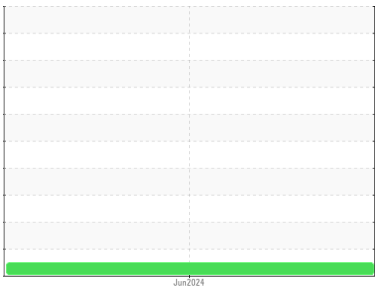
McCLUNG LOGAN EQUIPMENT COMPANY

# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Area
**[W/O 10825]**
Machine Id
## VOLVO EC250E 316471
Component
**Right Final Drive**
Fluid
**VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (2 GAL)**

## DIAGNOSIS

**Recommendation**
Resample at the next service interval to monitor.

**Wear**
All component wear rates are normal.

**Contamination**
There is no indication of any contamination 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 | | **ML0002157** | --- | --- |
| Sample Date | | Client Info | | **03 Jun 2024** | --- | --- |
| Machine Age | hrs | Client Info | | **634** | --- | --- |
| Oil Age | hrs | Client Info | | **634** | --- | --- |
| Oil Changed | | Client Info | | **Changed** | --- | --- |
| Sample Status | | | | **NORMAL** | --- | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >0.2 | **NEG** | --- | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >500 | **197** | --- | --- |
| Chromium | ppm | ASTM D5185m | >10 | **6** | --- | --- |
| Nickel | ppm | ASTM D5185m | >10 | **0** | --- | --- |
| Titanium | ppm | ASTM D5185m | | **<1** | --- | --- |
| Silver | ppm | ASTM D5185m | | **0** | --- | --- |
| Aluminum | ppm | ASTM D5185m | >25 | **8** | --- | --- |
| Lead | ppm | ASTM D5185m | >25 | **0** | --- | --- |
| Copper | ppm | ASTM D5185m | >50 | **<1** | --- | --- |
| Tin | ppm | ASTM D5185m | >10 | **0** | --- | --- |
| Vanadium | ppm | ASTM D5185m | | **0** | --- | --- |
| Cadmium | ppm | ASTM D5185m | | **0** | --- | --- |

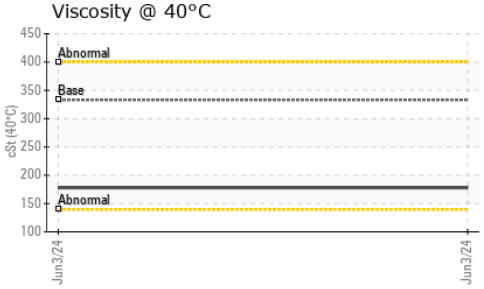
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 111 | **0** | --- | --- |
| Barium | ppm | ASTM D5185m | 0.0 | **1** | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 0.9 | **0** | --- | --- |
| Manganese | ppm | ASTM D5185m | 0.0 | **4** | --- | --- |
| Magnesium | ppm | ASTM D5185m | 39 | **4** | --- | --- |
| Calcium | ppm | ASTM D5185m | 93 | **49** | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 920 | **304** | --- | --- |
| Zinc | ppm | ASTM D5185m | 104 | **24** | --- | --- |
| Sulfur | ppm | ASTM D5185m | 20179 | **17459** | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >75 | **50** | --- | --- |
| Sodium | ppm | ASTM D5185m | | **2** | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | --- | --- |

| 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 | **LIGHT** | --- | --- |
| 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** | --- | --- |

# OIL ANALYSIS REPORT

Viscosity @ 40°C

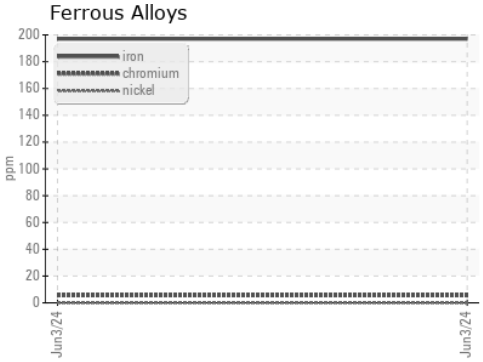



| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 333 | **178** | --- | --- |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | *no image* | *no image* | *no image* |
| Bottom | | | *no image* | *no image* | *no image* |

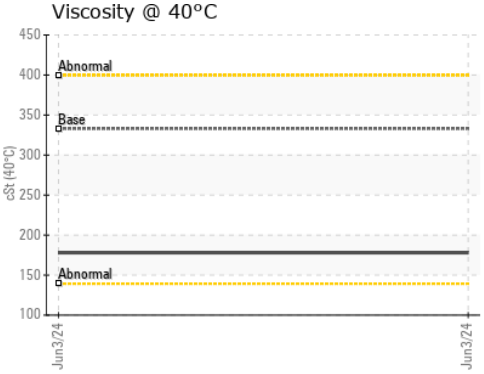
## GRAPHS

Ferrous Alloys




Non-ferrous Metals


Viscosity @ 40°C




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : ML0002157
**Lab Number** : 06203062
**Unique Number** : 11070523
**Test Package** : CONST

**Received** : 07 Jun 2024
**Tested** : 10 Jun 2024
**Diagnosed** : 10 Jun 2024 - Don Baldridge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*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)*