

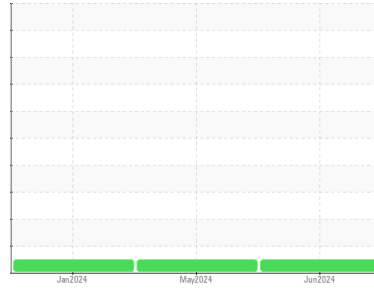


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR R1300 SCP221**  
 Component  
**Rear Left Planetary**  
 Fluid  
**PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)**

### Sample Rating Trend



**NORMAL**



### 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>WC0949838</b>   | WC0937711   | WC0865533   |
| Sample Date   | Client Info |             | <b>10 Jun 2024</b> | 09 May 2024 | 16 Jan 2024 |
| Machine Age   | hrs         | Client Info | <b>3866</b>        | 3516        | 2369        |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info |             | <b>Not Chngd</b>   | Not Chngd   | N/A         |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

### CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.2       | <b>NEG</b> | NEG      | NEG      |

### WEAR METALS

|           | method | limit/base    | current | history1     | history2 |    |
|-----------|--------|---------------|---------|--------------|----------|----|
| Iron      | ppm    | ASTM D5185(m) | >500    | <b>38</b>    | 32       | 30 |
| Chromium  | ppm    | ASTM D5185(m) | >10     | <b>&lt;1</b> | <1       | <1 |
| Nickel    | ppm    | ASTM D5185(m) | >10     | <b>0</b>     | 0        | <1 |
| Titanium  | ppm    | ASTM D5185(m) |         | <b>&lt;1</b> | <1       | 0  |
| Silver    | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | 0  |
| Aluminum  | ppm    | ASTM D5185(m) | >25     | <b>2</b>     | 2        | 5  |
| Lead      | ppm    | ASTM D5185(m) | >25     | <b>0</b>     | 0        | <1 |
| Copper    | ppm    | ASTM D5185(m) | >75     | <b>&lt;1</b> | <1       | 35 |
| Tin       | ppm    | ASTM D5185(m) | >10     | <b>0</b>     | 0        | <1 |
| Antimony  | ppm    | ASTM D5185(m) | >5      | <b>0</b>     | 0        | 0  |
| Vanadium  | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | 0  |
| Beryllium | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | 0  |
| Cadmium   | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | 0  |

### ADDITIVES

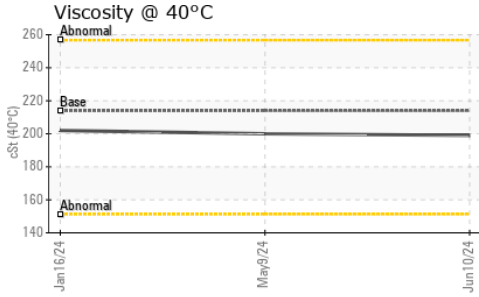
|            | method | limit/base    | current | history1     | history2 |       |
|------------|--------|---------------|---------|--------------|----------|-------|
| Boron      | ppm    | ASTM D5185(m) | 2       | <b>1</b>     | 2        | 1     |
| Barium     | ppm    | ASTM D5185(m) | 0       | <b>&lt;1</b> | <1       | 1     |
| Molybdenum | ppm    | ASTM D5185(m) | 0       | <b>&lt;1</b> | <1       | 0     |
| Manganese  | ppm    | ASTM D5185(m) | 0       | <b>&lt;1</b> | <1       | 0     |
| Magnesium  | ppm    | ASTM D5185(m) | 9       | <b>13</b>    | 14       | 11    |
| Calcium    | ppm    | ASTM D5185(m) | 3114    | <b>3467</b>  | 3502     | 3431  |
| Phosphorus | ppm    | ASTM D5185(m) | 1099    | <b>894</b>   | 874      | 908   |
| Zinc       | ppm    | ASTM D5185(m) | 1245    | <b>1051</b>  | 1055     | 1047  |
| Sulfur     | ppm    | ASTM D5185(m) | 7086    | <b>11024</b> | 10853    | 10927 |
| Lithium    | ppm    | ASTM D5185(m) |         | <b>&lt;1</b> | <1       | <1    |

### CONTAMINANTS

|           | method | limit/base    | current | history1  | history2 |    |
|-----------|--------|---------------|---------|-----------|----------|----|
| Silicon   | ppm    | ASTM D5185(m) | >75     | <b>14</b> | 16       | 10 |
| Sodium    | ppm    | ASTM D5185(m) |         | <b>3</b>  | <1       | <1 |
| Potassium | ppm    | ASTM D5185(m) | >20     | <b>9</b>  | <1       | <1 |



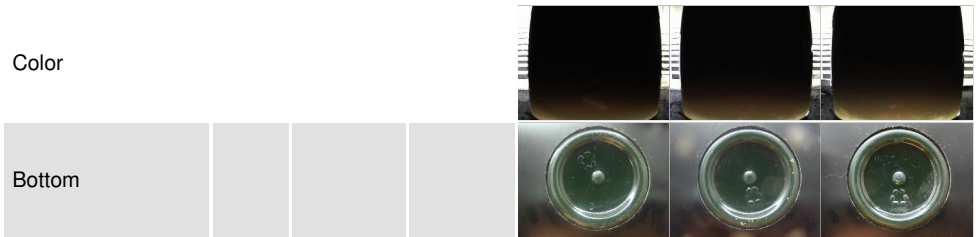
# OIL ANALYSIS REPORT



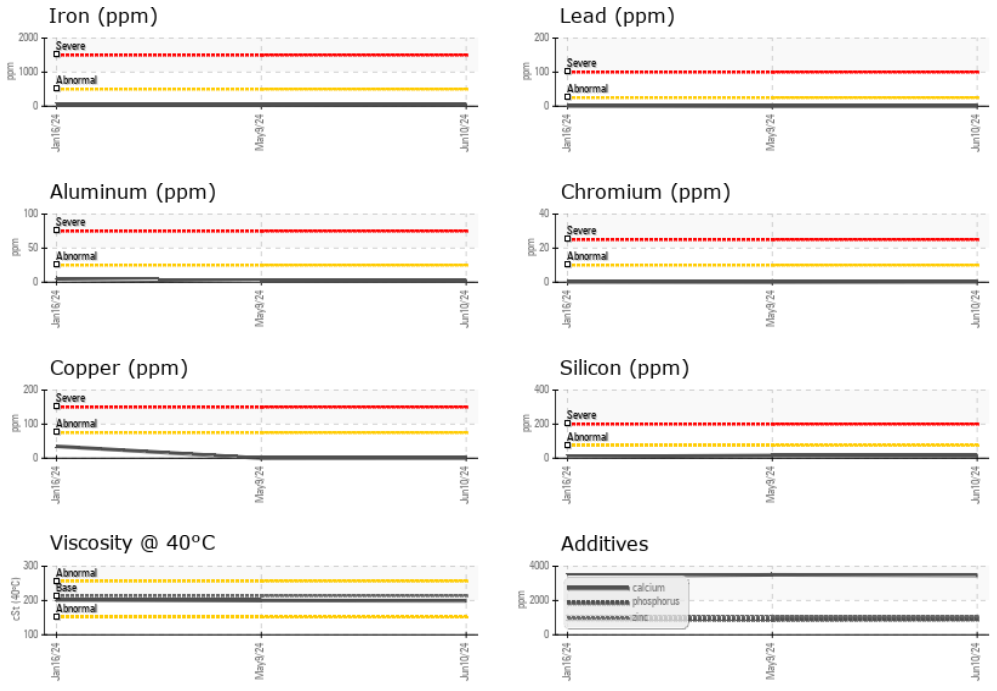
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | Visual*    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | Visual*    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | Visual*    | NONE    | NONE     | NONE     |
| Silt             | scalar | Visual*    | NONE    | NONE     | NONE     |
| Debris           | scalar | Visual*    | NONE    | NONE     | NONE     |
| Sand/Dirt        | scalar | Visual*    | NONE    | NONE     | NONE     |
| Appearance       | scalar | Visual*    | NORML   | NORML    | NORML    |
| Odor             | scalar | Visual*    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | Visual*    | >0.2    | NEG      | NEG      |
| Free Water       | scalar | Visual*    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base    | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D7279(m) | 213.9   | 199      | 200      |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0949838  
**Lab Number** : 02641802  
**Unique Number** : 5799341  
**Test Package** : MOB 1

**Agnico Eagle Canada**  
 1350 Government Rd. W, MACASSA COMPLEX  
 Kirkland Lake, ON  
 CA P2N 3J1

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.

Contact: Mitch Lamontagne  
 AEM\_KL\_macassaoilsampleresults@agnicoeagle.com  
 T: (705)567-5208  
 F: (705)567-5221