



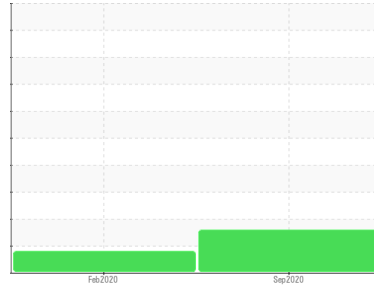
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
MT
 Machine Id
TEST CELL A8
 Component
Hydraulic System
 Fluid
MOBIL DTE 25 (--- GAL)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

The copper level is abnormal. All other component wear rates are normal.

Contamination

There is a high 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 | | WC0502670 | WC0424720 | --- |
| Sample Date | Client Info | | 16 Sep 2020 | 25 Feb 2020 | --- |
| Machine Age | hrs | Client Info | 0 | 3392 | --- |
| Oil Age | hrs | Client Info | 0 | 0 | --- |
| Oil Changed | Client Info | | Changed | Changed | --- |
| Sample Status | | | ABNORMAL | ABNORMAL | --- |

CONTAMINATION

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

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >20 | 13 | 9 | --- |
| Chromium | ppm | ASTM D5185m >20 | <1 | <1 | --- |
| Nickel | ppm | ASTM D5185m >20 | 1 | 1 | --- |
| Titanium | ppm | ASTM D5185m | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | <1 | <1 | --- |
| Aluminum | ppm | ASTM D5185m >20 | 0 | 0 | --- |
| Lead | ppm | ASTM D5185m >20 | <1 | <1 | --- |
| Copper | ppm | ASTM D5185m >20 | ▲ 66 | ▲ 63 | --- |
| Tin | ppm | ASTM D5185m >20 | 0 | 0 | --- |
| Antimony | ppm | ASTM D5185m | <1 | 0 | --- |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | --- |
| Cadmium | ppm | ASTM D5185m | 5 | 4 | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 2 | <1 | --- |
| Barium | ppm | ASTM D5185m | <1 | <1 | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | --- |
| Manganese | ppm | ASTM D5185m | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | 4 | 1 | --- |
| Calcium | ppm | ASTM D5185m | 110 | 106 | --- |
| Phosphorus | ppm | ASTM D5185m | 443 | 437 | --- |
| Zinc | ppm | ASTM D5185m | 692 | 697 | --- |
| Sulfur | ppm | ASTM D5185m | 5476 | 5118 | --- |

CONTAMINANTS

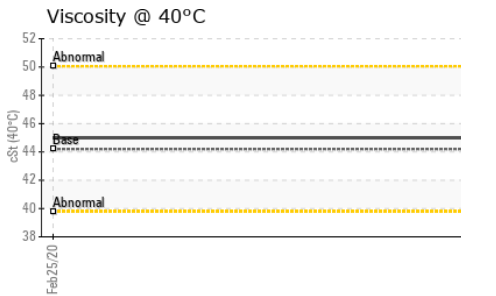
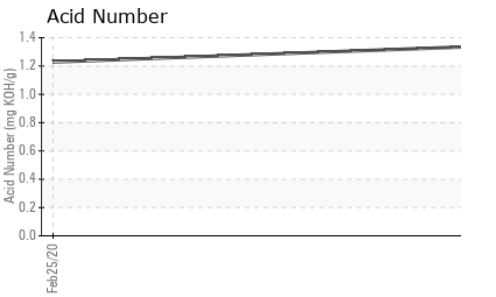
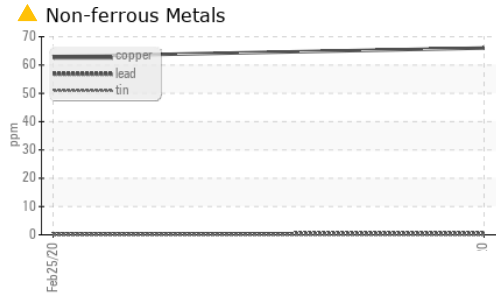
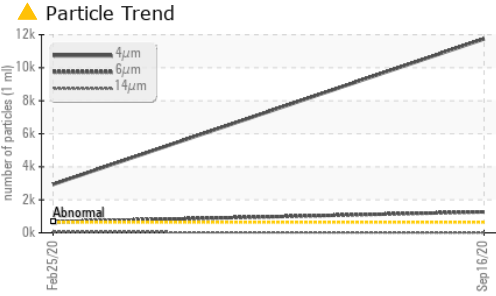
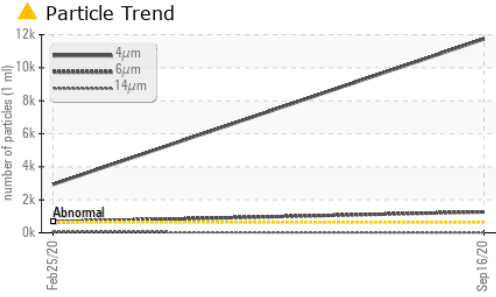
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | 2 | <1 | --- |
| Sodium | ppm | ASTM D5185m | 6 | 4 | --- |
| Potassium | ppm | ASTM D5185m >20 | <1 | <1 | --- |

FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-------------------|----------|----------|
| Particles >4µm | ASTM D7647 | >640 | ▲ 11745 | 2935 | --- |
| Particles >6µm | ASTM D7647 | >160 | ▲ 1268 | 664 | --- |
| Particles >14µm | ASTM D7647 | >20 | 17 | 42 | --- |
| Particles >21µm | ASTM D7647 | >4 | 3 | 10 | --- |
| Particles >38µm | ASTM D7647 | >3 | 0 | 3 | --- |
| Particles >71µm | ASTM D7647 | >3 | 0 | 2 | --- |
| Oil Cleanliness | ISO 4406 (c) | >16/14/11 | ▲ 21/17/11 | 19/17/13 | --- |



OIL ANALYSIS REPORT

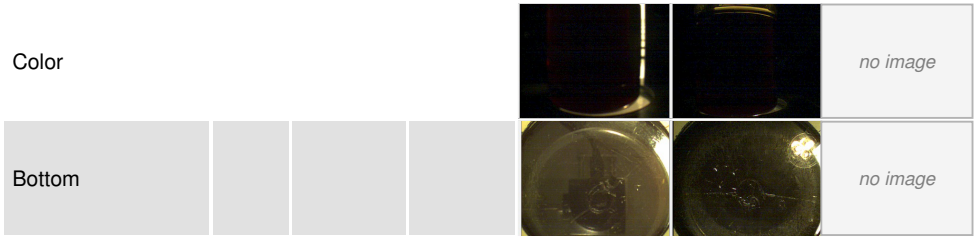


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 1.340 | 1.228 | --- |

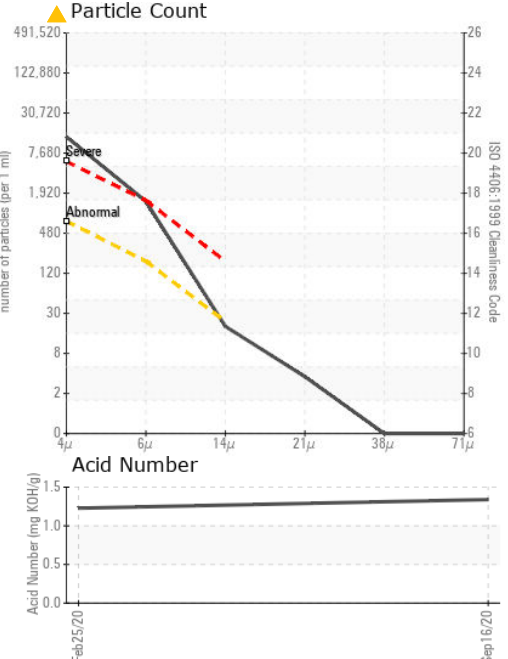
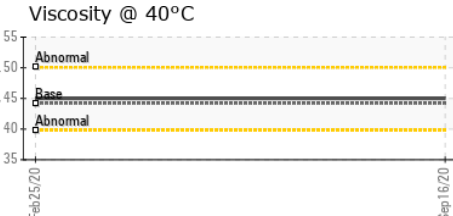
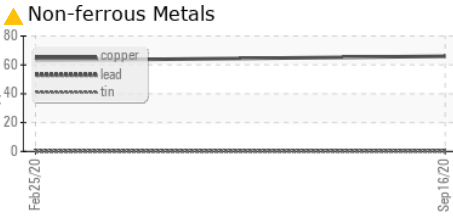
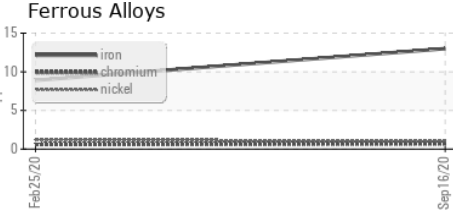
| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | --- |
| Silt | scalar | *Visual | NONE | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | NEG | --- |
| Free Water | scalar | *Visual | | NEG | NEG | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|------------------|-----|-----------|------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 44.2 | 45.0 | 45.0 | --- |

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0502670 **Received** : 21 Sep 2020
Lab Number : 05070014 **Diagnosed** : 22 Sep 2020
Unique Number : 9180204 **Diagnostician** : Don Baldrige
Test Package : IND 2

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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)