



OIL ANALYSIS REPORT

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

Area
WOOD PROCESSING EQUIPMENT
 Machine Id
CANTER TWIN
 Component
Hydraulic System
 Fluid
SHELL AW HYDRAULIC S2 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | PE0003623 | PE0000639 | PE0000739 |
| Sample Date | | Client Info | | 07 Jun 2024 | 15 Mar 2024 | 25 Jan 2024 |
| 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 | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| PQ | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--------------|--------|-------------|-----------|--------------|----------|----------|
| PQ | | ASTM D8184 | | 15 | 14 | 11 |
| Iron | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 3 | 0 |
| Lead | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Copper | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >20 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

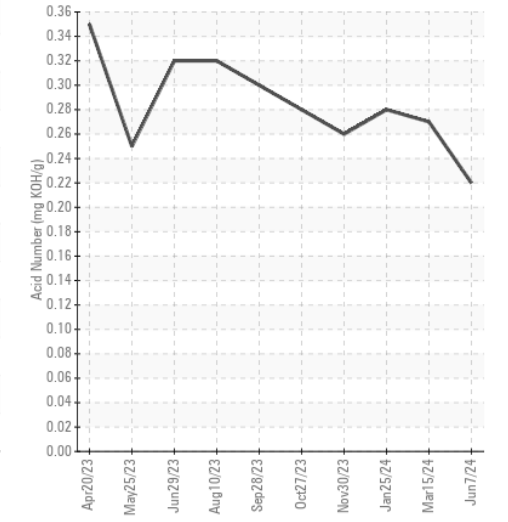
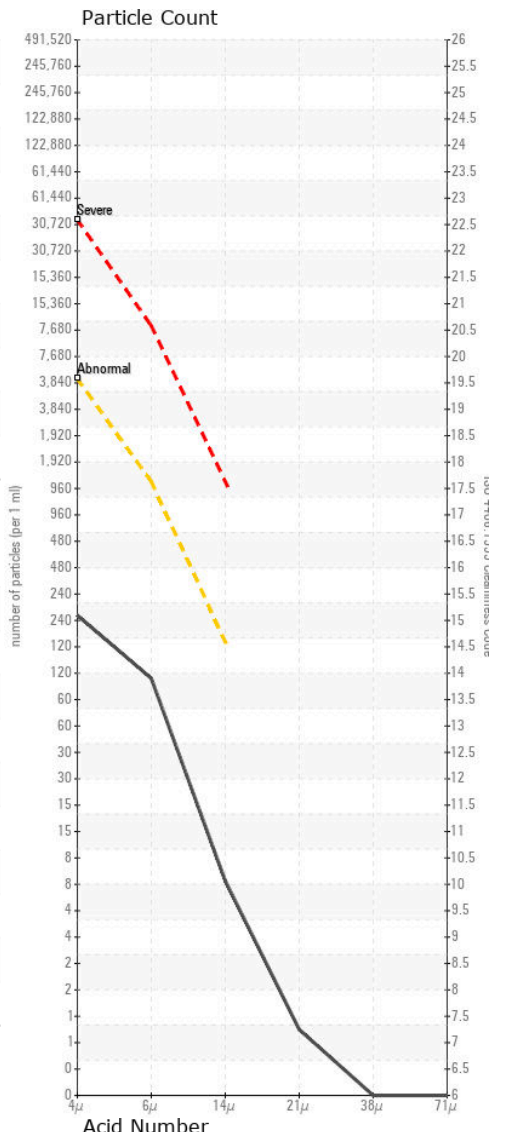
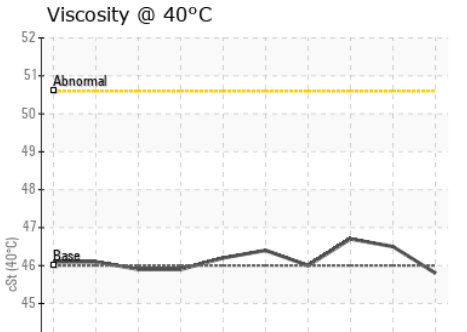
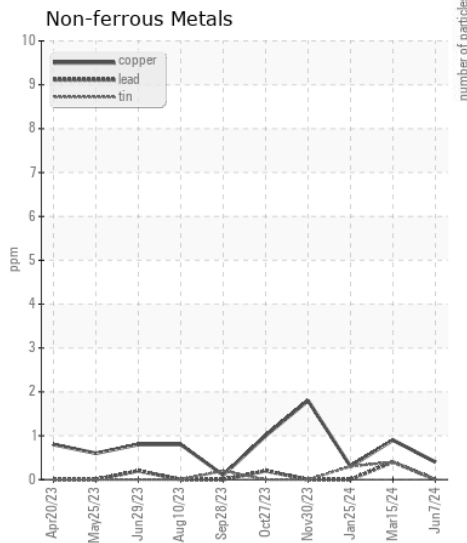
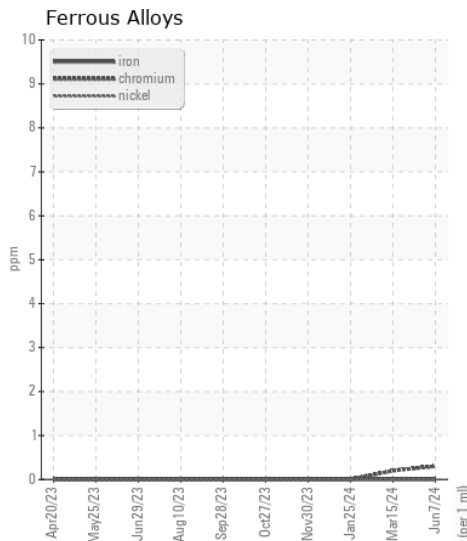
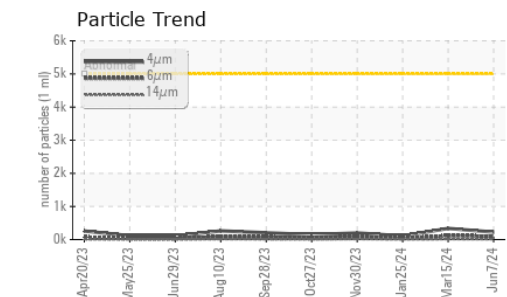
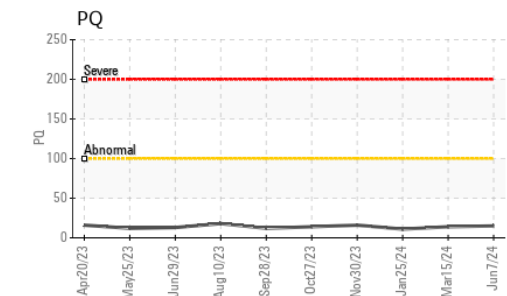
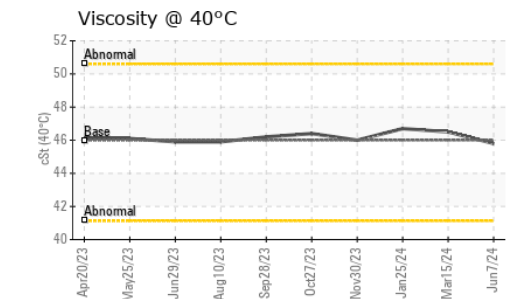
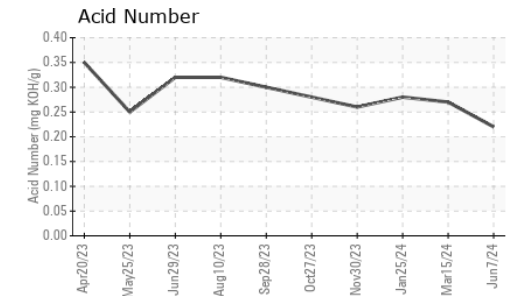
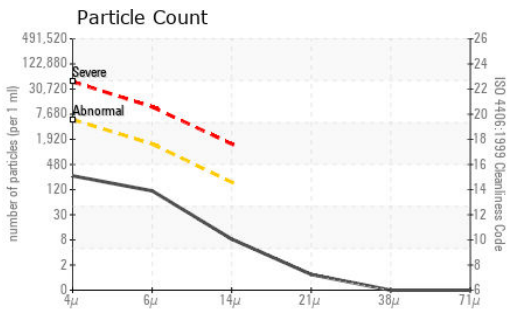
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

| | | | | | | |
|------------------|--------|--------------|-----------|-----------------|----------|---------|
| Silicon | ppm | ASTM D5185m | >15 | 0 | <1 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | 1 | 1 |
| Water | | WC Method | >0.05 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >5000 | 226 | 337 | 109 |
| Particles >6µm | | ASTM D7647 | >1300 | 99 | 117 | 36 |
| Particles >14µm | | ASTM D7647 | >160 | 7 | 12 | 2 |
| Particles >21µm | | ASTM D7647 | >40 | 1 | 4 | 1 |
| Particles >38µm | | ASTM D7647 | >10 | 0 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 15/14/10 | 16/14/11 | 14/12/9 |
| 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 |

FLUID CONDITION

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

| | | | | | | |
|------------------|----------|-------------|----|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | 9 | 11 | 8 |
| Calcium | ppm | ASTM D5185m | | 48 | 59 | 48 |
| Phosphorus | ppm | ASTM D5185m | | 274 | 264 | 270 |
| Zinc | ppm | ASTM D5185m | | 318 | 289 | 300 |
| Sulfur | ppm | ASTM D5185m | | 982 | 731 | 765 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.22 | 0.27 | 0.28 |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 45.8 | 46.5 | 46.7 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0003623
Lab Number : 06214535
Unique Number : 11087399
Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

WEYERHAEUSER - RAYMOND LUMBER
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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)

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