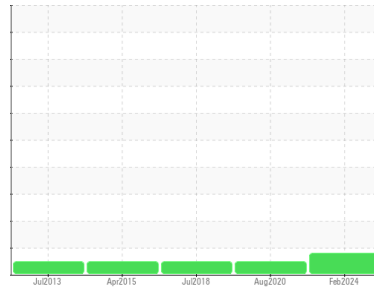




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
CINCINNATI BRAKE-06 (S/N 47514)
 Component
Hydraulic System
 Fluid
MOBIL DTE 24 (150 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

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 | | | WC0768853 | WCI2320270 | WCI2320274 |
| Sample Date | Client Info | | | 26 Feb 2024 | 28 Aug 2020 | 03 Jul 2018 |
| Machine Age | hrs | Client Info | | 50733 | 45600 | 41459 |
| Oil Age | hrs | Client Info | | 25000 | 20000 | 20000 |
| Oil Changed | Client Info | | | Not Changed | Not Changed | Not Changed |
| Sample Status | | | | ATTENTION | 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 | 2 | 1 | 1 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >20 | <1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >20 | 2 | 1 | <1 |
| Tin | ppm | ASTM D5185m | >20 | <1 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | | --- | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 |

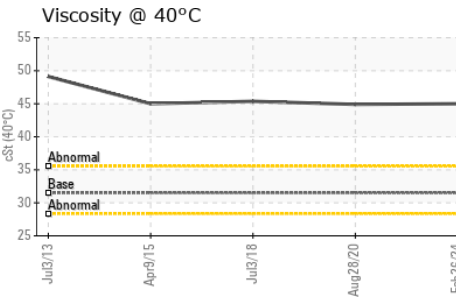
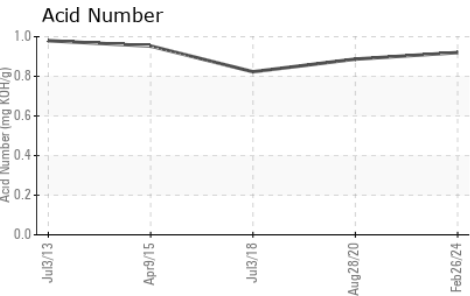
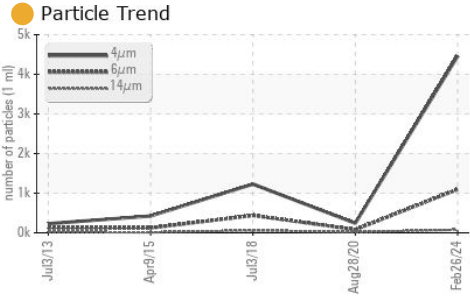
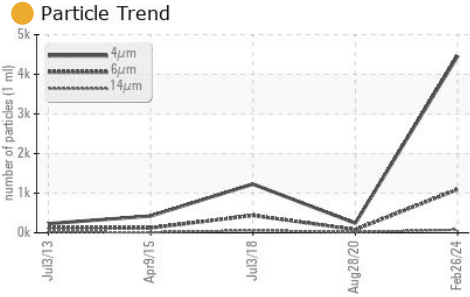
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | | 6 | 7 | 4 |
| Calcium | ppm | ASTM D5185m | | 143 | 146 | 138 |
| Phosphorus | ppm | ASTM D5185m | | 535 | 524 | 482 |
| Zinc | ppm | ASTM D5185m | | 759 | 743 | 661 |
| Sulfur | ppm | ASTM D5185m | | 8100 | 6857 | 8089 |

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

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm | | ASTM D7647 | | 4459 | 240 | 1230 |
| Particles >6µm | | ASTM D7647 | >640 | 1098 | 80 | 438 |
| Particles >14µm | | ASTM D7647 | >80 | 77 | 16 | 59 |
| Particles >21µm | | ASTM D7647 | >20 | 19 | 7 | 21 |
| Particles >38µm | | ASTM D7647 | >4 | 0 | 1 | 2 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >--/16/13 | 19/17/13 | 15/13/11 | 17/16/13 |



OIL ANALYSIS REPORT

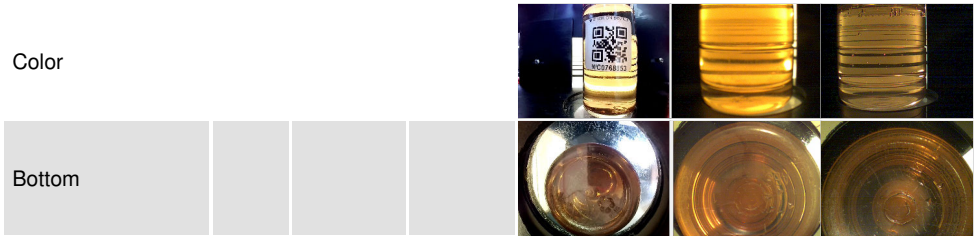


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.92 | 0.887 | 0.823 |

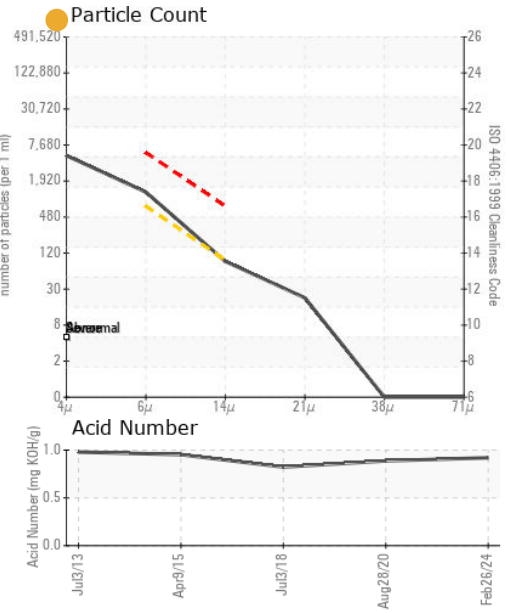
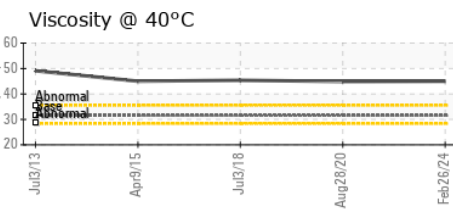
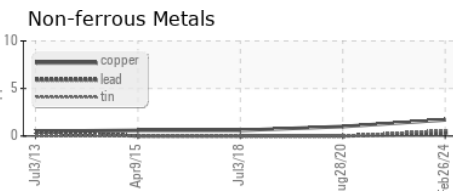
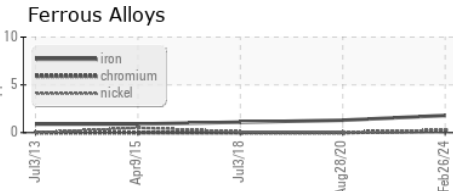
| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *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 | 31.5 | 45.0 | 44.9 | 45.37 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0768853
Lab Number : **06180117**
Unique Number : 11031443
Test Package : IND 2
Received : 15 May 2024
Tested : 16 May 2024
Diagnosed : 17 May 2024 - Don Baldrige

JACO INC
 140 CONSTITUTION BLVD
 FRANKLIN, MA
 US 02038
 Contact: RICH GONGOL
 rgongol@jacoinc.com; rgongol@msn.com
 T: (508)446-7480
 F: (508)553-1099

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)