# Lubricant Analysis Report

877-458-3315

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| NORMAL | | ABNORMAL | | CRITICAL |

Overall report severity based on comments.

| Account Information | | Component Information | | Sample Information | |
|---|---|---|---|---|---|
| Account Number: | OILANA-7501-4483 | Unit Number: | 97 LC | Tracking Number: | 11333D02097 |
| Company Name: | SGM LLC | Secondary ID: | | Lab Number: | A-374671 |
| Contact: | STUART MILLER | Component Type: | UNLEADED GASOLINE ENGINE | Lab Location: | Atlanta |
| Address: | 414 N DUPONT RD WILMINGTON, DE 19804 US | Manufacturer: | TOYOTA | Data Analyst: | JUK |
| | | Model: | 4.5L | Sampled: | 13-Dec-2013 |
| Phone Number: | 516-377-8151 | Application: | AUTOMOTIVE | Received: | 19-Dec-2013 |
| | | Sump Capacity: | 11 qt | Completed: | 20-Dec-2013 |

| Filter Information | | Miscellaneous Information | Product Information | |
|---|---|---|---|---|
| Filter Type: | FULLFLOW & BYPASS | | Product Manufacturer: | AMSOIL |
| Micron Rating: | 2 | | Product Name: | ASL SIG SIGNATURE SERIES |
| | | | Viscosity Grade: | SAE 5W30 |

| Comments | Base Number is SIGNIFICANTLY LOW. Flagged additive levels are different than what should be present for the lubricant that is identified for this unit. (This does not imply that the lubricant does not meet proper API, SAE, or ISO classifications.); Lubricant and filter change acknowledged; Sample information has been added or tests have been rerun or additional testing was added and the report has been regenerated; |
|---|---|

| | Wear Metals (ppm) | | | | | | | | | | Contaminant Metals (ppm) | | | Multi-Source Metals (ppm) | | | | | | Additive Metals (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample # | Iron | Chromium | Nickel | Aluminum | Copper | Lead | Tin | Cadmium | Silver | Vanadium | Silicon | Sodium | Potassium | Titanium | Molybdenum | Antimony | Manganese | Lithium | Boron | Magnesium | Calcium | Barium | Phosphorous | Zinc |
| **1** | 6 | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 15 | 14 | 0 | 0 | 152 | 0 | 0 | 0 | 49 | 40 | 3519 | 0 | 622 | 727 |

| | Sample Information | | | | | | | Contaminants | | | Fluid Properties | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample # | Date Sampled | Date Received | Lube Time mi | Unit Time mi | Lube Change | Lube Added qt | Filter Change | Fuel Dilution % Vol | Soot % Vol | Water % Vol | Viscosity 40°C cSt | Viscosity 100 °C cSt | Acid Number mg KOH/g | Base Number mg KOH/g | Oxidation abs/cm | Nitration abs/0.1 mm |
| **1** | 13-Dec-2013 | 19-Dec-2013 | 14261 | 190015 | Yes | 0 | Yes | <1 - Estimate | <.1 | <.1 - FTIR | | 11.3 | | 2.41 | 56 | 18 |

| | Particle Count (particles/mL) | | | | | | | | | | Additional Testing |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample # | ISO Code Based On 4/6/14 | > 4 µm | > 6 µm | > 10 µm | > 14 µm | > 21 µm | > 38 µm | > 70 µm | > 100 µm | Test Method | |
| **1** | // | | | | | | | | | | |

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Missing fluid or component information limits the evaluation. No warranty is expressed or implied.

Historical Comments