2014
597	ETBE by D4815	0.00	Volume Percent		TS	3/18/2014
596	MTBE by D4815	0.00	Volume Percent		TS	3/18/2014
596	MTBE by D4815	0.00	Volume Percent		TS	3/18/2014
5808	Weight Percent Oxygenates by D5599	10.60	Weight Percent		TS	3/18/2014
5808	Weight Percent Oxygenates by D5599	10.71	Weight Percent		TS	3/18/2014
5809	t-Amyl Alcohol by D4815	0.00	Volume Percent		TS	3/18/2014
595	Volume Percent Oxygenates by D4815	10.18	Volume Percent		TS	3/18/2014
5810	n-Butanol by D4815	0.00	Volume Percent		TS	3/18/2014
594	Weight Percent Oxygenates by D4815	10.84	Weight Percent		TS	3/18/2014
594	Weight Percent Oxygenates by D4815	10.78	Weight Percent		TS	3/18/2014
5803	sec-Butanol by D4815	0.00	Volume Percent		TS	3/18/2014
5810	n-Butanol by D4815	0.00	Volume Percent		TS	3/18/2014
5810	n-Butanol by D4815	0.00	Volume Percent		TS	3/18/2014
595	Volume Percent Oxygenates by D4815	10.24	Volume Percent		TS	3/18/2014
590	Weight Percent Oxygen by D4815	3.76	Weight Percent		TS	3/18/2014
590	Weight Percent Oxygen by D4815	3.74	Weight Percent		TS	3/18/2014
5809	t-Amyl Alcohol by D4815	0.00	Volume Percent		TS	3/18/2014
5807	i-Propanol by D4815	0.00	Volume Percent		TS	3/18/2014
5807	i-Propanol by D4815	0.00	Volume Percent		TS	3/18/2014
5810	n-Butanol by D4815	0.00	Volume Percent		TS	3/18/2014
552	MTBE by D5599	0.00	Oxygen Percent		TS	3/18/2014
552	MTBE by D5599	0.00	Oxygen Percent		TS	3/18/2014

562	ETBE	by D5599	0.00	Oxygen Percent	TS	3/18/2014
562	ETBE	by D5599	0.00	Oxygen Percent	TS	3/18/2014
534	Ethanol	by D5599	3.72	Oxygen Percent	TS	3/18/2014
534	Ethanol	by D5599	3.68	Oxygen Percent	TS	3/18/2014
572	TAME	by D5599	0.00	Oxygen Percent	TS	3/18/2014
572	TAME	by D5599	0.00	Oxygen Percent	TS	3/18/2014
62	Vapor Pressure	by D5191 (Modified)	7.09	PS I	NST	3/13/2014
65	Percent Evaporated at 200 Degrees F	D86	47.6	Volume Percent	RG	3/17/2014
66	Percent Evaporated at 300 Degrees F	D86	84.0	Volume Percent	RG	3/17/2014
48	Aromatics in Gasoline	MSD D5769	22.38	Volume Percent	TW	3/14/2014
49	Olefins in	by FIA D1319	5.6	Volume Percent	RCG	3/17/2014
64	Benzene in Gasoline	D3606	0.70	Volume Percent	TW	3/13/2014
532	Ethanol	by D5599	10.11	Volume Percent	TS	3/18/2014
532	Ethanol	by D5599	10.00	Volume Percent	TS	3/18/2014
593	Volume Percent Oxygenates	by D5599	10.11	Volume Percent	TS	3/18/2014
59	Weight Percent Oxygen	by D5599	3.72	Weight Percent	TS	3/18/2014
593	Volume Percent Oxygenates	by D5599	10.00	Volume Percent	TS	3/18/2014
55	MTBE	by D5599	0.00	Volume Percent	TS	3/18/2014
57	TAME	by D5599	0.00	Volume Percent	TS	3/18/2014
59	Weight Percent Oxygen	by D5599	3.68	Weight Percent	TS	3/18/2014
55	MTBE	by D5599	0.00	Volume Percent	TS	3/18/2014
57	TAME	by D5599	0.00	Volume Percent	TS	3/18/2014
56	ETBE	by D5599	0.00	Volume Percent	TS	3/18/2014
56	ETBE	by D5599	0.00	Volume Percent	TS	3/18/2014
46	Aromatics	by FIA D1319	21.3	Volume Percent	RCG	3/17/2014
630	Toluene in gasoline	by MSD D5769	5.65	Volume Percent	TW	3/14/2014
63	Benzene in Gasoline	by GC/MSD D5769	0.72	Volume Percent	TW	3/14/2014
69	Specific Gravity @ 60 deg F	D4052	0.75014	60/60F	NT	3/13/2014
692	Degrees API	D4052	57.13	Degrees API	NT	3/13/2014
691	Density @ 60 deg F	D4052	0.74940	g/cm-03 @ 60 deg F	NT	3/13/2014
101	Initial Boiling Point	D86	115.3	Degrees F	RG	3/17/2014
110	10 Percent	D86	134.6	Degrees F	RG	3/17/2014
150	50 Percent	D86	210.9	Degrees F	RG	3/17/2014
190	90 Percent	D86	315.7	Degrees F	RG	3/17/2014
200	End Point	D86	350.1	Degrees F	RG	3/17/2014
201	Residue	D86	0.9	mL	RG	3/17/2014
202	Total Recovery	D86	96.2	mL	RG	3/17/2014
203	Loss	D86	2.9	mL	RG	3/17/2014
543	Methanol	by D5599	0.00	Volume Percent	TS	3/18/2014
543	Methanol	by D5599	0.00	Volume Percent	TS	3/18/2014
533	Ethanol	by D4815	10.18	Volume Percent	TS	3/18/2014
533	Ethanol	by D4815	10.24	Volume Percent	TS	3/18/2014
584	Isopropanol	by D5599	0.00	Volume Percent	TS	3/18/2014
584	Isopropanol	by D5599	0.00	Volume Percent	TS	3/18/2014

585	t-Butanol	by D5599	0.00 Volume Percent	TS	3/18/2014
585	t-Butanol	by D5599	0.00 Volume Percent	TS	3/18/2014
586	n-Propanol	by D5599	0.00 Volume Percent	TS	3/18/2014
586	n-Propanol	by D5599	0.00 Volume Percent	TS	3/18/2014
587	sec-Butanol	by D5599	0.00 Volume Percent	TS	3/18/2014
587	sec-Butanol	by D5599	0.00 Volume Percent	TS	3/18/2014
588	DIPE	by D5599	0.00 Volume Percent	TS	3/18/2014
588	DIPE	by D5599	0.00 Volume Percent	TS	3/18/2014
589	Isobutanol	by D5599	0.00 Volume Percent	TS	3/18/2014
589	Isobutanol	by D5599	0.00 Volume Percent	TS	3/18/2014
5801	t-Amyl Alcohol	by D5599	0.00 Volume Percent	TS	3/18/2014
5801	t-Amyl Alcohol	by D5599	0.00 Volume Percent	TS	3/18/2014
5802	n-Butanol	by D5599	0.00 Volume Percent	TS	3/18/2014
5802	n-Butanol	by D5599	0.00 Volume Percent	TS	3/18/2014
542	Methanol in Gasoline D4815		0.00 Volume Percent	TS	3/18/2014
542	Methanol in Gasoline D4815		0.00 Volume Percent	TS	3/18/2014
582	t-Butanol in Gasoline D4815		0.00 Volume Percent	TS	3/18/2014
582	t-Butanol in Gasoline D4815		0.00 Volume Percent	TS	3/18/2014
583	i-Butanol in Gasoline D4815		0.00 Volume Percent	TS	3/18/2014
583	i-Butanol in Gasoline D4815		0.00 Volume Percent	TS	3/18/2014
30	Lead in Gasoline by D3237		0.000 Grm Pb per Gallon	Haltermann	12/10/2013
227	Gum Content Washed		0.5 mg/100ml	Haltermann	12/10/2013
228	Gum Content Unwashed		16.0 mg/100ml	Haltermann	3/17/2014
991	Phosphorus in Gasoline by D3231		0.0000 Grams per Gallon	Haltermann	12/10/2013
221	Motor Octane		84.2 Motor Octane Number	Haltermann	12/10/2013
219	Antiknock		88.10 (RON+MON)/2	CPU	12/10/2013
218	Sensitivity		7.8 RON-MON	CPU	12/10/2013
220	Research Octane		92.0 Research Octane Number	Haltermann	12/10/2013
225	Copper Corrosion D130		1a Designation	Haltermann	12/10/2013
230	Net Heating Value D240		17913.00 BTU/lb	Paragon	12/10/2013
231	Carbon Content D5291		82.50 Weight Percent	Haltermann	12/10/2013
232	Hydrogen Content D5291		13.80 Weight Percent	Haltermann	12/10/2013
492	Olefins by D6550		4.4 Volume Percent	LS	3/18/2014

Total Aromatic D-5580 vol% 21.89
Benzene D-5580 vol% .71