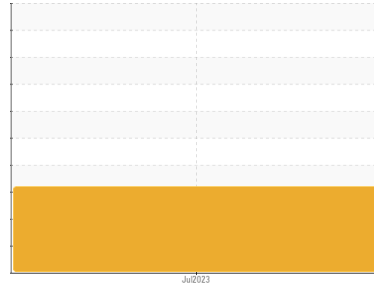




Area  
**SHARP BUS LINES**  
Machine Id  
**INTERNATIONAL 1259**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**



## DIAGNOSIS

**Recommendation**  
We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

**Wear**  
All component wear rates are normal.

**Contamination**  
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

**Fluid Condition**  
Calcium ppm levels are abnormally low. Visc @ 100°C is abnormally low. Visc @ 40°C is abnormally low. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

| method        | limit/base      | current            | history1 | history2 |
|---------------|-----------------|--------------------|----------|----------|
| Sample Number | Client Info     | <b>PC0081338</b>   | ---      | ---      |
| Sample Date   | Client Info     | <b>13 Jul 2023</b> | ---      | ---      |
| Machine Age   | kms Client Info | <b>227331</b>      | ---      | ---      |
| Oil Age       | kms Client Info | <b>12000</b>       | ---      | ---      |
| Oil Changed   | Client Info     | <b>Changed</b>     | ---      | ---      |
| Sample Status |                 | <b>SEVERE</b>      | ---      | ---      |

## CONTAMINATION

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

## WEAR METALS

| method    | limit/base             | current      | history1 | history2 |
|-----------|------------------------|--------------|----------|----------|
| Iron      | ppm ASTM D5185(m) >100 | <b>59</b>    | ---      | ---      |
| Chromium  | ppm ASTM D5185(m) >20  | <b>2</b>     | ---      | ---      |
| Nickel    | ppm ASTM D5185(m) >4   | <b>&lt;1</b> | ---      | ---      |
| Titanium  | ppm ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Silver    | ppm ASTM D5185(m) >3   | <b>0</b>     | ---      | ---      |
| Aluminum  | ppm ASTM D5185(m) >20  | <b>9</b>     | ---      | ---      |
| Lead      | ppm ASTM D5185(m) >40  | <b>5</b>     | ---      | ---      |
| Copper    | ppm ASTM D5185(m) >330 | <b>2</b>     | ---      | ---      |
| Tin       | ppm ASTM D5185(m) >15  | <b>1</b>     | ---      | ---      |
| Antimony  | ppm ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Vanadium  | ppm ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Beryllium | ppm ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Cadmium   | ppm ASTM D5185(m)      | <b>0</b>     | ---      | ---      |

## ADDITIVES

| method     | limit/base             | current      | history1 | history2 |
|------------|------------------------|--------------|----------|----------|
| Boron      | ppm ASTM D5185(m) 250  | <b>8</b>     | ---      | ---      |
| Barium     | ppm ASTM D5185(m) 10   | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm ASTM D5185(m) 100  | <b>52</b>    | ---      | ---      |
| Manganese  | ppm ASTM D5185(m)      | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm ASTM D5185(m) 450  | <b>797</b>   | ---      | ---      |
| Calcium    | ppm ASTM D5185(m) 3000 | <b>877</b>   | ---      | ---      |
| Phosphorus | ppm ASTM D5185(m) 1150 | <b>901</b>   | ---      | ---      |
| Zinc       | ppm ASTM D5185(m) 1350 | <b>991</b>   | ---      | ---      |
| Sulfur     | ppm ASTM D5185(m) 4250 | <b>2170</b>  | ---      | ---      |
| Lithium    | ppm ASTM D5185(m)      | <b>&lt;1</b> | ---      | ---      |

## CONTAMINANTS

| method    | limit/base             | current      | history1 | history2 |
|-----------|------------------------|--------------|----------|----------|
| Silicon   | ppm ASTM D5185(m) >25  | <b>5</b>     | ---      | ---      |
| Sodium    | ppm ASTM D5185(m) >158 | <b>3</b>     | ---      | ---      |
| Potassium | ppm ASTM D5185(m) >20  | <b>&lt;1</b> | ---      | ---      |
| Fuel      | % ASTM D7593* >2.0     | <b>10.2</b>  | ---      | ---      |

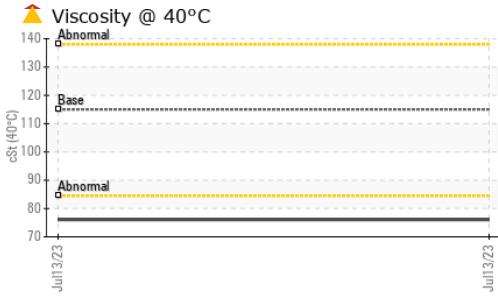
## INFRA-RED

| method    | limit/base               | current     | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot %    | % ASTM D7844* >3         | <b>1.3</b>  | ---      | ---      |
| Nitration | Abs/cm ASTM D7624* >20   | <b>11.9</b> | ---      | ---      |
| Sulfation | Abs/.1mm ASTM D7415* >30 | <b>24.3</b> | ---      | ---      |

## FLUID DEGRADATION

| method    | limit/base               | current     | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Oxidation | Abs/.1mm ASTM D7414* >25 | <b>21.4</b> | ---      | ---      |

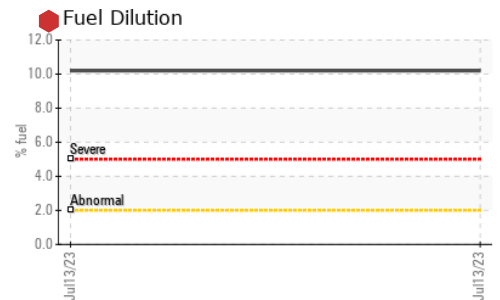
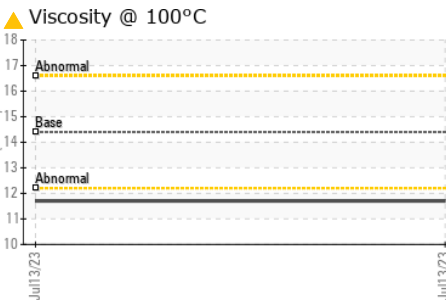
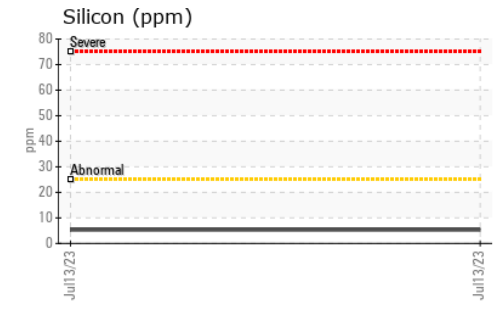
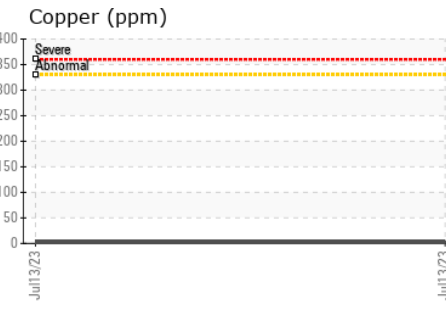
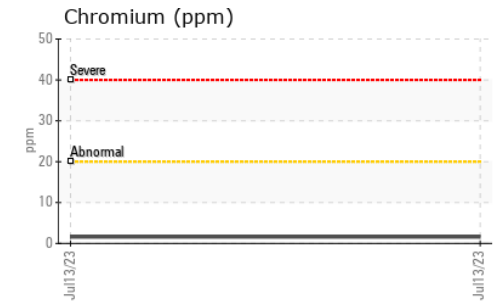
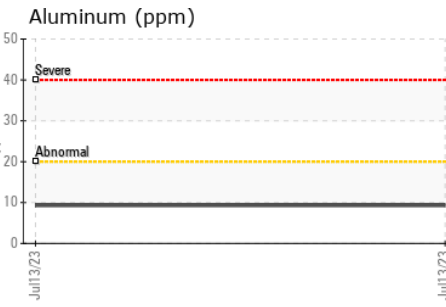
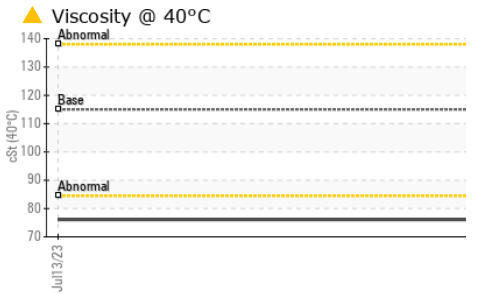
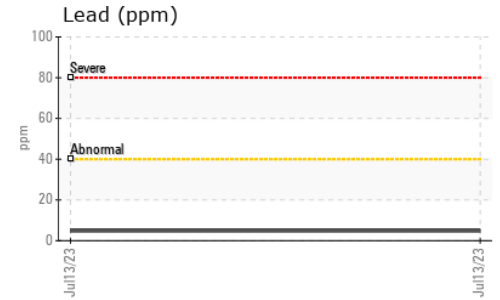
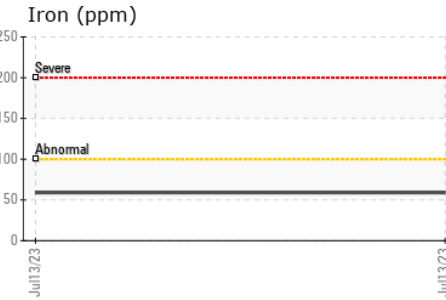
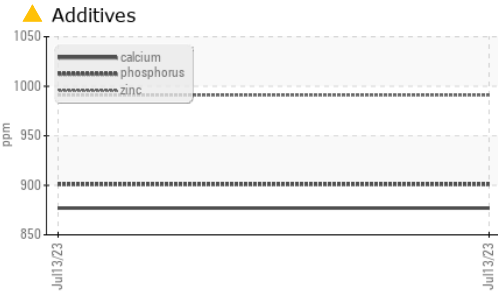
# OIL ANALYSIS REPORT



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

| FLUID PROPERTIES     |       | method        | limit/base | current     | history1 | history2 |
|----------------------|-------|---------------|------------|-------------|----------|----------|
| Visc @ 40°C          | cSt   | ASTM D7279(m) | 115        | <b>76.1</b> | ---      | ---      |
| Visc @ 100°C         | cSt   | ASTM D7279(m) | 14.4       | <b>11.7</b> | ---      | ---      |
| Viscosity Index (VI) | Scale | ASTM D2270*   | 126        | <b>147</b>  | ---      | ---      |

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0081338 **Received** : 04 Aug 2023  
**Lab Number** : **02574159** **Diagnosed** : 08 Aug 2023  
**Unique Number** : 5619210 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, KV40, PercentFuel, VI )

**ICSB - Brantford**  
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 Brantford, ON  
 CA N3T 5L8  
 Contact: Doug Hall  
 Djhall@sharpbus.com  
 T: (519)751-3434  
 F:

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.