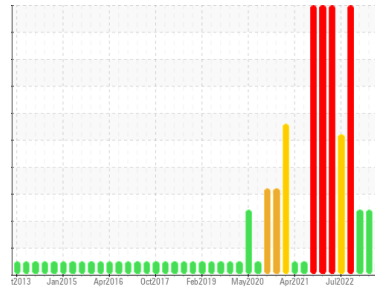




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

3

Machine Id

3-302-MB Sec. Crush. Lube Pump Tank

Component

Tank Blower

Fluid

MOBIL DTE OIL EXTRA HEAVY (300 LTR)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. 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 | WC0869856 | WC0842658 | WC0818128 |
| Sample Date | Client Info | 24 Nov 2023 | 07 Sep 2023 | 16 May 2023 |
| Machine Age | hrs | Client Info | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 |
| Oil Changed | Client Info | N/A | N/A | N/A |
| Sample Status | | NORMAL | ATTENTION | ATTENTION |

CONTAMINATION

| method | limit/base | current | history1 | history2 |
|--------|------------|------------|----------|----------|
| Water | WC Method | NEG | NEG | NEG |

WEAR METALS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|-------------------|--------------|----------|------|
| Iron | ppm | ASTM D5185(m) >20 | 9 | ▲ 30 | ▲ 23 |
| Chromium | ppm | ASTM D5185(m) >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) >20 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185(m) | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) >20 | <1 | 6 | 6 |
| Lead | ppm | ASTM D5185(m) >20 | <1 | <1 | 0 |
| Copper | ppm | ASTM D5185(m) >20 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) >20 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | 0 | 0 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 | |
|------------|------------|---------------|--------------|----------|--------|
| Boron | ppm | ASTM D5185(m) | <1 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | <1 | 3 | 2 |
| Calcium | ppm | ASTM D5185(m) | 7 | ▲ 44 | ▲ 31 |
| Phosphorus | ppm | ASTM D5185(m) | 15 | ▲ 1 | ▲ <1 |
| Zinc | ppm | ASTM D5185(m) | <1 | ▲ 2 | ▲ <1 |
| Sulfur | ppm | ASTM D5185(m) | 3718 | ▲ 3918 | ▲ 3952 |
| Lithium | ppm | ASTM D5185(m) | <1 | <1 | <1 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|-------------------|--------------|----------|----|
| Silicon | ppm | ASTM D5185(m) >15 | 5 | 20 | 16 |
| Sodium | ppm | ASTM D5185(m) | <1 | <1 | 0 |
| Potassium | ppm | ASTM D5185(m) >20 | 0 | 2 | 2 |

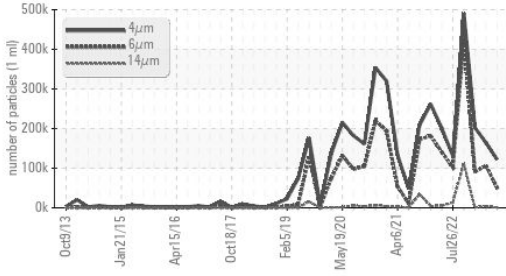
FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | 122046 | 164087 | 201935 |
| Particles >6µm | ASTM D7647 >320000 | 50721 | 105968 | 91409 |
| Particles >14µm | ASTM D7647 >160000 | 904 | 3411 | 901 |
| Particles >21µm | ASTM D7647 >40000 | 116 | 243 | 118 |
| Particles >38µm | ASTM D7647 >10000 | 4 | 3 | 1 |
| Particles >71µm | ASTM D7647 >2500 | 1 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) >--/25/24 | 24/23/17 | 25/24/19 | 25/24/17 |

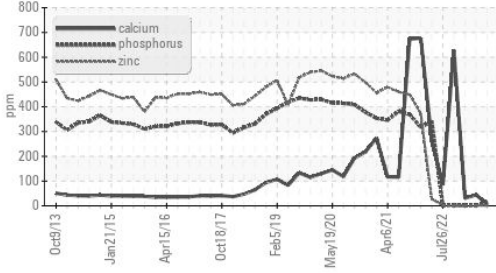


OIL ANALYSIS REPORT

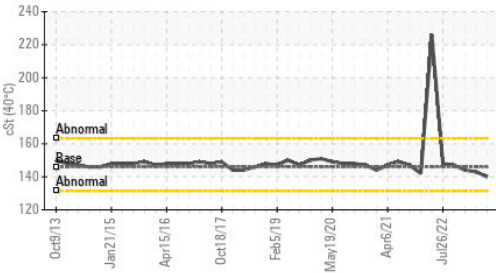
Particle Trend



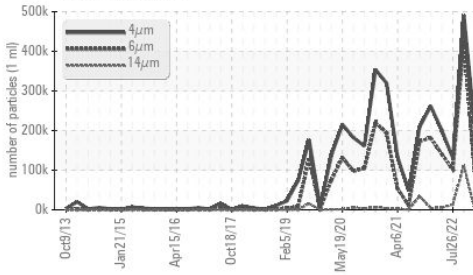
Additives



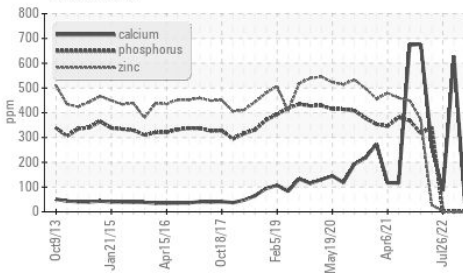
Viscosity @ 40°C



Particle Trend



Additives



| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 0.04 | 0.08 | 0.03 |

| 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* | | NEG | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG | NEG |

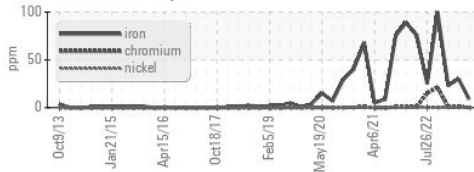
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|------------------|-----|---------------|------------|------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 146 | 140 | 143 | 144 |

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

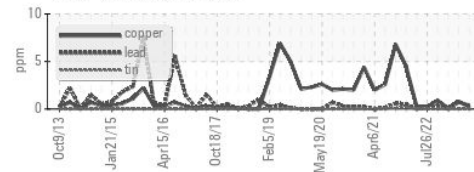


GRAPHS

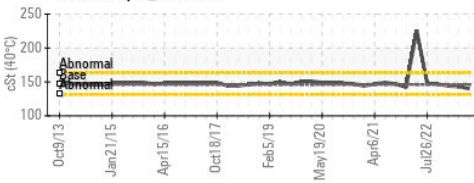
Ferrous Alloys



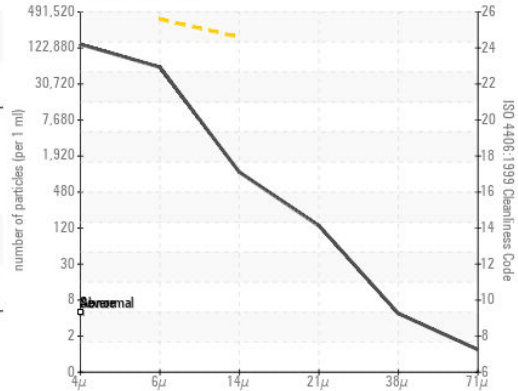
Non-ferrous Metals



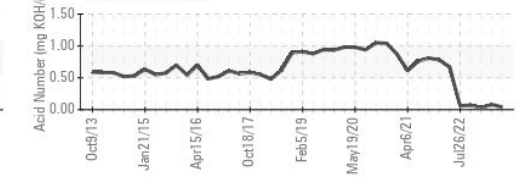
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0869856 **Received** : 08 Dec 2023
Lab Number : **02602047** **Diagnosed** : 11 Dec 2023
Unique Number : 5695132 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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