

OIL REPORT

LAB NUMBER:
REPORT DATE: 3/11/2019

UNIT ID: 5W30 CLIENT ID:

PAYMENT: CC: Discover

UNIT

MAKE/MODEL: Virgin 5W/30

FUEL TYPE: ADDITIONAL INFO:

OIL TYPE & GRADE: 5W/30

OIL USE INTERVAL:

CODE: 22/685

CLIENT

COMMENTS

Nothing unusual found in this virgin 5W/30 sample. The main detergent/dispersant additives are boron, calcium, and magnesium. Molybdenum, phosphorus, and zinc are anti-wear additives. Silicon is a harmless anti-foaming additive in this oil. It's good to know it's there, because the silicon additive will boost the silicon reading in your used oil samples. But we'll know it's not dirt; the extra silicon is additive. The viscosity read in the 5W/30 range and no water or solids showed up. The TBN starts out plenty strong at 6.7. We consider a reading of 1.0 or less too low. This oil should work well in its intended application.

| | MI/HR on Oil | | | | | |
|----------|-------------------|-----------|-------------------|--|--|-----------|
| | MI/HR on Unit | | UNIT / | | | UNIVERSAL |
| | Sample Date | 2/26/2019 | LOCATION AVERAGES | | | AVERAGES |
| z | Make Up Oil Added | 2/20/2013 | AVERAGES | | | |
| NO NO | Make op on Added | | | | | |
| | ALUMINUM | 0 | 1 | | | 1 |
| M | CHROMIUM | 0 | 0 | | | 0 |
| | IRON | 0 | 1 | | | 1 |
| 믒 | COPPER | 0 | 0 | | | 0 |
| <u>a</u> | LEAD | 0 | 0 | | | 1 |
| 10 | TIN | 0 | 0 | | | 0 |
| TS | MOLYBDENUM | 43 | 43 | | | 62 |
| PAR | NICKEL | 0 | 0 | | | 0 |
| 4 | MANGANESE | 0 | 0 | | | 0 |
| | SILVER | 0 | 0 | | | 0 |
| Z | TITANIUM | 0 | 0 | | | 1 |
| (0 | POTASSIUM | 0 | 0 | | | 5 |
| TS | BORON | 190 | 190 | | | 78 |
| EMEN. | SILICON | 11 | 11 | | | 4 |
| ≅ | SODIUM | 2 | 2 | | | 37 |
| Щ | CALCIUM | 1420 | 1420 | | | 1802 |
| ᇳ | MAGNESIUM | 440 | 440 | | | 105 |
| | PHOSPHORUS | 839 | 839 | | | 677 |
| | ZINC | 940 | 940 | | | 790 |
| | BARIUM | 0 | 0 | | | 0 |

Values

Should Be*

| | SUS Viscosity @ 210° | 61.7 | 54-65 | | | |
|----------|-----------------------|-------|----------|--|--|--|
| | cSt Viscosity @ 100°C | 10.69 | 8.5-11.9 | | | |
| ES | Flashpoint in °F | 425 | >380 | | | |
| | Fuel % | - | <2.0 | | | |
| E | Antifreeze % | - | 0.0 | | | |
| Δ | Water % | 0.0 | 0.0 | | | |
| RO | Insolubles % | 0.0 | <0.6 | | | |
| 뮵 | TBN | 6.7 | >1.0 | | | |
| | TAN | | | | | |
| | ISO Code | | | | | |

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE