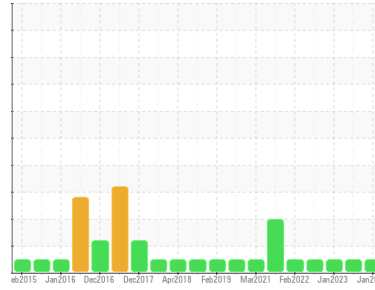




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
CMPL
 Machine Id
CMPL UNCOILER - MAIN (S/N 16-5300-0115)
 Component
Gearbox
 Fluid
GEAR OIL ISO 220 (--- QTS)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

The water content is negligible. There is no indication of any contamination 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 | | RP0039156 | RP0035027 | RP0031440 |
| Sample Date | Client Info | | 12 Jan 2024 | 07 Jul 2023 | 17 Jan 2023 |
| Machine Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | NORMAL | NORMAL | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|------------|------------------|--------------|----------|----------|
| PQ | ASTM D8184 | | 46 | 104 | 171 |
| Iron | ppm | ASTM D5185m >200 | 10 | 56 | 67 |
| Chromium | ppm | ASTM D5185m >15 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185m >15 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >25 | 1 | 2 | 0 |
| Lead | ppm | ASTM D5185m >100 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >200 | <1 | 1 | 2 |
| Tin | ppm | ASTM D5185m >25 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-----------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m 50 | 3 | 2 | 2 |
| Barium | ppm | ASTM D5185m 15 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m 15 | <1 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m 50 | 4 | 0 | 1 |
| Calcium | ppm | ASTM D5185m 50 | 19 | 16 | 16 |
| Phosphorus | ppm | ASTM D5185m 350 | 152 | 120 | 109 |
| Zinc | ppm | ASTM D5185m 100 | 13 | 0 | 3 |

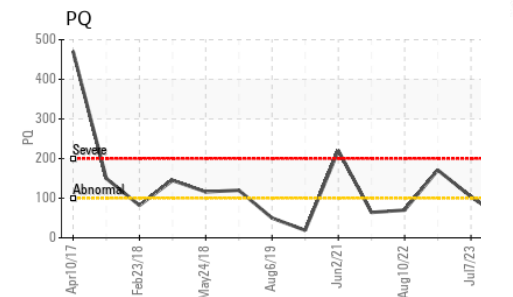
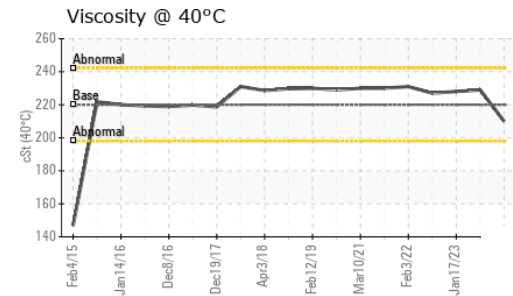
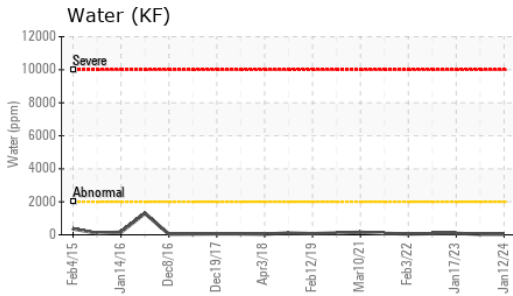
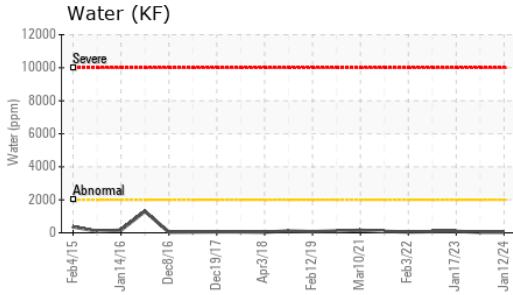
CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >50 | 3 | 5 | 5 |
| Sodium | ppm | ASTM D5185m | <1 | 3 | 3 |
| Potassium | ppm | ASTM D5185m >20 | <1 | <1 | <1 |
| Water | % | ASTM D6304 >0.2 | 0.003 | 0.003 | 0.008 |
| ppm Water | ppm | ASTM D6304 >2000 | 34 | 36.0 | 89.4 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.85 | 0.20 | 0.29 | 0.32 |

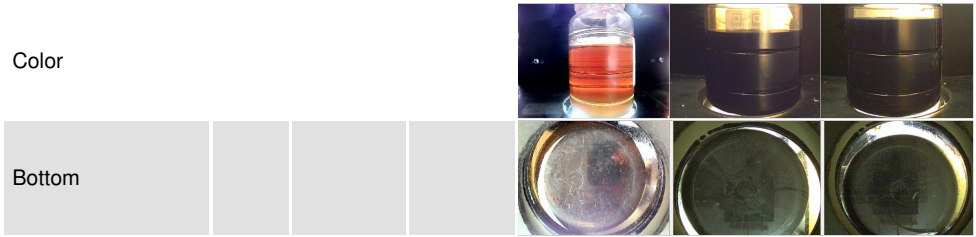
OIL ANALYSIS REPORT



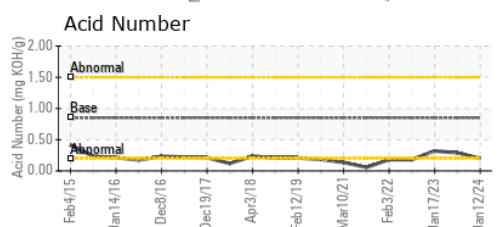
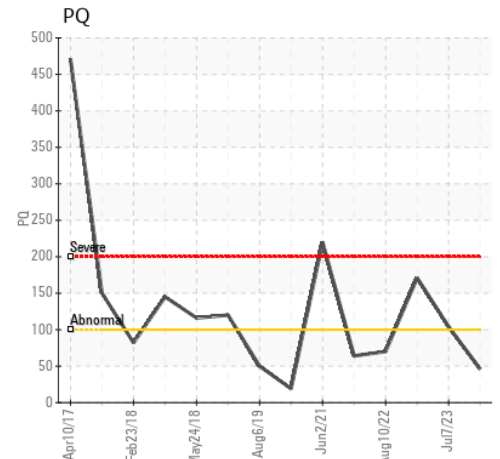
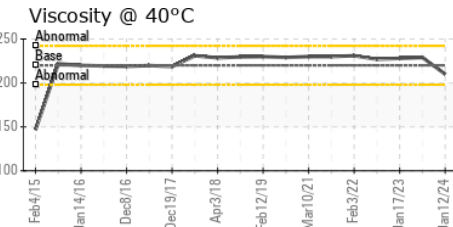
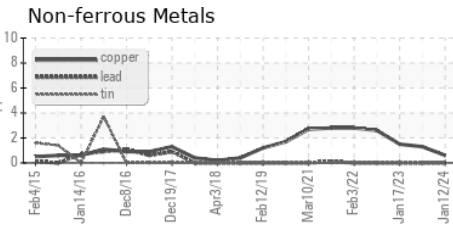
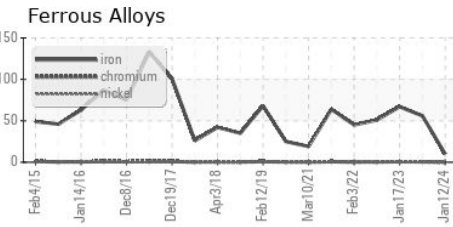
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | MODER |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | 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 | >0.2 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 220 | 210 | 229 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0039156 **Recieved** : 16 Jan 2024
Lab Number : 06062077 **Diagnosed** : 18 Jan 2024
Unique Number : 10833459 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: PQ)

OUTOKUMPU STAINLESS USA
 HWY 43 N
 CALVERT, AL
 US 36513
 Contact: MARIO JOHNSON
 Mario.johnson@outokumpu.com
 T: (251)321-4105
 F: x:

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)