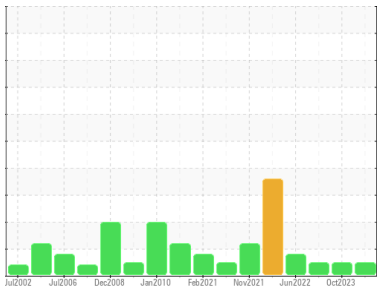
OIL DIAGNOSTICS

# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Machine Id
## FREIGHT ELEVATOR
Component
**Hydraulic System**
Fluid
**MOBIL DTE 25 (150 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. The amount and size of particulates present in the system are acceptable.

**Fluid Condition**
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **PCA0118361** | PCA0103596 | PCA0078706 |
| Sample Date | | Client Info | | **26 Apr 2024** | 15 Oct 2023 | 16 Sep 2022 |
| Machine Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **N/A** | N/A | N/A |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >0.05 | **NEG** | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >20 | **4** | 3 | 4 |
| Chromium | ppm | ASTM D5185m | >20 | **<1** | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | **0** | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | **<1** | <1 | 0 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | **2** | 1 | 0 |
| Lead | ppm | ASTM D5185m | >20 | **7** | 5 | 6 |
| Copper | ppm | ASTM D5185m | >20 | **2** | 1 | <1 |
| Tin | ppm | ASTM D5185m | >20 | **<1** | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | <1 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 2 |
| Molybdenum | ppm | ASTM D5185m | | **16** | 13 | 18 |
| Manganese | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | | **3** | <1 | 3 |
| Calcium | ppm | ASTM D5185m | | **110** | 75 | 88 |
| Phosphorus | ppm | ASTM D5185m | | **520** | 419 | 412 |
| Zinc | ppm | ASTM D5185m | | **689** | 516 | 522 |
| Sulfur | ppm | ASTM D5185m | | **3966** | 3740 | 3992 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >15 | **2** | 1 | 1 |
| Sodium | ppm | ASTM D5185m | | **0** | 0 | 5 |
| Potassium | ppm | ASTM D5185m | >20 | **2** | 2 | 2 |

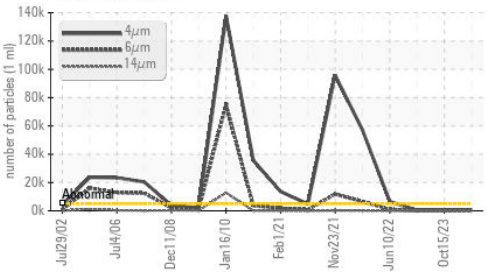
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >5000 | **802** | 347 | 315 |
| Particles >6µm | | ASTM D7647 | >1300 | **142** | 81 | 72 |
| Particles >14µm | | ASTM D7647 | >320 | **21** | 13 | 9 |
| Particles >21µm | | ASTM D7647 | >80 | **8** | 5 | 3 |
| Particles >38µm | | ASTM D7647 | >20 | **0** | 1 | 1 |
| Particles >71µm | | ASTM D7647 | >4 | **0** | 0 | 1 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/15 | **17/14/12** | 16/14/11 | 15/13/10 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.48** | 0.494 | 0.51 |

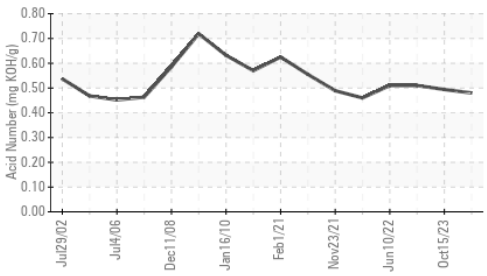
# OIL ANALYSIS REPORT

OIL DIAGNOSTICS

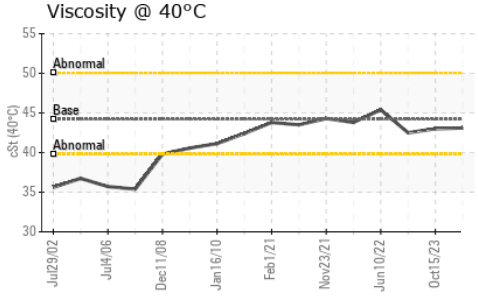
Particle Trend



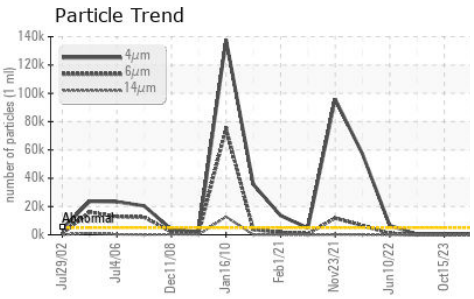

Acid Number




Viscosity @ 40°C




Particle Trend



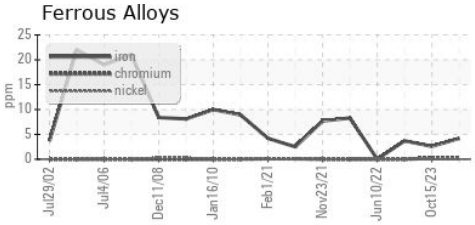

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| 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 | >0.05 | **NEG** | NEG | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 44.2 | **43.1** | 43.0 | 42.5 |

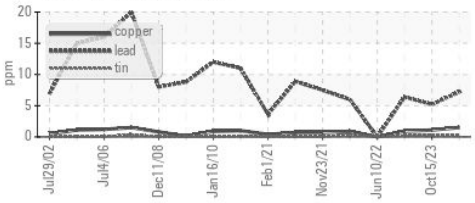
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

## GRAPHS

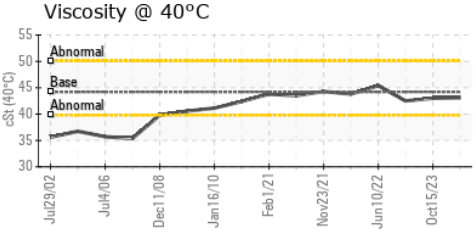
Ferrous Alloys



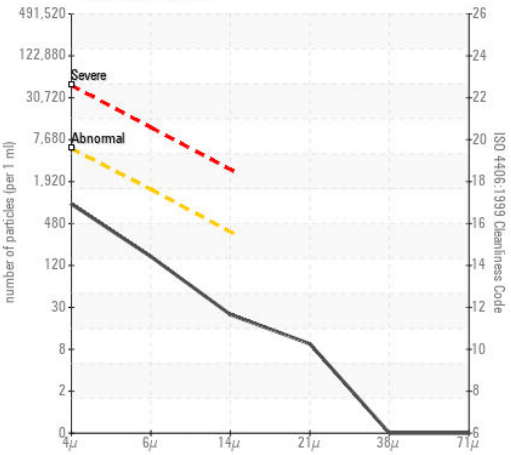

Non-ferrous Metals



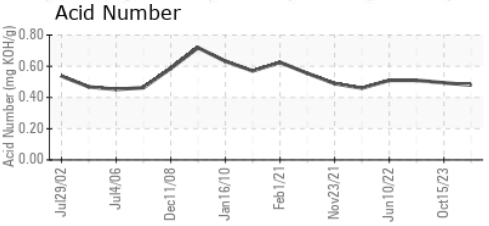

Viscosity @ 40°C




Particle Count




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : PCA0118361
**Lab Number** : 06175416
**Unique Number** : 11021469
**Test Package** : IND 2

**Received** : 10 May 2024
**Tested** : 13 May 2024
**Diagnosed** : 14 May 2024 - Don Baldridge

*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)*


**KraftHeinz - New Ulm - Plant 8302**
2525 S BRIDGE STREET
NEW ULM, MN
US 56073
Contact: RYAN SCHMID
ryan.schmid@kraftheinz.com
T: (507)568-0338
F: (507)354-7927