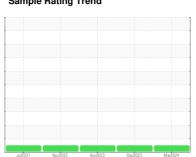


OIL ANALYSIS REPORT

Sample Rating Trend









731005 Component **Natural Gas Engine**

CASTROL 15W40 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

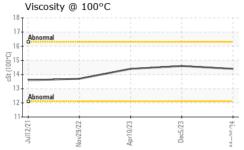
Fluid Condition

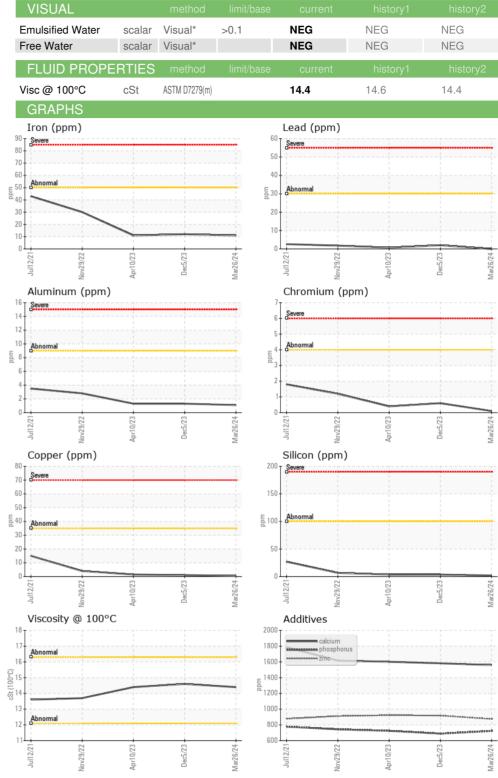
The condition of the oil is acceptable for the time in service.

| GAL) | | Jul2021 | Nov2022 | Apr2023 Dec2023 | Mar2024 | |
|---------------------|----------|--------------------------------|-------------|-----------------|----------------|----------------|
| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | GFL0100730 | GFL0100758 | GFL0041637 |
| Sample Date | | Client Info | | 26 Mar 2024 | 05 Dec 2023 | 10 Apr 2023 |
| Machine Age | kms | Client Info | | 83748 | 83748 | 2815 |
| Oil Age | kms | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| WEAR METAL | .S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >50 | 11 | 12 | 11 |
| Chromium | ppm | ASTM D5185(m) | >4 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >2 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >9 | 1 | 1 | 1 |
| Lead | ppm | ASTM D5185(m) | >30 | 0 | 2 | <1 |
| Copper | ppm | ASTM D5185(m) | >35 | <1 | 1 | 2 |
| Tin | ppm | ASTM D5185(m) | >4 | 0 | <1 | <1 |
| Antimony | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | | 20 | 7 | 6 |
| Barium | ppm | ASTM D5185(m) | | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 47 | 54 | 53 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | | 513 | 556 | 539 |
| Calcium | ppm | ASTM D5185(m) | | 1560 | 1582 | 1601 |
| Phosphorus | ppm | ASTM D5185(m) | | 724 | 689 | 725 |
| Zinc | ppm | ASTM D5185(m) | | 875 | 918 | 923 |
| Sulfur | ppm | ASTM D5185(m) ASTM D5185(m) | | 1940 | 1964 | 2091 |
| Lithium | ppm | | limit/base | <1 | <1 history1 | <1 history2 |
| Silicon | | method | | current | 4 | 4 |
| | ppm | ASTM D5185(m) | >+100 | 2 | | 2 |
| Sodium Potassium | ppm | ASTM D5185(m) ASTM D5185(m) | >406 >20 | 2 <1 | 3 | 0 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | ASTM D7844* | | 0 | 0 | 0 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 8.9 | 11.7 | 11.8 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 19.3 | 25.4 | 24.6 |
| FLUID DEGRA | DATION | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 15.9 | 20.6 | 18.4 |



OIL ANALYSIS REPORT







CALA ISO 17025:2017 Accredited Laboratory

Laboratory

Sample No. Lab Number : 02625118

: GFL0100730

Unique Number : 5750237 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 28 Mar 2024 **Tested** : 28 Mar 2024

Diagnosed : 28 Mar 2024 - Kevin Marson

GFL Environmental - 277 - Niagara Regional C/O Metro Truck Niagara Inc., 411 Glendale Avenue

St. Catharines, ON CA L2P 3Y1 Contact: Kelly Bremner kbremner@gflenv.com T: (437)235-6849

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.