



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area

**5**

Machine Id

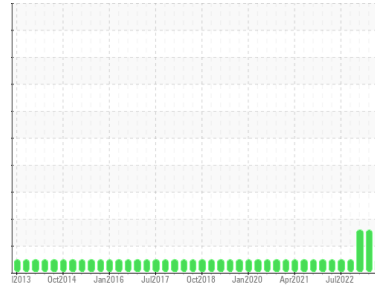
**5-3-160 Atox Main Feed Belt**

Component

**Gearbox**

Fluid

**MOBIL DTE OIL EXTRA HEAVY (30 LTR)**



## DIAGNOSIS

### Recommendation

We advise that you check all areas where contaminants can enter the system. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Calcium and/or magnesium levels higher than normal indicating possible contamination with cement dust, advise investigate. There is no indication of any contamination in the oil.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>WC0869857</b>   | WC0842662   | WC0818129   |
| Sample Date   | Client Info |             | <b>23 Nov 2023</b> | 07 Sep 2023 | 18 May 2023 |
| Machine Age   | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info |             | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             |             | <b>NORMAL</b>      | ATTENTION   | ATTENTION   |

## 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 |
|-----------|-------------|--------------------|--------------|----------|----------|
| PQ        | ASTM D8184* |                    | <b>0</b>     | 0        | 0        |
| Iron      | ppm         | ASTM D5185(m) >200 | <b>5</b>     | 5        | 4        |
| Chromium  | ppm         | ASTM D5185(m) >15  | <b>0</b>     | 0        | 0        |
| Nickel    | ppm         | ASTM D5185(m) >15  | <b>&lt;1</b> | 0        | 0        |
| Titanium  | ppm         | ASTM D5185(m)      | <b>0</b>     | 0        | 0        |
| Silver    | ppm         | ASTM D5185(m)      | <b>&lt;1</b> | 0        | 0        |
| Aluminum  | ppm         | ASTM D5185(m) >25  | <b>&lt;1</b> | <1       | <1       |
| Lead      | ppm         | ASTM D5185(m) >100 | <b>0</b>     | 0        | 0        |
| Copper    | ppm         | ASTM D5185(m) >200 | <b>&lt;1</b> | <1       | 0        |
| Tin       | ppm         | ASTM D5185(m) >25  | <b>0</b>     | 0        | 0        |
| Antimony  | ppm         | ASTM D5185(m) >5   | <b>0</b>     | 0        | <1       |
| 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

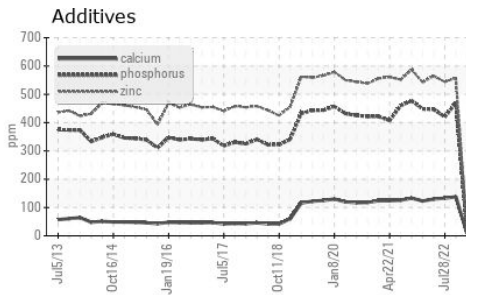
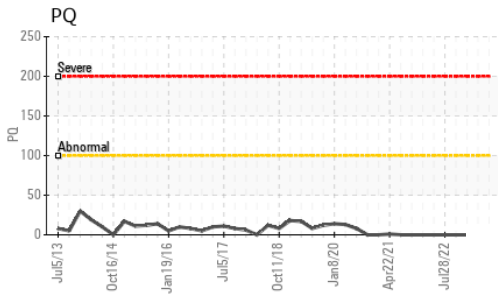
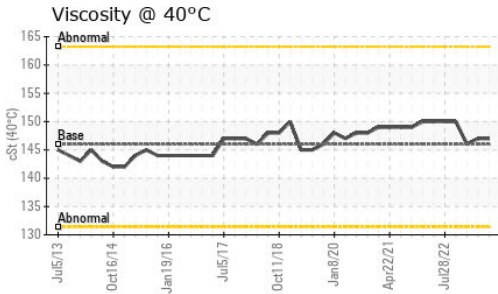
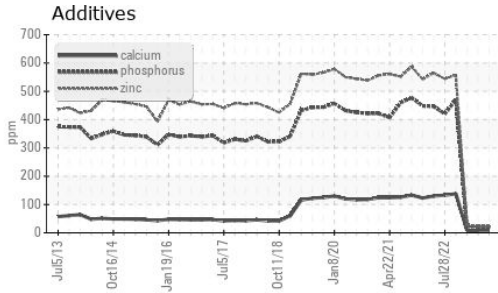
|            | method | limit/base    | current      | history1 | history2 |
|------------|--------|---------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185(m) | <b>&lt;1</b> | <1       | <1       |
| Barium     | ppm    | ASTM D5185(m) | <b>&lt;1</b> | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185(m) | <b>0</b>     | 0        | 0        |
| Manganese  | ppm    | ASTM D5185(m) | <b>0</b>     | 0        | 0        |
| Magnesium  | ppm    | ASTM D5185(m) | <b>0</b>     | <1       | 0        |
| Calcium    | ppm    | ASTM D5185(m) | <b>8</b>     | ▲ 8      | ▲ 8      |
| Phosphorus | ppm    | ASTM D5185(m) | <b>20</b>    | ▲ 21     | ▲ 24     |
| Zinc       | ppm    | ASTM D5185(m) | <b>23</b>    | ▲ 24     | ▲ 28     |
| Sulfur     | ppm    | ASTM D5185(m) | <b>3963</b>  | ▲ 3948   | ▲ 4121   |
| Lithium    | ppm    | ASTM D5185(m) | <b>&lt;1</b> | <1       | <1       |

## CONTAMINANTS

|           | method | limit/base        | current  | history1 | history2 |
|-----------|--------|-------------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185(m) >50 | <b>3</b> | 3        | 3        |
| Sodium    | ppm    | ASTM D5185(m)     | <b>0</b> | 0        | 0        |
| Potassium | ppm    | ASTM D5185(m) >20 | <b>0</b> | 0        | 0        |

## FLUID DEGRADATION

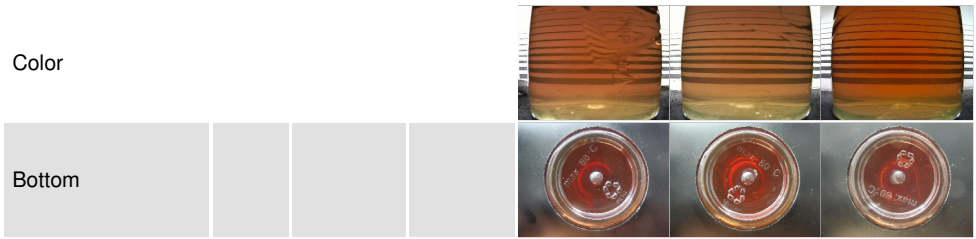
|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | <b>0.09</b> | 0.05     | 0.08     |



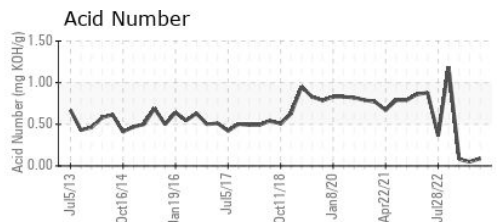
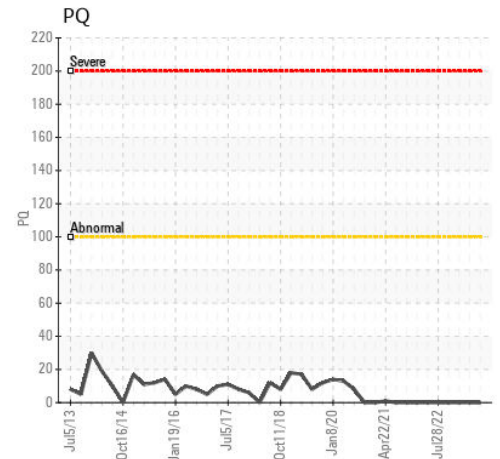
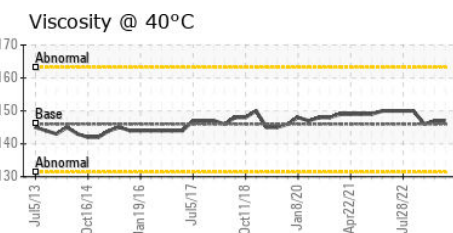
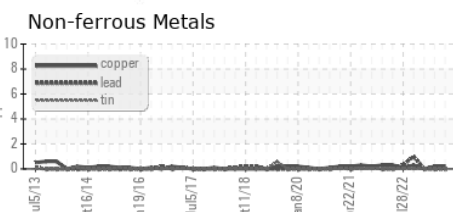
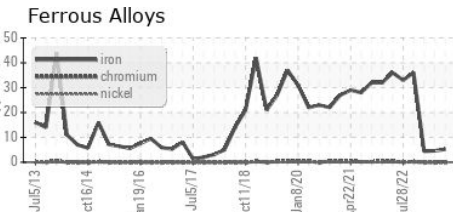
| PARAMETER        | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | Visual*    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | Visual*    | NONE    | NONE     | NONE     |
| 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) | 146     | 147      | 146      |

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



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0869857 **Received** : 08 Dec 2023  
**Lab Number** : 02602017 **Diagnosed** : 11 Dec 2023  
**Unique Number** : 5695102 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**ST. MARYS CEMENT CO.**  
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 T: (905)440-5874  
 F: (905)623-4695

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.