



OIL ANALYSIS REPORT

| | |
|-----------------|--------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
F-83
 Component
Right Final Drive
 Fluid
GEAR OIL SAE 75W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|-------------|
| Sample Number | | Client Info | | MTMCF60986 | MTMCF51053 | MTMCF25319 |
| Sample Date | | Client Info | | 30 Jul 2018 | 01 Jul 2018 | 01 Mar 2016 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | Changed |
| Filter Changed | | Client Info | | N/A | N/A | Changed |
| Sample Status | | | | NORMAL | ABNORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|-------|------|
| PQ | | ASTM D8184 | | 50 | 105 | 68.0 |
| Iron | ppm | ASTM D5185m | >500 | 73 | 123 | 253 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | 3 |
| Nickel | ppm | ASTM D5185m | | <1 | <1 | 3 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | <1 | 3 |
| Lead | ppm | ASTM D5185m | >25 | <1 | ▲ 15 | <1 |
| Copper | ppm | ASTM D5185m | >50 | 22 | ▲ 292 | 34 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 2 | 1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

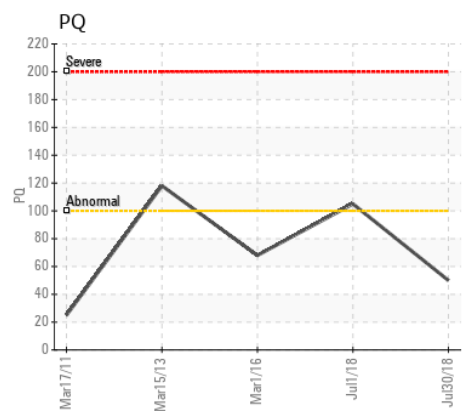
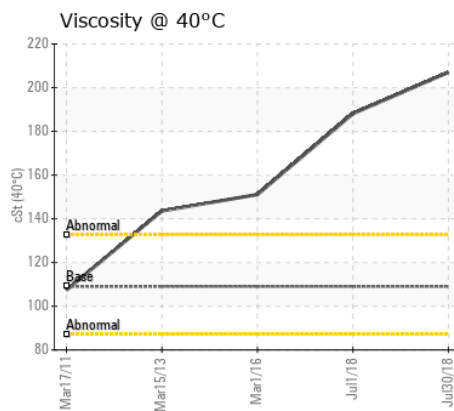
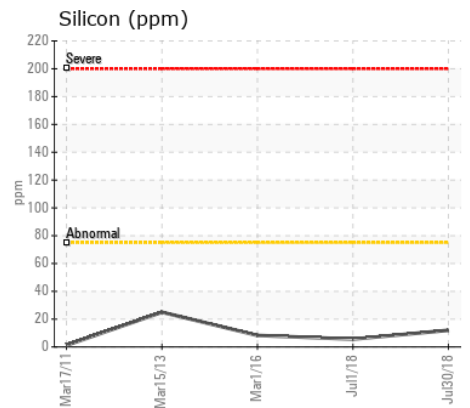
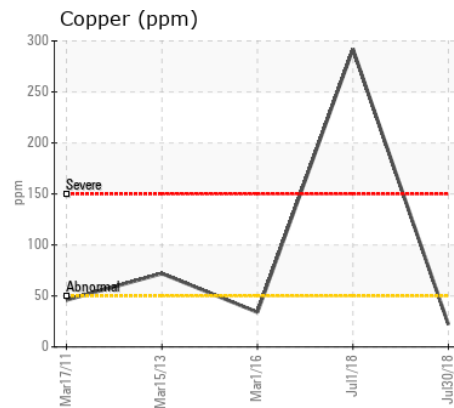
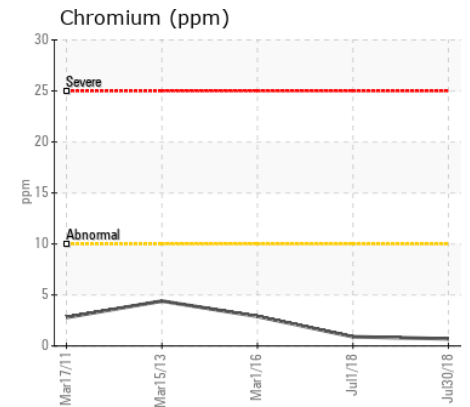
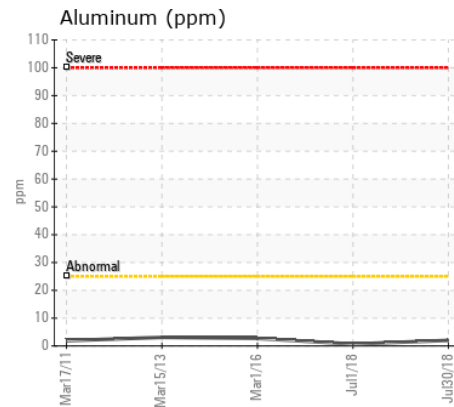
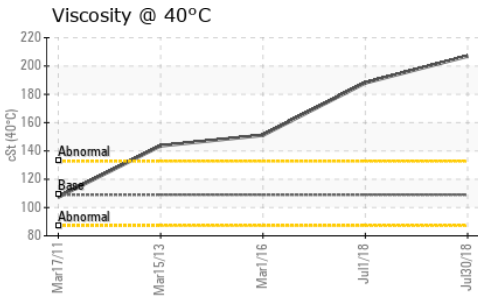
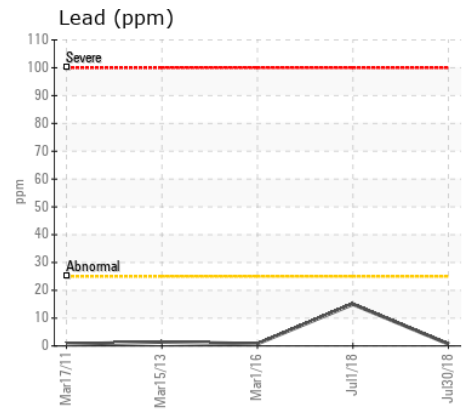
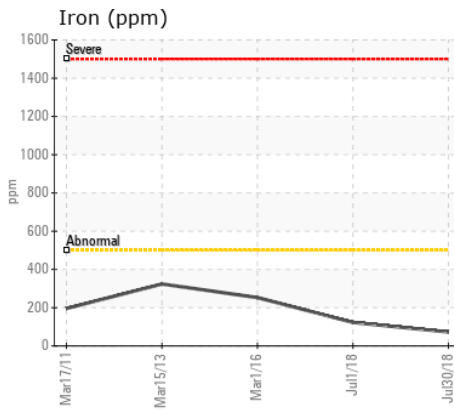
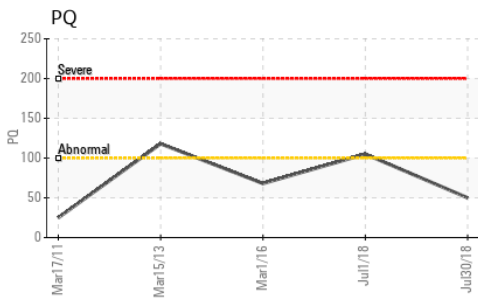
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|-------|-------|-------|
| Silicon | ppm | ASTM D5185m | >75 | 12 | 6 | 8 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 2 | 1 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| 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 | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|-------|-------|-------|-------|
| Sodium | ppm | ASTM D5185m | | 3 | 1 | 4 |
| Boron | ppm | ASTM D5185m | 400 | 91 | 28 | 200 |
| Barium | ppm | ASTM D5185m | 200 | <1 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | 12 | 55 | 63 | 0 |
| Manganese | ppm | ASTM D5185m | | 1 | 1 | 3 |
| Magnesium | ppm | ASTM D5185m | 12 | 0 | 0 | 2 |
| Calcium | ppm | ASTM D5185m | 150 | 29 | 186 | 78 |
| Phosphorus | ppm | ASTM D5185m | 1650 | 469 | 319 | 966 |
| Zinc | ppm | ASTM D5185m | 125 | 29 | 108 | 205 |
| Sulfur | ppm | ASTM D5185m | 22500 | 10330 | 6578 | 17214 |
| Visc @ 40°C | cSt | ASTM D445 | 109 | 207.0 | 188.1 | 151.1 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MTMCF60986 **Received** : 31 Jul 2018
Lab Number : 04521337 **Tested** : 02 Aug 2018
Unique Number : 8280166 **Diagnosed** : 02 Aug 2018 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: PQ)

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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)