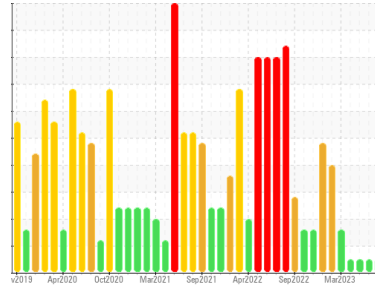




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
DIRECT STRIP MILL/FINISHING
 Machine Id
PL8 ROLL BITE LUBE SYSTEM (DSC023) (S/N 1000017405)
 Component
Gear Lube System
 Fluid
NOT GIVEN (2000 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

Wear

Component wear rates appear to be normal (unconfirmed).

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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 | | WC0780881 | WC0813694 | WC0780818 |
| Sample Date | Client Info | | 08 Aug 2023 | 21 Jun 2023 | 15 May 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 | |
|-----------|--------|---------------|---------|--------------|----------|----|
| Iron | ppm | ASTM D5185(m) | >150 | 24 | 32 | 18 |
| Chromium | ppm | ASTM D5185(m) | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >10 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >25 | <1 | 0 | 0 |
| Lead | ppm | ASTM D5185(m) | >100 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185(m) | >50 | <1 | <1 | 0 |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | 0 | <1 |
| Antimony | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| 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) | | 2 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | <1 | 0 |
| Magnesium | ppm | ASTM D5185(m) | | 0 | <1 | 0 |
| Calcium | ppm | ASTM D5185(m) | | <1 | 2 | 0 |
| Phosphorus | ppm | ASTM D5185(m) | | 2 | 3 | 1 |
| Zinc | ppm | ASTM D5185(m) | | 2 | 3 | 2 |
| Sulfur | ppm | ASTM D5185(m) | | 10833 | 11293 | 11044 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|---------------|---------|--------------|----------|----|
| Silicon | ppm | ASTM D5185(m) | >50 | 4 | <1 | <1 |
| Sodium | ppm | ASTM D5185(m) | | 0 | 2 | <1 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | 0 |

FLUID CLEANLINESS

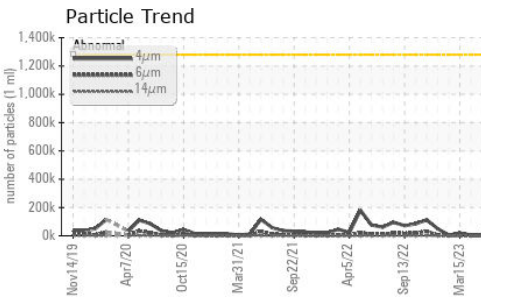
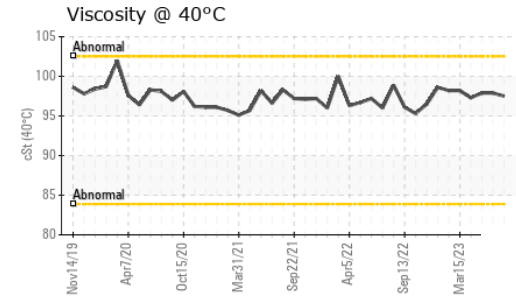
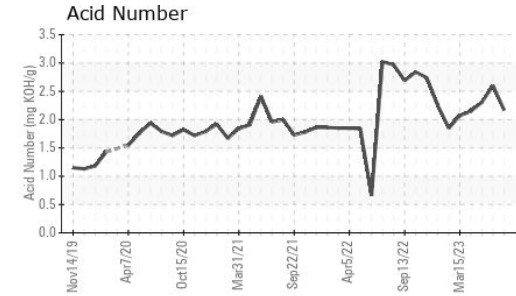
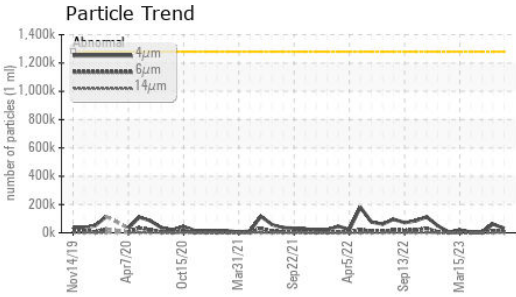
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >1280000 | 32184 | 61043 | 3735 |
| Particles >6µm | ASTM D7647 | >640000 | 8308 | 14717 | 829 |
| Particles >14µm | ASTM D7647 | >20000 | 497 | 659 | 52 |
| Particles >21µm | ASTM D7647 | >5000 | 139 | 139 | 14 |
| Particles >38µm | ASTM D7647 | >1300 | 15 | 4 | 1 |
| Particles >71µm | ASTM D7647 | >320 | 8 | 1 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >27/26/21 | 22/20/16 | 23/21/17 | 19/17/13 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 2.17 | 2.60 | 2.31 |



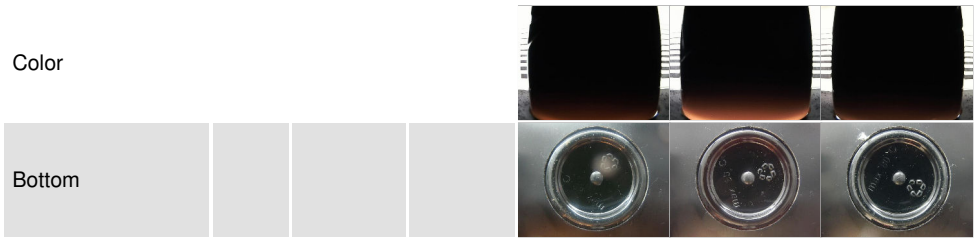
OIL ANALYSIS REPORT



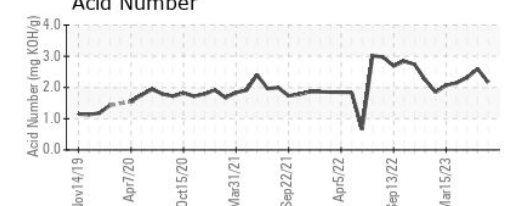
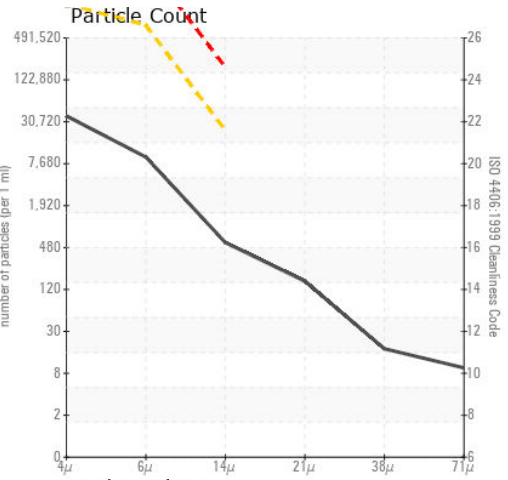
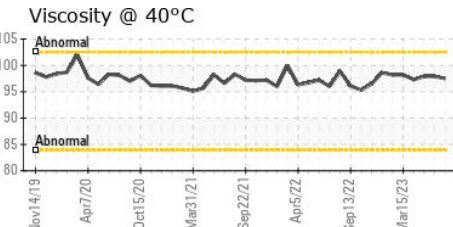
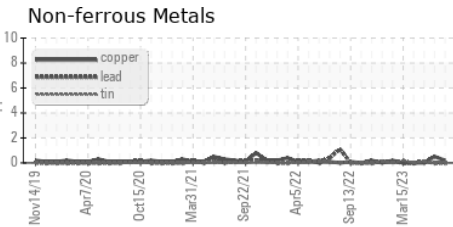
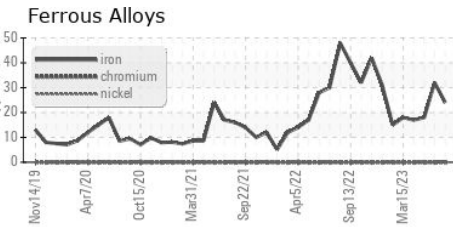
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE | 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* | >0.1 | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 97.5 | 97.9 | 97.9 |

| 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. : WC0780881 **Received** : 11 Aug 2023 **301 WALLACE TERRACE**
Lab Number : 02575461 **Diagnosed** : 14 Aug 2023 **SAULT STE MARIE, ON**
Unique Number : 5620512 **Diagnostician** : Kevin Marson **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.

Contact: Algoma Reliability
 algomareliability@algoma.com
 T: (705)206-1059
 F: (705)945-3585