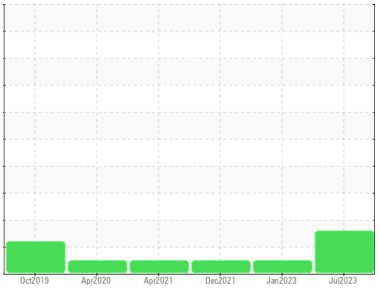
# PROBLEM SUMMARY

Sample Rating Trend

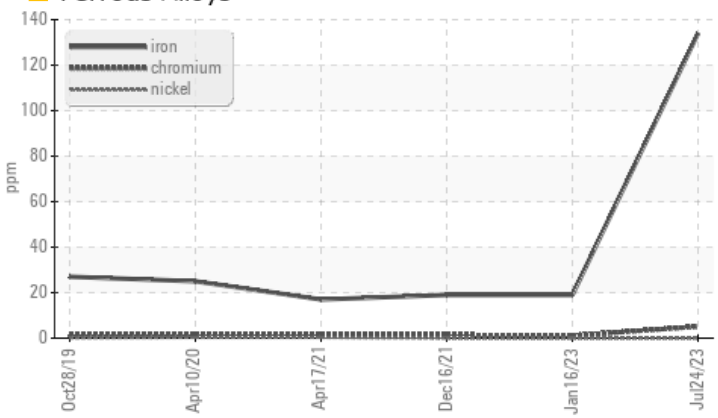



**WEAR**

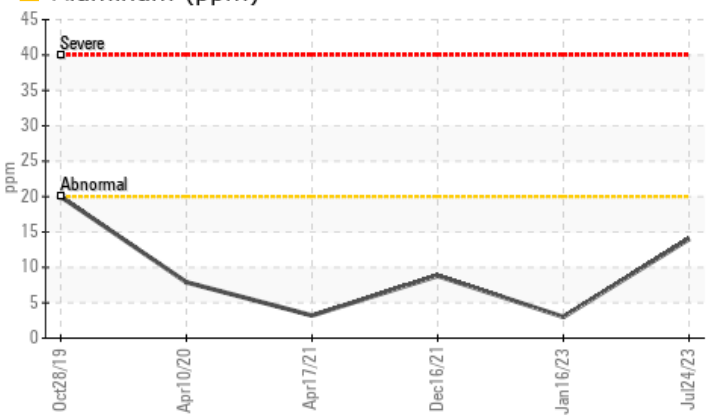
Machine Id
**16397**
Component
**Diesel Engine**
Fluid
**MOBIL DELVAC 1300 SUPER15W40 (--- QTS)**

## COMPONENT CONDITION SUMMARY

Ferrous Alloys




Aluminum (ppm)




## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

| Sample Status | | | | ABNORMAL | NORMAL | NORMAL |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >100 | ▲ **134** | 19 | 19 |
| Aluminum | ppm | ASTM D5185m | >20 | ▲ **14** | 3 | 9 |

**Customer Id:** IDEEFF
**Sample No.:** IL0027065
**Lab Number:** 05935155
**Test Package:** FLEET

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Don Baldridge +1
don.b505@comcast.net

*To change component or sample information:*
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Change Fluid | --- | --- | ? | Oil and filter change at the time of sampling has been noted. |
| Change Filter | --- | --- | ? | Oil and filter change at the time of sampling has been noted. |
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |

## HISTORICAL DIAGNOSIS

**16 Jan 2023 Diag: Wes Davis**

NORMAL

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

**16 Dec 2021 Diag: Wes Davis**

NORMAL

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

**17 Apr 2021 Diag: Don Baldridge**

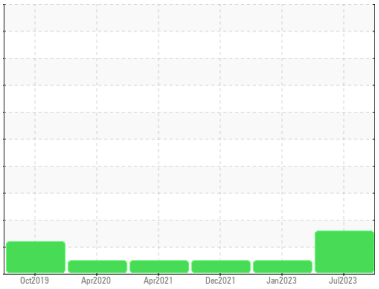
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

# OIL ANALYSIS REPORT

Sample Rating Trend




**WEAR**

Machine Id
**16397**
Component
**Diesel Engine**
Fluid
**MOBIL DELVAC 1300 SUPER15W40 (--- QTS)**

## DIAGNOSIS

**Recommendation**
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

**Wear**
Piston, ring and cylinder wear is indicated. All other 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 acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **IL0027065** | IL0027124 | IL0015577 |
| Sample Date | | Client Info | | **24 Jul 2023** | 16 Jan 2023 | 16 Dec 2021 |
| Machine Age | mls | Client Info | | **103605** | 93761 | 71588 |
| Oil Age | mls | Client Info | | **9672** | 11239 | 12012 |
| Oil Changed | | Client Info | | **Changed** | Changed | Changed |
| Sample Status | | | | **ABNORMAL** | NORMAL | NORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Fuel | | WC Method | >5 | **<1.0** | <1.0 | <1.0 |
| Glycol | | WC Method | | **NEG** | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >100 | ▲ **134** | 19 | 19 |
| Chromium | ppm | ASTM D5185m | >20 | **5** | 1 | 1 |
| Nickel | ppm | ASTM D5185m | >4 | **0** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | **<1** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | ▲ **14** | 3 | 9 |
| Lead | ppm | ASTM D5185m | >40 | **9** | 1 | 2 |
| Copper | ppm | ASTM D5185m | >330 | **6** | <1 | 22 |
| Tin | ppm | ASTM D5185m | >15 | **3** | 0 | <1 |
| Antimony | ppm | ASTM D5185m | | **---** | --- | <1 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | 0 |

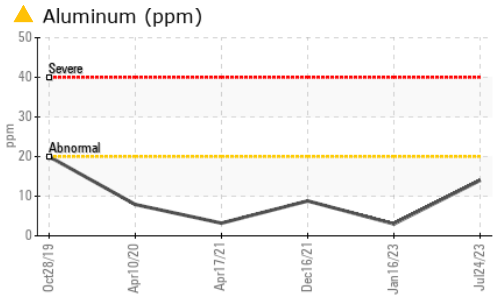
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 0 | **28** | 7 | 26 |
| Barium | ppm | ASTM D5185m | 0 | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | **20** | 52 | 5 |
| Manganese | ppm | ASTM D5185m | | **3** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | **701** | 945 | 727 |
| Calcium | ppm | ASTM D5185m | | **1635** | 1334 | 1381 |
| Phosphorus | ppm | ASTM D5185m | | **812** | 962 | 708 |
| Zinc | ppm | ASTM D5185m | | **987** | 1221 | 865 |
| Sulfur | ppm | ASTM D5185m | | **3488** | 3448 | 2514 |

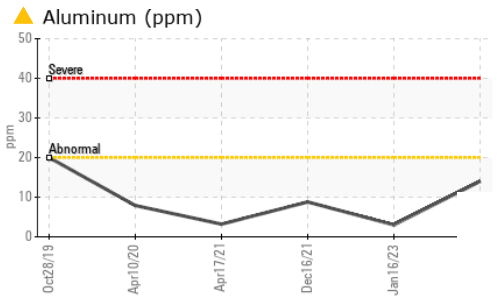
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **14** | 9 | 11 |
| Sodium | ppm | ASTM D5185m | | **4** | 2 | 1 |
| Potassium | ppm | ASTM D5185m | >20 | **39** | 6 | 11 |

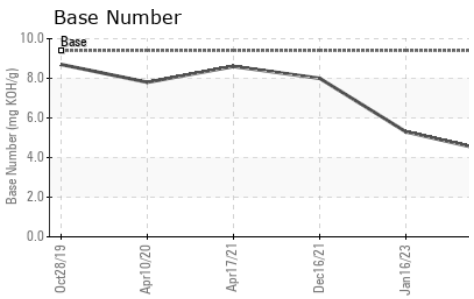
| INFRA-RED | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Soot % | % | *ASTM D7844 | >3 | **0.6** | 2 | 2.4 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | **12.5** | 10.8 | 12.3 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | **29.0** | 23.6 | 27.9 |

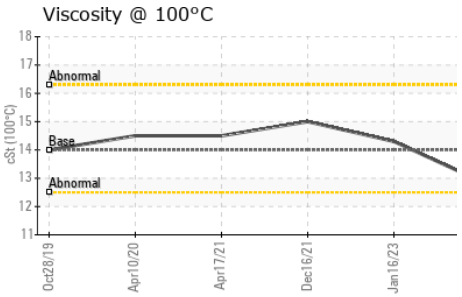
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | **27.9** | 17.4 | 18.3 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.4 | **4.3** | 5.3 | 8 |

# OIL ANALYSIS REPORT



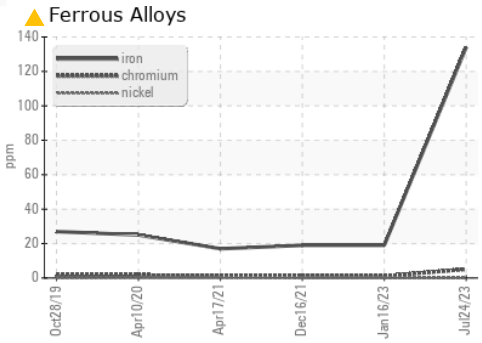



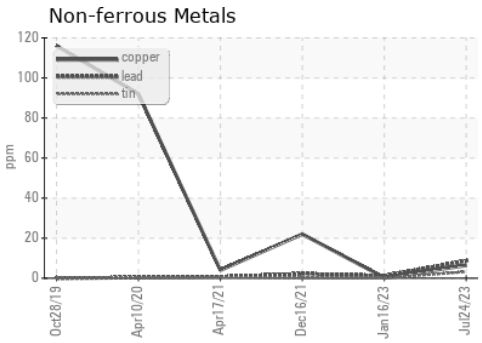



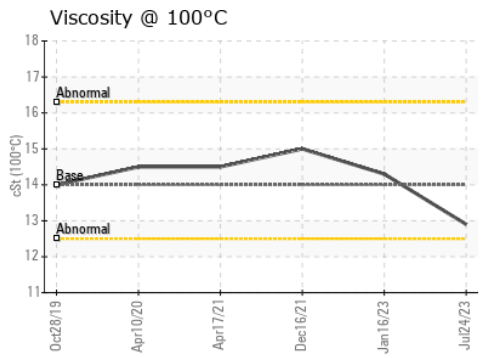

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| 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 |

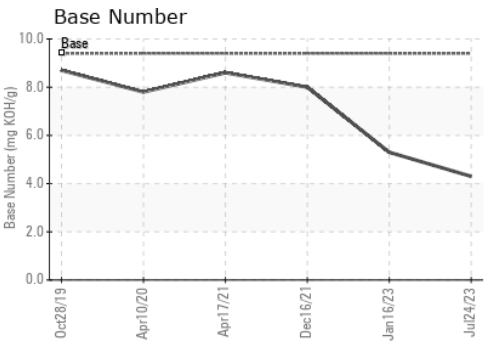
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 100°C | cSt | ASTM D445 | 14 | **12.9** | 14.3 | 15.0 |

## GRAPHS




**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : IL0027065
**Lab Number** : 05935155
**Unique Number** : 10620426
**Test Package** : FLEET

**Received** : 25 Aug 2023
**Diagnosed** : 28 Aug 2023
**Diagnostician** : Don Baldridge

Certificate L2367

*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)*

**RUSH TRUCK LEASING - EFFINGHAM Idealease**
1701 WEST FAYETTE AVENUE
EFFINGHAM, IL
US 62401
Contact: JACKIE OHNESORGE
ohnesorgej@rushenterprises.com
T: (217)342-9761
F: (217)342-9642