

NVFEL Fuel Analysis Report

25842

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 7/6/2016.

Season:

Tier 2 gasoline-27N 7-6 FTAG: 25842 Comments: sent out for octanes

| Test Code | Test Method | Results | Units | Fuel_ Code: | 3 | Analyst | Analysis Date |
|-----------|---|---------|--------------------|-------------|---|---------|---------------|
| 5808 | Weight Percent Oxygenates by D5599 | 0.00 | Weight Percent | | | HS | 7/14/2016 |
| 552 | MTBE by D5599 | 0.00 | Oxygen Percent | | | HS | 7/14/2016 |
| 562 | ETBE by D5599 | 0.00 | Oxygen Percent | | | HS | 7/14/2016 |
| 534 | Ethanol by D5599 | 0.00 | Oxygen Percent | | | HS | 7/14/2016 |
| 572 | TAME by D5599 | 0.00 | Oxygen Percent | | | HS | 7/14/2016 |
| 421 | Sulfur in Gasoline D2622 | 36.2 | Parts Per Million | | | NST | 8/2/2016 |
| 62 | Vapor Pressure by D5191 (Modified) | 9.11 | PS I | | | NST | 7/7/2016 |
| 65 | Percent Evaporated at 200 Degrees F D86 | 41.9 | Volume Percent | | | RG | 7/26/2016 |
| 65 | Percent Evaporated at 200 Degrees F D86 | 41.8 | Volume Percent | | | RG | 7/26/2016 |
| 66 | Percent Evaporated at 300 Degrees F D86 | 88.3 | Volume Percent | | | RG | 7/26/2016 |
| 66 | Percent Evaporated at 300 Degrees F D86 | 88.3 | Volume Percent | | | RG | 7/26/2016 |
| 48 | Aromatics in Gasoline MSD D5769 | 32.19 | Volume Percent | | | TW | 7/13/2016 |
| 48 | Aromatics in Gasoline MSD D5769 | 31.99 | Volume Percent | | | TW | 7/13/2016 |
| 49 | Olefins in by FIA D1319 | 0.8 | Volume Percent | | | RCG | 7/11/2016 |
| 64 | Benzene in Gasoline D3606 | 0.02 | Volume Percent | | | TW | 7/12/2016 |
| 532 | Ethanol by D5599 | 0.00 | Volume Percent | | | HS | 7/14/2016 |
| 57 | TAME by D5599 | 0.00 | Volume Percent | | | HS | 7/14/2016 |
| 59 | Weight Percent Oxygen by D5599 | 0.00 | Weight Percent | | | HS | 7/14/2016 |
| 593 | Volume Percent Oxygenates by D5599 | 0.00 | Volume Percent | | | HS | 7/14/2016 |
| 55 | MTBE by D5599 | 0.00 | Volume Percent | | | HS | 7/14/2016 |
| 56 | ETBE by D5599 | 0.00 | Volume Percent | | | HS | 7/14/2016 |
| 630 | Toluene in gasoline by MSD D5769 | 19.74 | Volume Percent | | | TW | 7/13/2016 |
| 63 | Benzene in Gasoline by GC/MSD D5769 | 0.04 | Volume Percent | | | TW | 7/13/2016 |
| 63 | Benzene in Gasoline by GC/MSD D5769 | 0.04 | Volume Percent | | | TW | 7/13/2016 |
| 630 | Toluene in gasoline by MSD D5769 | 19.62 | Volume Percent | | | TW | 7/13/2016 |
| 46 | Aromatics by FIA D1319 | 30.5 | Volume Percent | | | RCG | 7/11/2016 |
| 69 | Specific Gravity @ 60 deg F D4052 | 0.74301 | 60/60F | | | NT | 7/7/2016 |
| 692 | Degrees API D4052 | 58.94 | Degrees API | | | NT | 7/7/2016 |
| 691 | Density @ 60 deg F D4052 | 0.74227 | g/cm-03 @ 60 deg F | | | NT | 7/7/2016 |
| 101 | Initial Boiling Point D86 | 88.7 | Degrees F | | | RG | 7/26/2016 |

| | | | | | |
|------|---------------------------------|-----|-----------------------------|---------|-----------|
| 101 | Initial Boiling Point | D86 | 89.4 Degrees F | RG | 7/26/2016 |
| 110 | 10 Percent | D86 | 123.8 Degrees F | RG | 7/26/2016 |
| 110 | 10 Percent | D86 | 124.0 Degrees F | RG | 7/26/2016 |
| 150 | 50 Percent | D86 | 219.0 Degrees F | RG | 7/26/2016 |
| 150 | 50 Percent | D86 | 219.2 Degrees F | RG | 7/26/2016 |
| 190 | 90 Percent | D86 | 313.7 Degrees F | RG | 7/26/2016 |
| 190 | 90 Percent | D86 | 312.6 Degrees F | RG | 7/26/2016 |
| 200 | End Point | D86 | 407.1 Degrees F | RG | 7/26/2016 |
| 200 | End Point | D86 | 403.9 Degrees F | RG | 7/26/2016 |
| 201 | Residue | D86 | 1.1 mL | RG | 7/26/2016 |
| 201 | Residue | D86 | 1.1 mL | RG | 7/26/2016 |
| 202 | Total Recovery | D86 | 97.5 mL | RG | 7/26/2016 |
| 202 | Total Recovery | D86 | 97.6 mL | RG | 7/26/2016 |
| 203 | Loss | D86 | 1.4 mL | RG | 7/26/2016 |
| 203 | Loss | D86 | 1.3 mL | RG | 7/26/2016 |
| 543 | Methanol by D5599 | | 0.00 Volume Percent | HS | 7/14/2016 |
| 584 | Isopropanol by D5599 | | 0.00 Volume Percent | HS | 7/14/2016 |
| 585 | t-Butanol by D5599 | | 0.00 Volume Percent | HS | 7/14/2016 |
| 586 | n-Propanol by D5599 | | 0.00 Volume Percent | HS | 7/14/2016 |
| 587 | sec-Butanol by D5599 | | 0.00 Volume Percent | HS | 7/14/2016 |
| 588 | DIPE by D5599 | | 0.00 Volume Percent | HS | 7/14/2016 |
| 589 | Isobutanol by D5599 | | 0.00 Volume Percent | HS | 7/14/2016 |
| 5801 | t-Amyl Alcohol by D5599 | | 0.00 Volume Percent | HS | 7/14/2016 |
| 5802 | n-Butanol by D5599 | | 0.00 Volume Percent | HS | 7/14/2016 |
| 30 | Lead in Gasoline by D3237 | | 0.001 Grm Pb per Gallon | Paragon | 7/16/2016 |
| 32 | Weight Fraction Carbon D3343 | | 0.86650 Weight Fraction | HS | |
| 991 | Phosphorus in Gasoline by D3231 | | 0.0002 Grams per Gallon | Paragon | 7/18/2016 |
| 221 | Motor Octane | | 88.5 Motor Octane Number | Paragon | 7/22/2016 |
| 220 | Research Octane | | 96.1 Research Octane Number | Paragon | 7/22/2016 |
| 219 | Antiknock | | 92.30 (RON+MON)/2 | CPU | 7/22/2016 |
| 218 | Sensitivity | | 7.6 RON-MON | CPU | 7/22/2016 |
| 230 | Net Heating Value D240 | | 18443.00 BTU/lb | HS | 8/4/2016 |

SUGGESTED CITATION: 2016 Honda 1.5L L15B7 Engine Tier 2 Fuel – Test Data Package. Version 2018-05. Ann Arbor,

MI: US EPA, National Vehicle and Fuel Emissions Laboratory, National Center for Advanced Technology, 2018.