



# OIL ANALYSIS REPORT

Sample Rating Trend

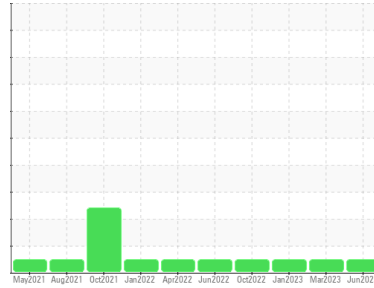
**NORMAL**



Machine Id  
**301216**

Component  
**Gasoline Engine**

Fluid  
**CASTROL EDGE SLX PRO OE 5W30 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>GFL0073048</b>  | GFL0073166  | GFL0063563  |
| Sample Date   | Client Info |             | <b>01 Jun 2023</b> | 23 Mar 2023 | 05 Jan 2023 |
| Machine Age   | kms         | Client Info | <b>224836</b>      | 7243        | 7070        |
| Oil Age       | kms         | Client Info | <b>0</b>           | 600         | 600         |
| Oil Changed   | Client Info |             | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

|        | method    | limit/base | current        | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel   | WC Method | >4.0       | <b>&lt;1.0</b> | <1.0     | <1.0     |
| Glycol | WC Method |            | <b>NEG</b>     | NEG      | NEG      |

## WEAR METALS

|           | method | limit/base         | current      | history1 | history2 |
|-----------|--------|--------------------|--------------|----------|----------|
| Iron      | ppm    | ASTM D5185(m) >150 | <b>52</b>    | 19       | 59       |
| Chromium  | ppm    | ASTM D5185(m) >20  | <b>2</b>     | <1       | 1        |
| Nickel    | ppm    | ASTM D5185(m) >5   | <b>&lt;1</b> | <1       | <1       |
| Titanium  | ppm    | ASTM D5185(m)      | <b>13</b>    | <1       | 3        |
| Silver    | ppm    | ASTM D5185(m) >2   | <b>0</b>     | 0        | 0        |
| Aluminum  | ppm    | ASTM D5185(m) >40  | <b>7</b>     | 3        | 4        |
| Lead      | ppm    | ASTM D5185(m) >50  | <b>&lt;1</b> | 4        | 0        |
| Copper    | ppm    | ASTM D5185(m) >155 | <b>7</b>     | 3        | 7        |
| Tin       | ppm    | ASTM D5185(m) >10  | <b>0</b>     | 1        | 0        |
| Antimony  | ppm    | ASTM D5185(m)      | <b>0</b>     | <1       | 0        |
| Vanadium  | ppm    | ASTM D5185(m)      | <b>&lt;1</b> | 0        | <1       |
| Beryllium | ppm    | ASTM D5185(m)      | <b>0</b>     | 0        | 0        |
| Cadmium   | ppm    | ASTM D5185(m)      | <b>0</b>     | 0        | 0        |

## ADDITIVES

|            | method | limit/base         | current      | history1 | history2 |
|------------|--------|--------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185(m)      | <b>25</b>    | 2        | 16       |
| Barium     | ppm    | ASTM D5185(m)      | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185(m)      | <b>78</b>    | 61       | 62       |
| Manganese  | ppm    | ASTM D5185(m)      | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185(m)      | <b>658</b>   | 981      | 448      |
| Calcium    | ppm    | ASTM D5185(m) 1925 | <b>904</b>   | 1120     | 1083     |
| Phosphorus | ppm    | ASTM D5185(m)      | <b>644</b>   | 1102     | 640      |
| Zinc       | ppm    | ASTM D5185(m) 840  | <b>705</b>   | 1230     | 679      |
| Sulfur     | ppm    | ASTM D5185(m)      | <b>1626</b>  | 2573     | 1662     |
| Lithium    | ppm    | ASTM D5185(m)      | <b>&lt;1</b> | <1       | <1       |

## CONTAMINANTS

|           | method | limit/base         | current   | history1 | history2 |
|-----------|--------|--------------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185(m) >30  | <b>7</b>  | 6        | 4        |
| Sodium    | ppm    | ASTM D5185(m) >400 | <b>16</b> | 3        | 22       |
| Potassium | ppm    | ASTM D5185(m) >20  | <b>2</b>  | <1       | 1        |

## INFRA-RED

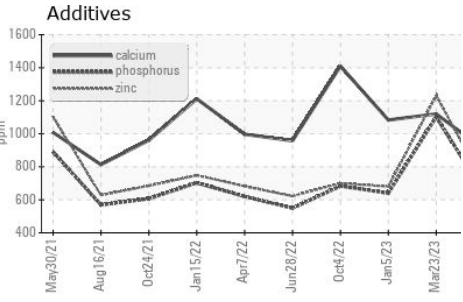
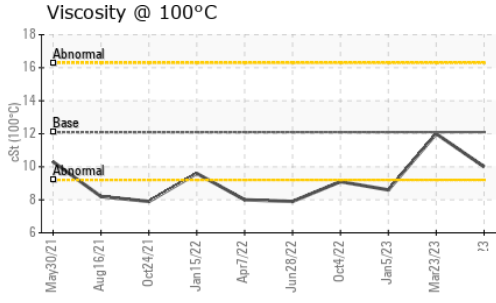
|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | ASTM D7844*     | <b>0</b>    | 0        | 0        |
| Nitration | Abs/cm   | ASTM D7624* >20 | <b>11.1</b> | 8.4      | 12.9     |
| Sulfation | Abs/.1mm | ASTM D7415* >30 | <b>22.2</b> | 20.8     | 25.2     |

## FLUID DEGRADATION

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | ASTM D7414* >25 | <b>16.5</b> | 19.4     | 19.5     |



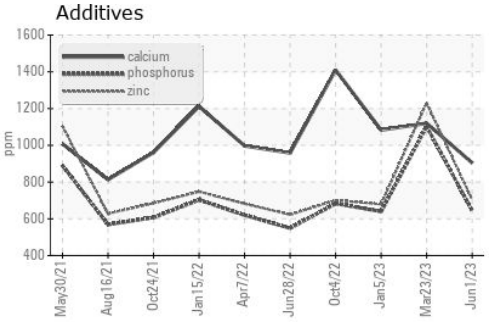
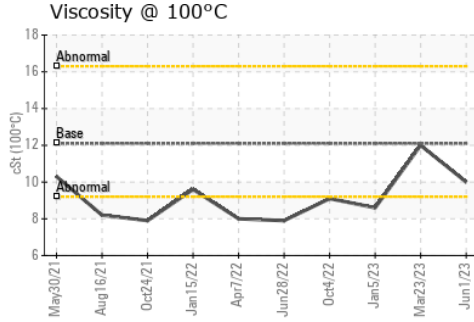
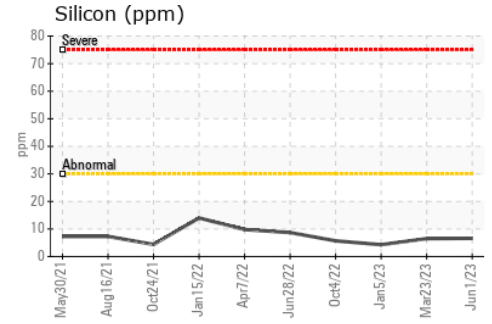
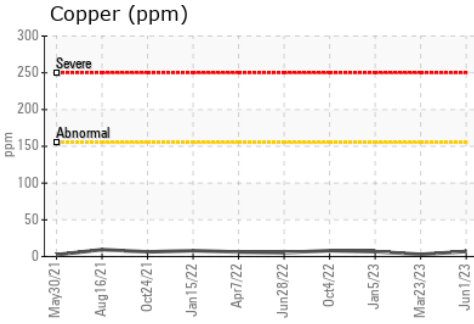
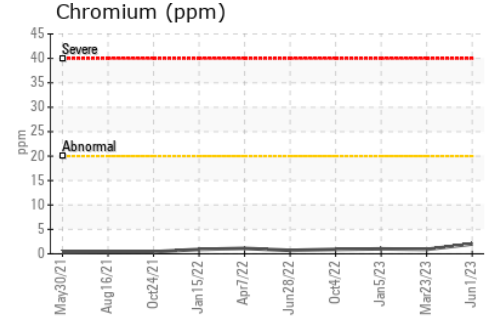
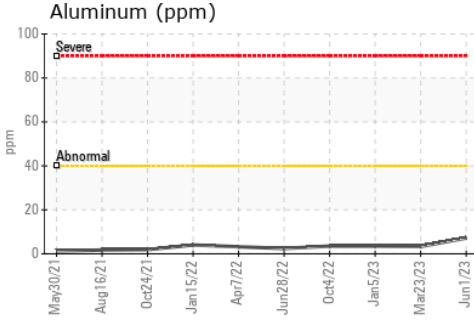
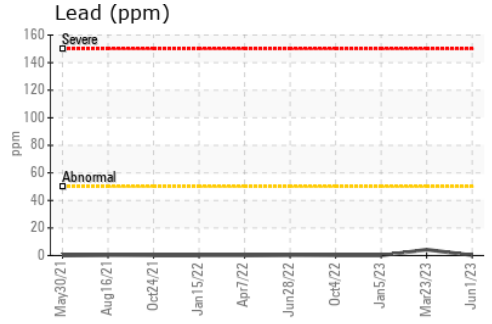
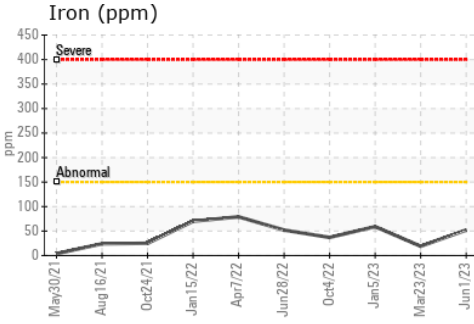
# OIL ANALYSIS REPORT



| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Emulsified Water | scalar | Visual*    | >0.2    | NEG      | NEG      |
| Free Water       | scalar | Visual*    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base    | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 100°C     | cSt    | ASTM D7279(m) | 12.1    | 10.0     | 12.0     |

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 574 - Vancouver Fleet  
**Sample No.** : GFL0073048 **Received** : 14 Jul 2023  
**Lab Number** : 02570096 **Diagnosed** : 14 Jul 2023  
**Unique Number** : 5607142 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1

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.

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