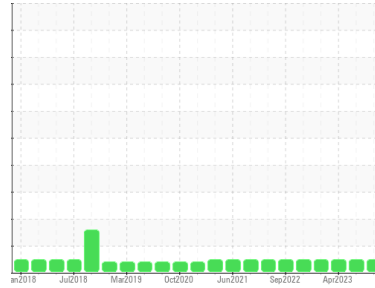




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
106 Mill
 Machine Id
#2 DESCALER - PUMP LUBE (PLS045)
 Component
Pump Bearing Lube
 Fluid
ROYAL PURPLE SYNFILM 32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

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 | | WC0837501 | WC0714564 | WC0714604 |
| Sample Date | Client Info | | 24 Aug 2023 | 01 Jun 2023 | 02 Apr 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* | | 0 | 0 | 0 |
| Iron | ppm | ASTM D5185(m) >120 | 3 | 2 | 2 |
| Chromium | ppm | ASTM D5185(m) >5 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) >20 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) >4 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185(m) >30 | 5 | <1 | 4 |
| Copper | ppm | ASTM D5185(m) >17 | 2 | 2 | 2 |
| Tin | ppm | ASTM D5185(m) >10 | 0 | 0 | <1 |
| Antimony | ppm | ASTM D5185(m) | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | <1 | 0 | 0 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) 90 | 65 | 73 | 71 |
| Calcium | ppm | ASTM D5185(m) | 2 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185(m) | 4 | 2 | 3 |
| Zinc | ppm | ASTM D5185(m) | 3 | 2 | 2 |
| Sulfur | ppm | ASTM D5185(m) | 12833 | 14826 | 15336 |
| Lithium | ppm | ASTM D5185(m) | <1 | <1 | <1 |

CONTAMINANTS

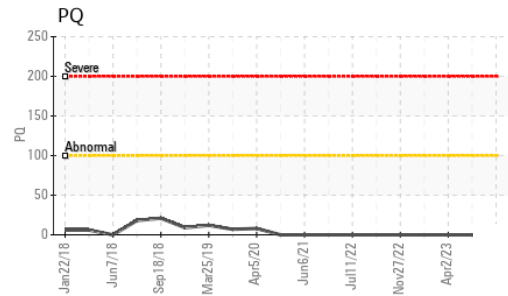
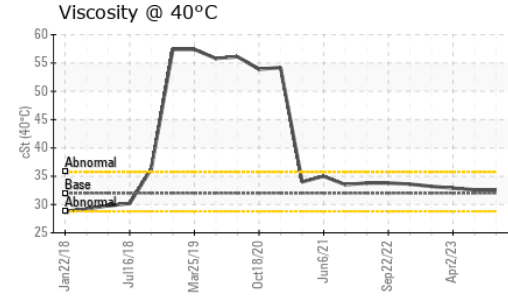
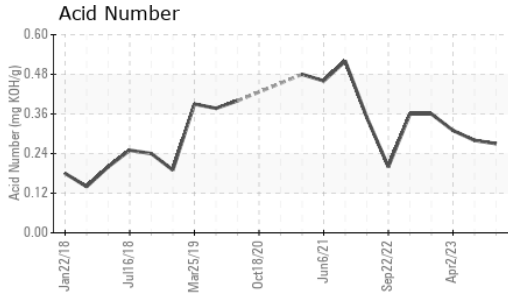
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >25 | <1 | <1 | <1 |
| Sodium | ppm | ASTM D5185(m) | 3 | 2 | 2 |
| Potassium | ppm | ASTM D5185(m) >20 | <1 | <1 | <1 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.27 | 0.28 | 0.31 |



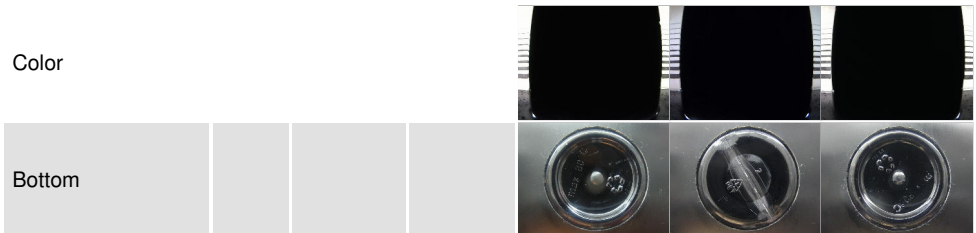
OIL ANALYSIS REPORT



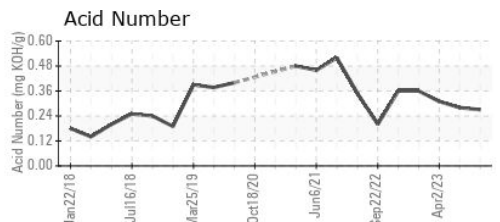
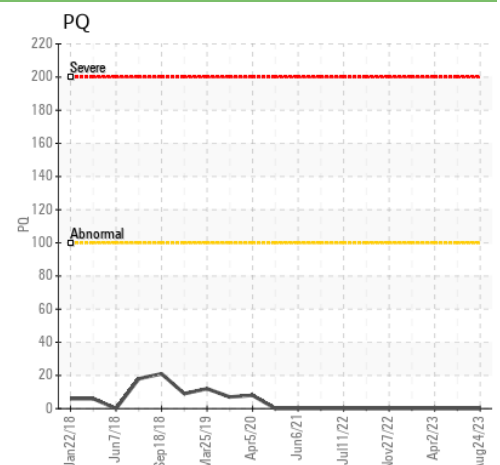
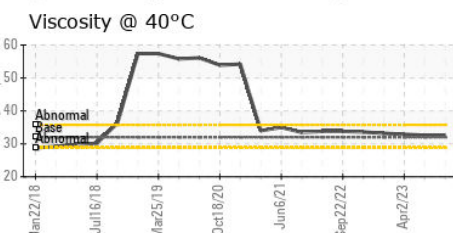
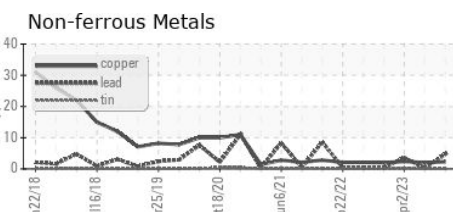
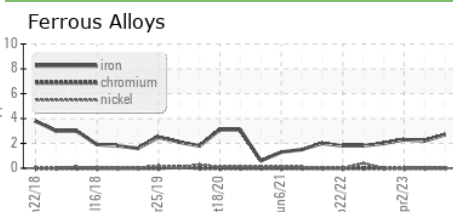
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE |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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|---------------|---------|-------------|----------|------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 32 | 32.5 | 32.6 | 32.9 |

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



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ALGOMA STEEL INC. - STORES DEPT.**
Sample No. : WC0837501 **Received** : 25 Aug 2023 **301 WALLACE TERRACE**
Lab Number : 02578463 **Diagnosed** : 29 Aug 2023 **SAULT STE MARIE, ON**
Unique Number : 5631523 **Diagnostician** : Wes Davis **CA P6C 1K8**
Test Package : IND 2

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.