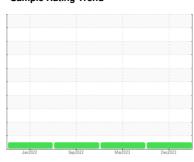


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **8111798**

Component **Diesel Engine**

VALVOLINE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

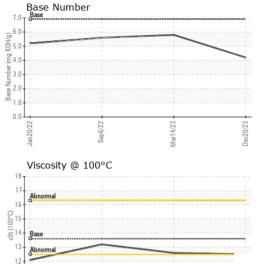
Fluid Condition

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

| | Jun2022 Sup2022 Mar2023 Duc2023 | | | | | |
|---|---------------------------------|---|----------------------------|--|--|--|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status | mls mls | Client Info Client Info Client Info Client Info Client Info | | IL0034277 20 Dec 2023 167048 0 Changed NORMAL | IL05802182 14 Mar 2023 75230 0 N/A NORMAL | IL05644075 06 Sep 2022 62141 0 N/A NORMAL |
| CONTAMINATION | 1 | method | limit/base | current | history1 | history2 |
| Fuel Water Glycol | | WC Method WC Method | >0.2 | <1.0 NEG NEG | <1.0 NEG NEG | <1.0 NEG NEG |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron Chromium Nickel | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | >100 >20 >4 | 35 2 <1 | 21 2 0 | 34 3 0 |
| Titanium Silver Aluminum Lead | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >3 >20 >40 | <1 0 6 9 | <1 0 6 5 | <1 <1 8 12 |
| Copper Tin Antimony | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | >330 | 1 3 | 1 | 2 2 |
| Vanadium Cadmium | ppm | ASTM D5185m ASTM D5185m | l:i+/l | <1 0 | <1 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 39 1 49 1 | 35 0 78 <1 | 61 2 68 <1 | 4 <1 61 |
| Magnesium Calcium Phosphorus | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | 616 1554 899 | 663 1465 939 | 615 1248 769 | 732 1194 648 |
| Zinc Sulfur CONTAMINANTS | ppm | ASTM D5185m ASTM D5185m method | 1069 2624 limit/base | 1197 2991 current | 962 2596 history1 | 858 2276 history2 |
| Silicon Sodium Potassium | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | | 8 2 12 | 7 3 11 | 8 1 16 |
| INFRA-RED Soot % | % | method *ASTM D7844 | limit/base | current 0.6 | history1 | history2 0.6 |
| Nitration Sulfation | Abs/cm Abs/.1mm | *ASTM D7624 *ASTM D7415 | >20 >30 | 11.1 26.1 | 11.1 23.6 | 14.6 27.3 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Oxidation Base Number (BN) | Abs/.1mm mg KOH/g | *ASTM D7414 ASTM D2896 | | 23.5 4.2 | 21.4 5.8 | 27.6 5.6 |



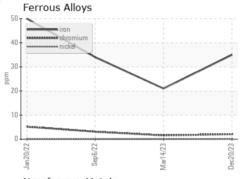
OIL ANALYSIS REPORT

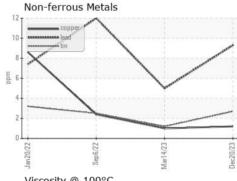


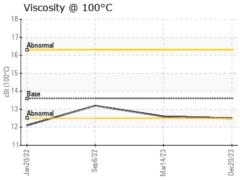
| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate |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

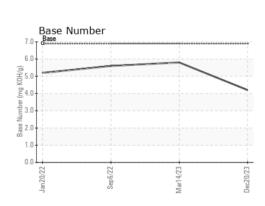
| FLUID FROFERITES | | memou | | | HISTOLAL | TIISTOT YZ | |
|------------------|-----|-----------|------|------|----------|------------|--|
| Visc @ 100°C | cSt | ASTM D445 | 13.6 | 12.5 | 12.6 | 13.2 | |

GRAPHS













Laboratory Sample No. Lab Number

Unique Number : 10830339 Test Package : FLEET

: IL0034277 : 06058957

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 12 Jan 2024 Diagnosed : 12 Jan 2024

Diagnostician : Wes Davis

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)

TAMPA IDEALEASE 5951 ORIENT ROAD

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russcook@idealease.com T: (813)626-9285

F: (844)270-1356 Contact/Location: Russ Cook - IDETAMFL