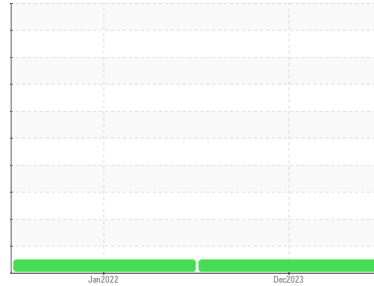


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**MARITIME CHICKS LTD [6100217255]**  
Machine Id  
**MTU 167010004459**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SAE 15W40 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

**Wear**

Metal levels are typical for a new component breaking in.

**Contamination**

Light fuel dilution occurring. No other contaminants were detected 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>WA0019981</b>   | WA0017285   | ---      |
| Sample Date        | Client Info |             |            | <b>13 Dec 2023</b> | 12 Jan 2022 | ---      |
| Machine Age        | hrs         | Client Info |            | <b>712</b>         | 519         | ---      |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 0           | ---      |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Changed     | ---      |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | ---      |

| CONTAMINATION |           | method | limit/base | current    | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water         | WC Method |        | >0.2       | <b>NEG</b> | NEG      | ---      |
| Glycol        | WC Method |        |            | <b>NEG</b> | 0.0      | ---      |

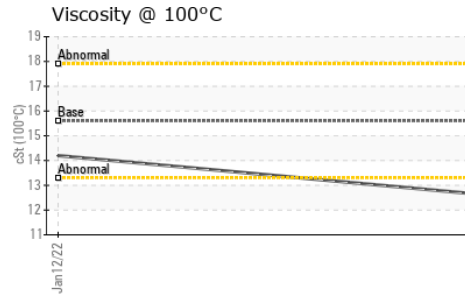
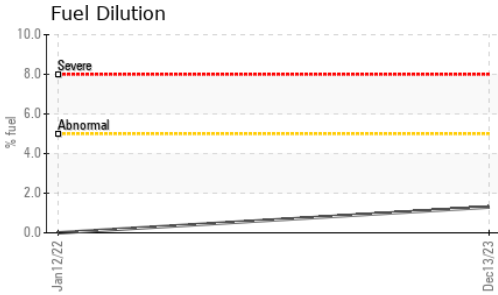
| WEAR METALS |     | method        | limit/base | current      | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185(m) | >100       | <b>2</b>     | 2        | ---      |
| Chromium    | ppm | ASTM D5185(m) |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

| ADDITIVES  |     | method        | limit/base | current      | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185(m) | 1          | <b>15</b>    | 184      | ---      |
| Barium     | ppm | ASTM D5185(m) | 1          | <b>&lt;1</b> | 0        | ---      |
| Molybdenum | ppm | ASTM D5185(m) | 60         | <b>63</b>    | <1       | ---      |
| Manganese  | ppm | ASTM D5185(m) | 1          | <b>0</b>     | <1       | ---      |
| Magnesium  | ppm | ASTM D5185(m) | 1010       | <b>895</b>   | 13       | ---      |
| Calcium    | ppm | ASTM D5185(m) | 1070       | <b>1228</b>  | 2204     | ---      |
| Phosphorus | ppm | ASTM D5185(m) | 1150       | <b>1026</b>  | 1028     | ---      |
| Zinc       | ppm | ASTM D5185(m) | 1270       | <b>1193</b>  | 1191     | ---      |
| Sulfur     | ppm | ASTM D5185(m) | 2060       | <b>2710</b>  | 3146     | ---      |
| Lithium    | ppm | ASTM D5185(m) |            | <b>&lt;1</b> | <1       | ---      |

| CONTAMINANTS |     | method        | limit/base | current    | history1 | history2 |
|--------------|-----|---------------|------------|------------|----------|----------|
| Silicon      | ppm | ASTM D5185(m) | >25        | <b>3</b>   | 3        | ---      |
| Sodium       | ppm | ASTM D5185(m) |            | <b>2</b>   | 2        | ---      |
| Potassium    | ppm | ASTM D5185(m) | >20        | <b>0</b>   | 8        | ---      |
| Fuel         | %   | ASTM D7593*   | >5         | <b>1.3</b> | <1.0     | ---      |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | ASTM D7844* | >3         | <b>0</b>    | 0        | ---      |
| Nitration | Abs/cm   | ASTM D7624* | >20        | <b>5.3</b>  | 3.2      | ---      |
| Sulfation | Abs/.1mm | ASTM D7415* | >30        | <b>17.4</b> | 13.8     | ---      |

# OIL ANALYSIS REPORT

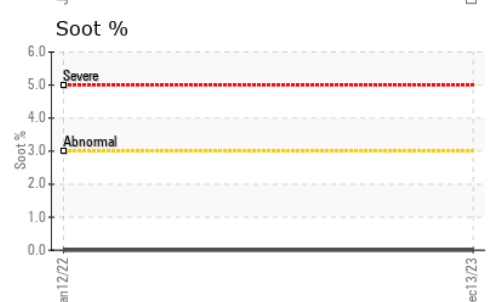
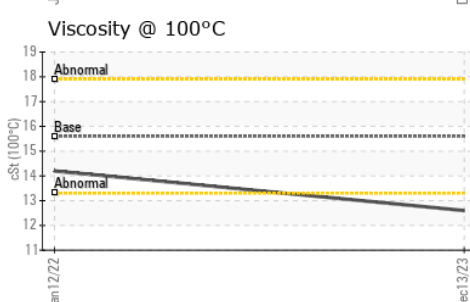
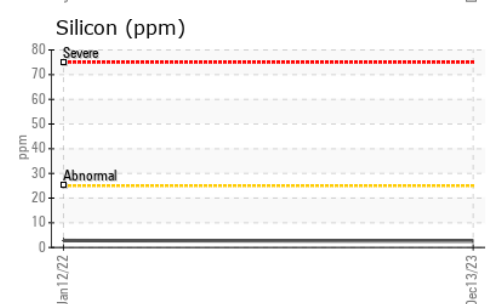
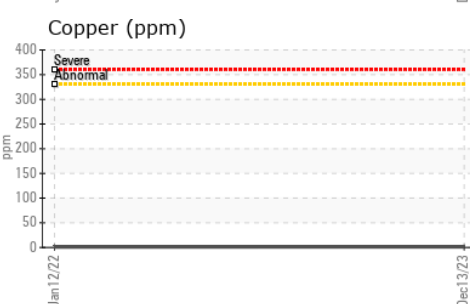
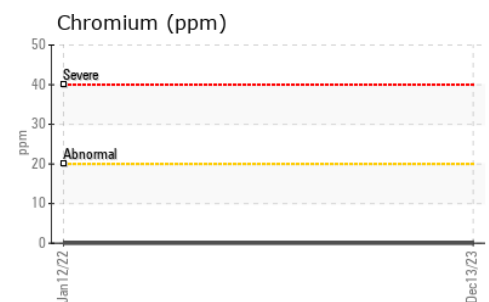
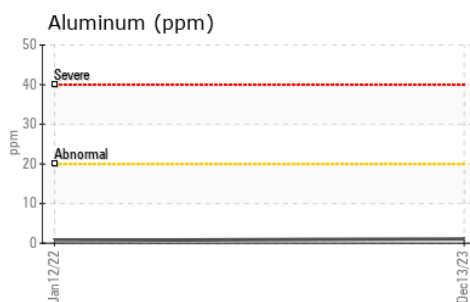
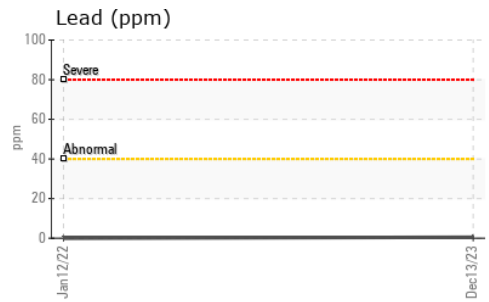
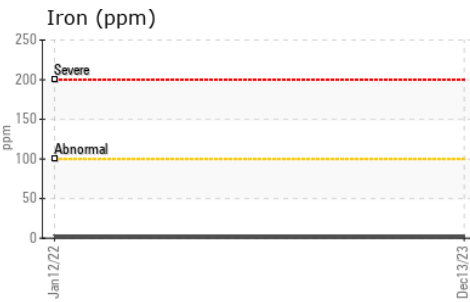


| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs./1mm | ASTM D7414* | >25        | <b>12.6</b> | 6.7      | ---      |

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

| FLUID PROPERTIES |     | method        | limit/base | current     | history1 | history2 |
|------------------|-----|---------------|------------|-------------|----------|----------|
| Visc @ 100°C     | cSt | ASTM D7279(m) | 15.6       | <b>12.6</b> | 14.2     | ---      |

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WA0019981 **Received** : 19 Dec 2023  
**Lab Number** : **02604021** **Diagnosed** : 20 Dec 2023  
**Unique Number** : 5697106 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**Wajax Power Systems**  
 70 Raddall Avenue  
 Dartmouth, NS  
 CA B3B 1T7  
 Contact: Danelle Hoffman  
 dhoffman@wajax.com  
 T: (902)468-6200  
 F: (902)468-3325

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.