



OIL ANALYSIS REPORT

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

Machine Id
7101
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

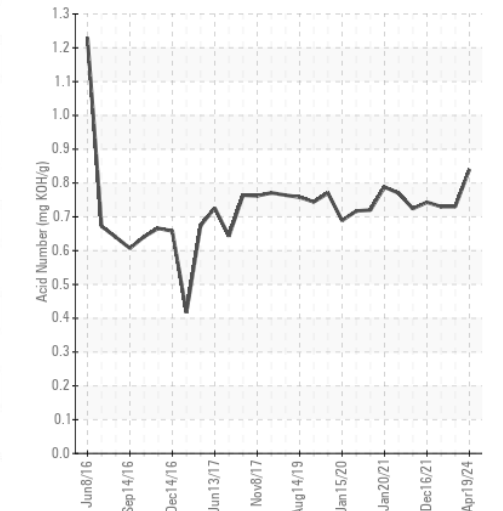
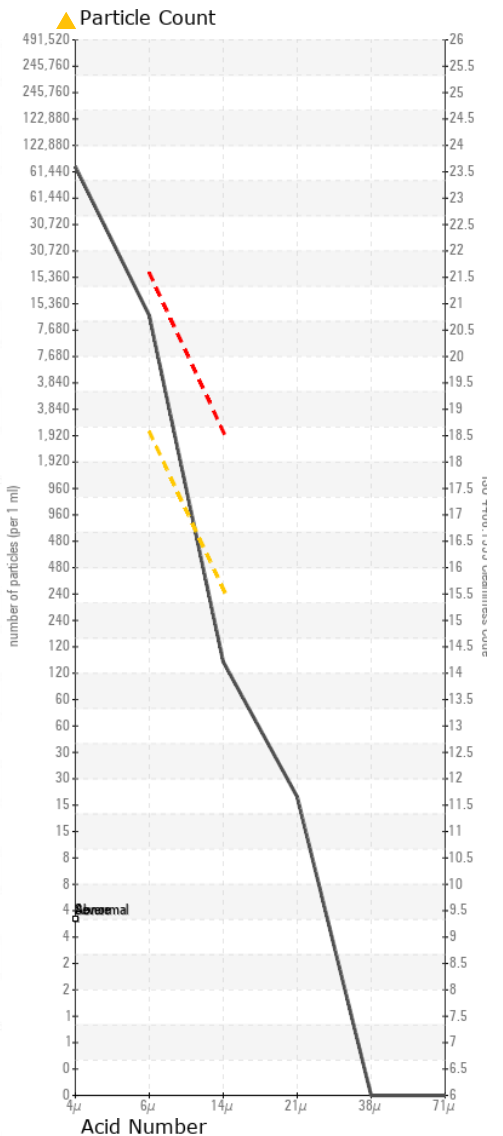
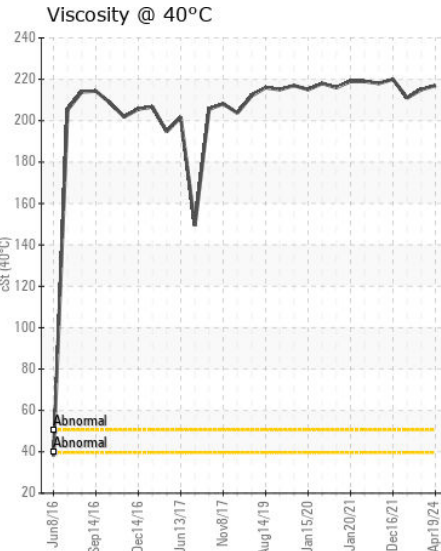
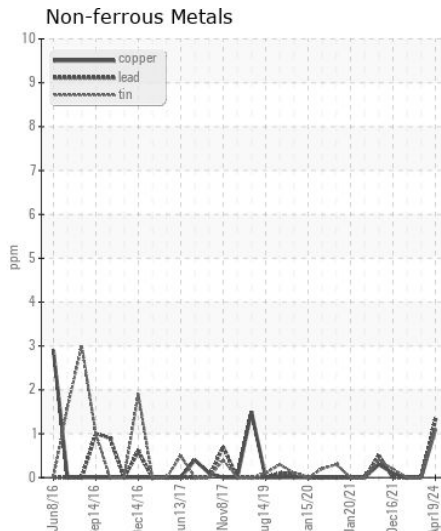
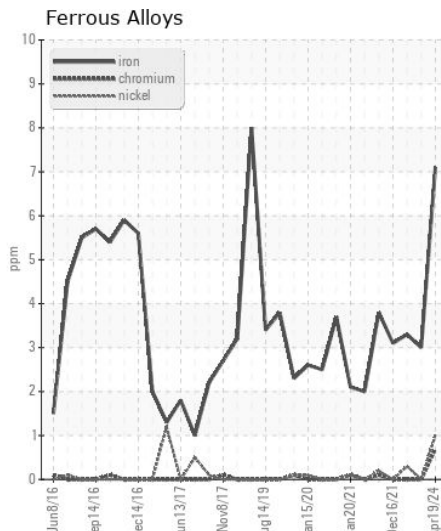
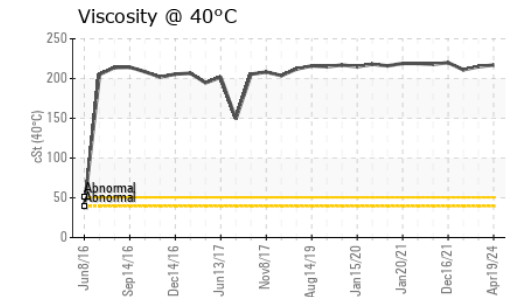
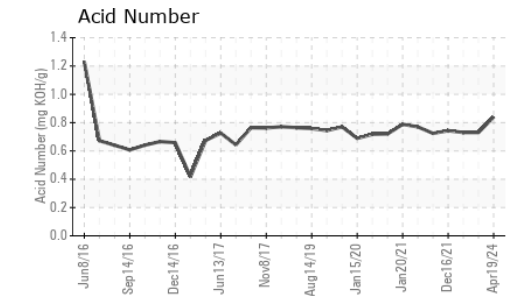
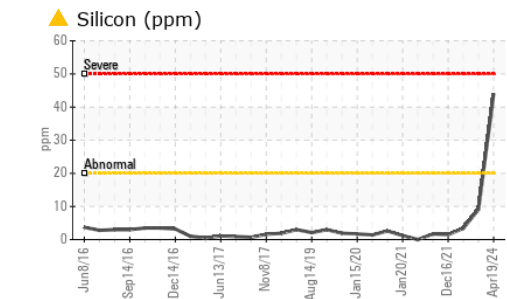
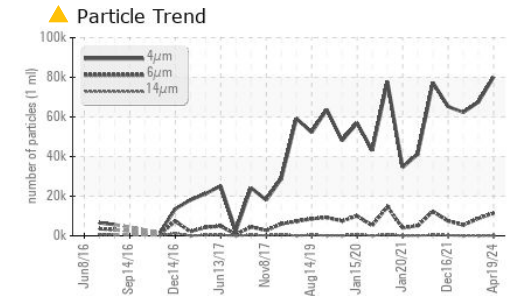
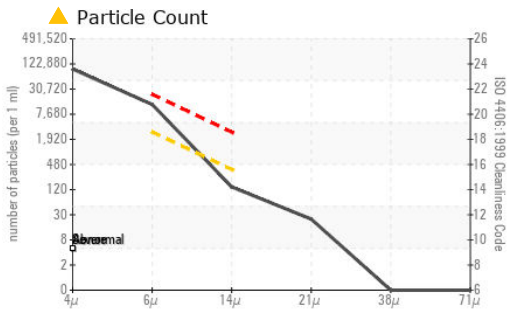
CONTAMINATION

There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal.

FLUID CONDITION

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

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|------------------|----------|--------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | PTK0001407 | PTK0000357 | PTK0001283 |
| Sample Date | | Client Info | | 19 Apr 2024 | 09 Nov 2023 | 23 Nov 2022 |
| Machine Age | wks | Client Info | | 0 | 0 | 0 |
| Oil Age | wks | Client Info | | 0 | 0 | 0 |
| Filter Age | wks | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| Iron | ppm | ASTM D5185m | >20 | 7 | 3 | 3 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >10 | 1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 5 | 3 | <1 |
| Lead | ppm | ASTM D5185m | >10 | 1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >75 | 1 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >10 | 1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >20 | ▲ 44 | 9 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 2 | <1 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | | 80186 | 67498 | 62314 |
| Particles >6µm | | ASTM D7647 | >2500 | ▲ 11420 | ▲ 8845 | ▲ 5370 |
| Particles >14µm | | ASTM D7647 | >320 | 123 | 74 | 75 |
| Particles >21µm | | ASTM D7647 | >80 | 21 | 10 | 14 |
| Particles >38µm | | ASTM D7647 | >20 | 0 | 0 | 1 |
| Particles >71µm | | ASTM D7647 | >4 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >18/15 | ▲ 21/14 | ▲ 20/13 | ▲ 20/13 |
| 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 | >0.1 | NEG | NEG | NEG |
| Sodium | ppm | ASTM D5185m | | 3 | 2 | <1 |
| Boron | ppm | ASTM D5185m | | 27 | 27 | 22 |
| Barium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 1 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | | 2 | 3 | 1 |
| Calcium | ppm | ASTM D5185m | | 12 | 0 | 3 |
| Phosphorus | ppm | ASTM D5185m | | 333 | 309 | 341 |
| Zinc | ppm | ASTM D5185m | | 8 | 0 | 1 |
| Sulfur | ppm | ASTM D5185m | | 18924 | 15607 | 19511 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.84 | 0.73 | 0.73 |
| Visc @ 40°C | cSt | ASTM D445 | | 217 | 215 | 211 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PTK0001407

Lab Number : 06159783

Unique Number : 10995206

Test Package : MOB 2

Received : 24 Apr 2024

Tested : 25 Apr 2024

Diagnosed : 26 Apr 2024 - Don Baldrige

GRAPHIC PACKAGING

1500 NICHOLAS BLVD

ELK GROVE, IL

US 60017

Contact: TONY HILDY

anthonyhildy@graphicpkg.com

T: (847)437-1700

F:

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)