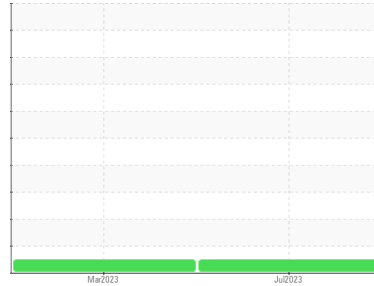




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**YRD 7**  
 Component  
**Diesel Engine**  
 Fluid  
**NOT GIVEN (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1    | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|----------|
| Sample Number      | Client Info |             |            | <b>IL05934634</b>  | IL05815151  | ---      |
| Sample Date        | Client Info |             |            | <b>26 Jul 2023</b> | 30 Mar 2023 | ---      |
| Machine Age        | hrs         | Client Info |            | <b>2047</b>        | 753         | ---      |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 0           | ---      |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | N/A         | ---      |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | ---      |

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

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >100       | <b>16</b>    | 73       | ---      |
| Chromium    | ppm | ASTM D5185m | >20        | <b>0</b>     | 1        | ---      |
| Nickel      | ppm | ASTM D5185m | >4         | <b>0</b>     | 0        | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Silver      | ppm | ASTM D5185m | >3         | <b>0</b>     | 0        | ---      |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 2        | ---      |
| Lead        | ppm | ASTM D5185m | >40        | <b>0</b>     | 0        | ---      |
| Copper      | ppm | ASTM D5185m | >330       | <b>2</b>     | 20       | ---      |
| Tin         | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | 0        | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>263</b>   | 4        | ---      |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Molybdenum | ppm | ASTM D5185m |            | <b>76</b>    | 59       | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 6        | ---      |
| Magnesium  | ppm | ASTM D5185m |            | <b>543</b>   | 904      | ---      |
| Calcium    | ppm | ASTM D5185m |            | <b>1368</b>  | 1088     | ---      |
| Phosphorus | ppm | ASTM D5185m |            | <b>927</b>   | 806      | ---      |
| Zinc       | ppm | ASTM D5185m |            | <b>1141</b>  | 1148     | ---      |
| Sulfur     | ppm | ASTM D5185m |            | <b>3543</b>  | 3110     | ---      |

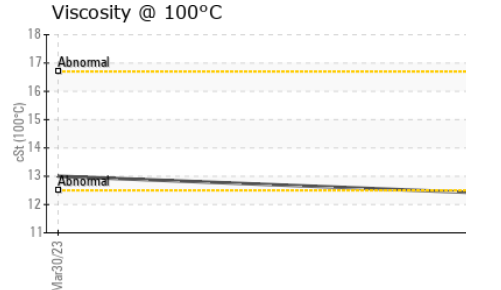
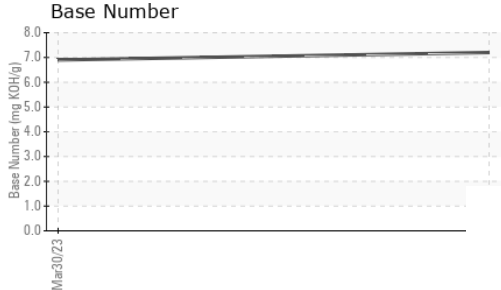
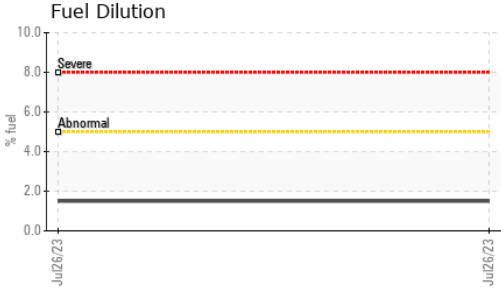
| CONTAMINANTS |     | method      | limit/base | current    | history1 | history2 |
|--------------|-----|-------------|------------|------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>7</b>   | 21       | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>2</b>   | 4        | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>0</b>   | <1       | ---      |
| Fuel         | %   | ASTM D3524  | >5         | <b>1.5</b> | <1.0     | ---      |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>0.3</b>  | 0.6      | ---      |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>7.0</b>  | 10.7     | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>19.1</b> | 22.3     | ---      |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>14.5</b> | 20.0     | ---      |
| Base Number (BN)  | mg KOH/g | ASTM D2896  |            | <b>7.2</b>  | 6.9      | ---      |



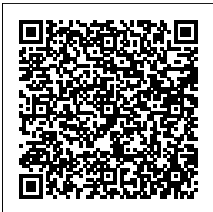
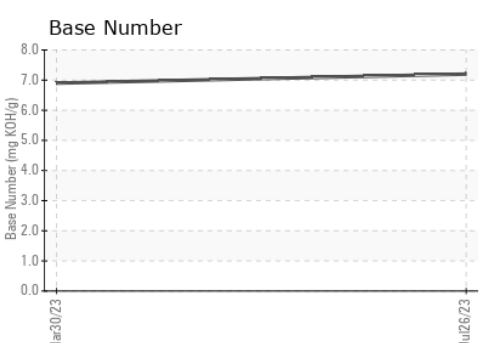
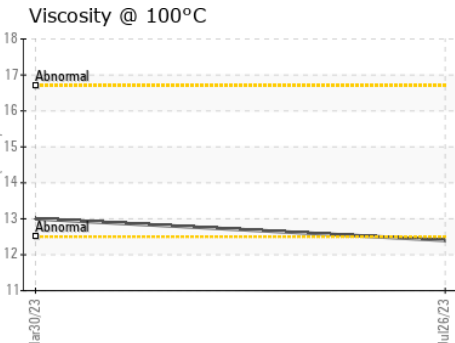
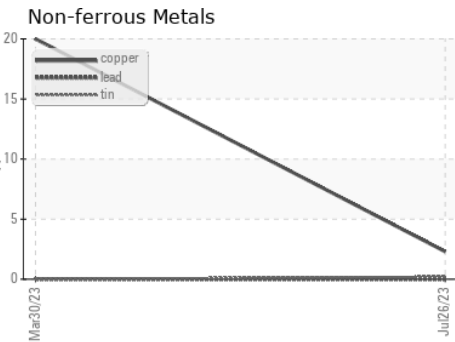
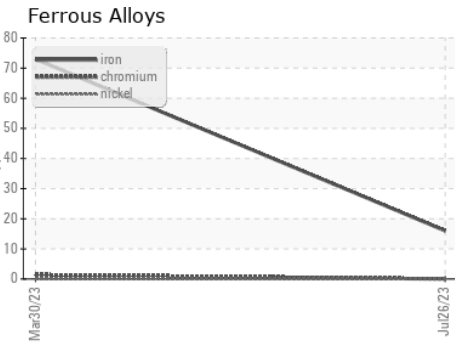
# OIL ANALYSIS REPORT



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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 100°C     | cSt    | ASTM D445  | 12.4    | 13.0     | ---      |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL05934634 **Received** : 25 Aug 2023  
**Lab Number** : 05934634 **Diagnosed** : 29 Aug 2023  
**Unique Number** : 10619905 **Diagnostician** : Wes Davis  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**TAMPA IDEALEASE**  
 5951 ORIENT ROAD  
 TAMPA, FL  
 US 33610-9565  
 Contact: Russ Cook  
 russcook@idealease.com  
 T: (813)626-9285  
 F: (844)270-1356

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)