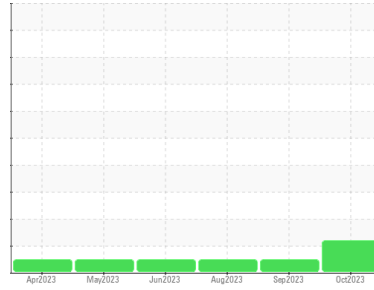


PROBLEM SUMMARY

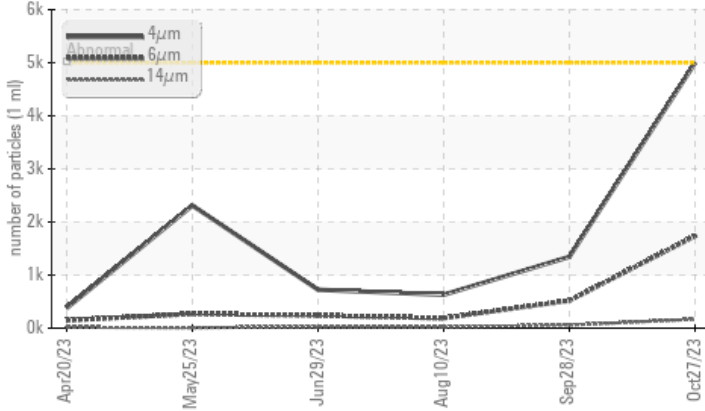
Sample Rating Trend



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

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

| Sample Status | | | ATTENTION | NORMAL | NORMAL |
|-----------------|--------------|-----------|------------|----------|----------|
| Particles >6µm | ASTM D7647 | >1300 | ▲ 1736 | 518 | 187 |
| Particles >14µm | ASTM D7647 | >160 | ▲ 168 | 57 | 22 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | ▲ 19/18/15 | 18/16/13 | 16/15/12 |

Customer Id: WEYRAY
 Sample No.: PE0000625
 Lab Number: 06000390
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

28 Sep 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



10 Aug 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



29 Jun 2023 Diag: Angela Borella

NORMAL

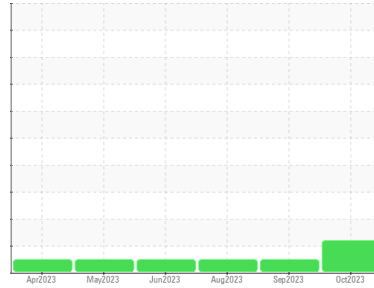


Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



Area
WOOD PROCESSING EQUIPMENT
 Machine Id
GANG
 Component
Hydraulic System
 Fluid
SHELL AW HYDRAULIC S2 46 (--- 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 particulates 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 | PE0000625 | PE0000721 | PE0000637 |
| Sample Date | Client Info | 27 Oct 2023 | 28 Sep 2023 | 10 Aug 2023 |
| Machine Age | hrs | Client Info | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 |
| Oil Changed | Client Info | N/A | N/A | N/A |
| Sample Status | | ATTENTION | NORMAL | NORMAL |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|----------|------------|-----------------|-----------|----------|
| PQ | ASTM D8184 | 14 | 12 | 17 |
| Iron | ppm | ASTM D5185m >20 | 0 | 0 |
| Chromium | ppm | ASTM D5185m >20 | 0 | 0 |
| Nickel | ppm | ASTM D5185m >20 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >20 | 0 | 0 |
| Lead | ppm | ASTM D5185m >20 | 0 | 0 |
| Copper | ppm | ASTM D5185m >20 | 10 | 8 |
| Tin | ppm | ASTM D5185m >20 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|------------|------------|-------------|------------|----------|
| Boron | ppm | ASTM D5185m | 0 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 10 | 12 |
| Calcium | ppm | ASTM D5185m | 63 | 61 |
| Phosphorus | ppm | ASTM D5185m | 264 | 253 |
| Zinc | ppm | ASTM D5185m | 282 | 271 |
| Sulfur | ppm | ASTM D5185m | 731 | 647 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|------------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | 2 | 2 |
| Sodium | ppm | ASTM D5185m | 0 | 0 |
| Potassium | ppm | ASTM D5185m >20 | 0 | <1 |

FLUID CLEANLINESS

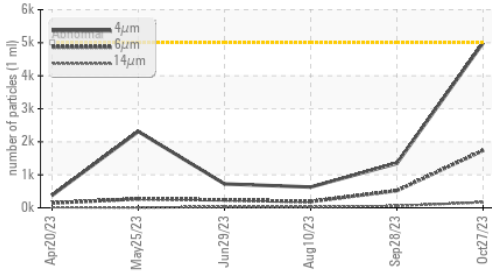
| method | limit/base | current | history1 | history2 |
|-----------------|--------------|-----------|-------------------|----------|
| Particles >4µm | ASTM D7647 | >5000 | 4996 | 1344 |
| Particles >6µm | ASTM D7647 | >1300 | ▲ 1736 | 518 |
| Particles >14µm | ASTM D7647 | >160 | ▲ 168 | 57 |
| Particles >21µm | ASTM D7647 | >40 | 32 | 8 |
| Particles >38µm | ASTM D7647 | >10 | 0 | 0 |
| Particles >71µm | ASTM D7647 | >3 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | ▲ 19/18/15 | 18/16/13 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|------------------|------------|------------|-------------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.28 | 0.23 |

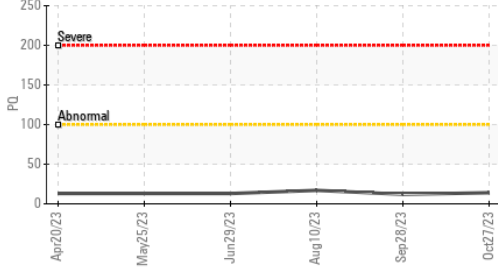
OIL ANALYSIS REPORT

▲ Particle Trend



| 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 |

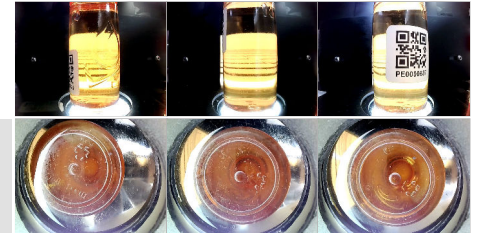
PQ



| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 46 | 45.8 | 45.6 |

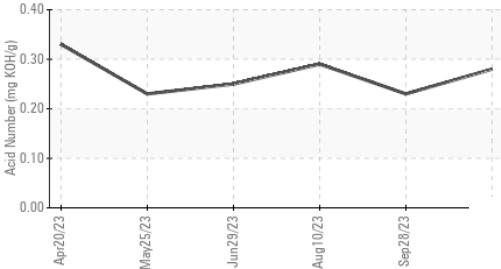
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

Color



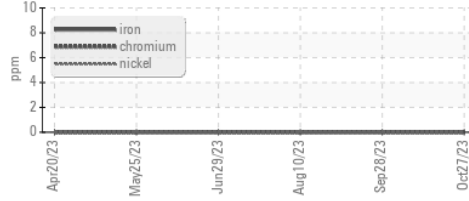
Bottom

Acid Number

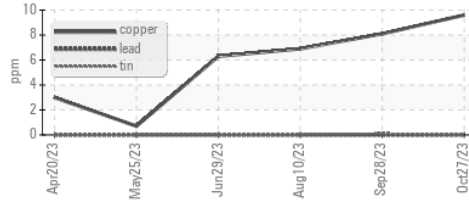


GRAPHS

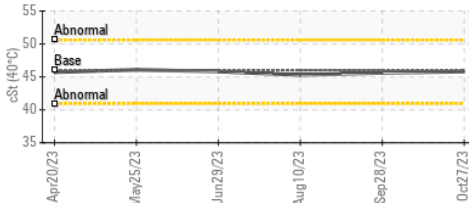
Ferrous Alloys



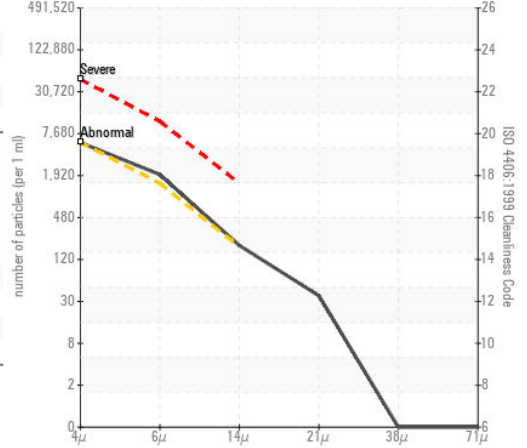
Non-ferrous Metals



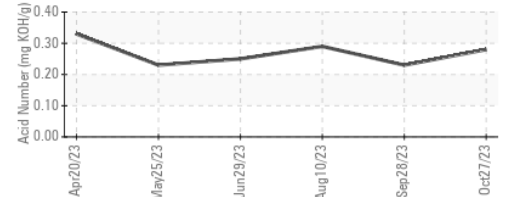
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WEYERHAEUSER - RAYMOND LUMBER
Sample No. : PE0000625
Lab Number : 06000390
Unique Number : 10728750
Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

WEYERHAEUSER - RAYMOND LUMBER
 1740 51 ELLIS ST
 RAYMOND, WA
 US 98577
 Contact: JOHNNY DOMINGUEZ
 johnny.dominguez@weyerhaeuser.com

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)