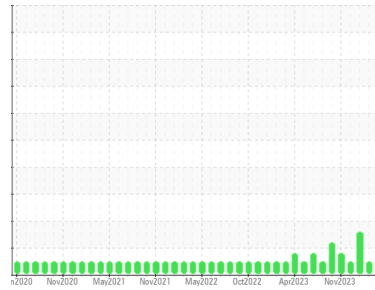




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**Direct Strip Mill/Caster**

Machine Id

**#1 COMPRESSOR (DSC088) (S/N 100029205)**

Component

**Compressor**

Fluid

**COMPRESSOR OIL ISO 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. 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 |             | <b>WC0931239</b>   | WC0780553   | WC0837378   |
| Sample Date   | Client Info |             | <b>11 Jun 2024</b> | 16 Apr 2024 | 29 Feb 2024 |
| Machine Age   | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info |             | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | ATTENTION   |

## WEAR METALS

|           | method | limit/base    | current | history1 | history2 |
|-----------|--------|---------------|---------|----------|----------|
| Iron      | ppm    | ASTM D5185(m) | >50     | <b>0</b> | 0        |
| Chromium  | ppm    | ASTM D5185(m) | >10     | <b>0</b> | 0        |
| Nickel    | ppm    | ASTM D5185(m) |         | <b>0</b> | 0        |
| Titanium  | ppm    | ASTM D5185(m) |         | <b>0</b> | 0        |
| Silver    | ppm    | ASTM D5185(m) |         | <b>0</b> | 0        |
| Aluminum  | ppm    | ASTM D5185(m) | >25     | <b>0</b> | <1       |
| Lead      | ppm    | ASTM D5185(m) | >25     | <b>0</b> | 0        |
| Copper    | ppm    | ASTM D5185(m) | >50     | <b>1</b> | 2        |
| Tin       | ppm    | ASTM D5185(m) | >15     | <b>0</b> | 0        |
| Antimony  | ppm    | ASTM D5185(m) |         | <b>0</b> | 0        |
| Vanadium  | ppm    | ASTM D5185(m) |         | <b>0</b> | 0        |
| Beryllium | ppm    | ASTM D5185(m) |         | <b>0</b> | 0        |
| Cadmium   | ppm    | ASTM D5185(m) |         | <b>0</b> | 0        |

## ADDITIVES

|            | method | limit/base    | current | history1     | history2 |
|------------|--------|---------------|---------|--------------|----------|
| Boron      | ppm    | ASTM D5185(m) | 5       | <b>1</b>     | <1       |
| Barium     | ppm    | ASTM D5185(m) | 5       | <b>121</b>   | 119      |
| Molybdenum | ppm    | ASTM D5185(m) | 5       | <b>0</b>     | 0        |
| Manganese  | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        |
| Magnesium  | ppm    | ASTM D5185(m) | 5       | <b>&lt;1</b> | 0        |
| Calcium    | ppm    | ASTM D5185(m) | 5       | <b>0</b>     | <1       |
| Phosphorus | ppm    | ASTM D5185(m) | 150     | <b>202</b>   | 213      |
| Zinc       | ppm    | ASTM D5185(m) | 5       | <b>&lt;1</b> | <1       |
| Sulfur     | ppm    | ASTM D5185(m) | 5000    | <b>144</b>   | 141      |
| Lithium    | ppm    | ASTM D5185(m) |         | <b>&lt;1</b> | <1       |

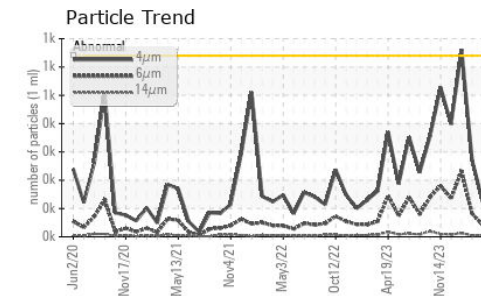
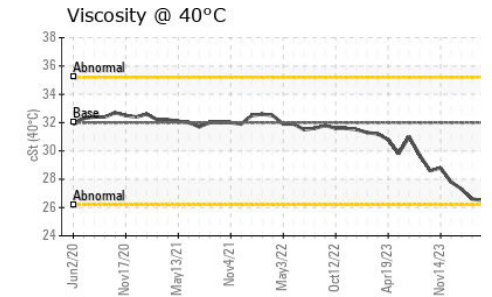
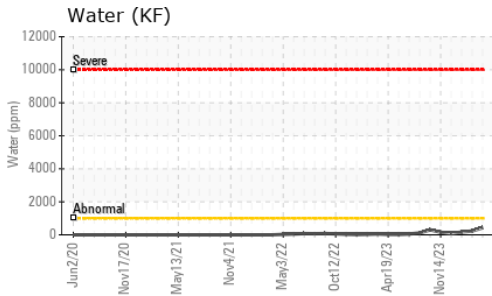
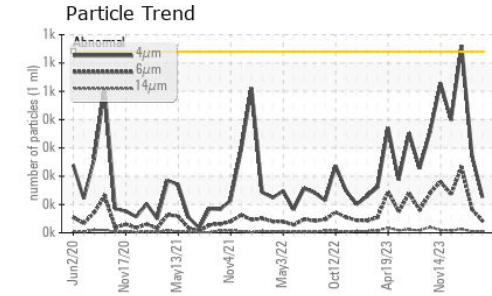
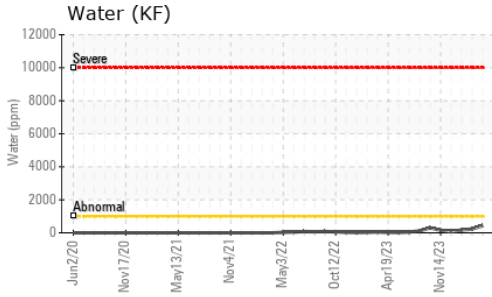
## CONTAMINANTS

|           | method | limit/base    | current | history1     | history2 |
|-----------|--------|---------------|---------|--------------|----------|
| Silicon   | ppm    | ASTM D5185(m) | >25     | <b>0</b>     | 0        |
| Sodium    | ppm    | ASTM D5185(m) |         | <b>7</b>     | <1       |
| Potassium | ppm    | ASTM D5185(m) | >20     | <b>1</b>     | 0        |
| Water     | %      | ASTM D6304*   | >0.1    | <b>0.042</b> | 0.023    |
| ppm Water | ppm    | ASTM D6304*   | >1000   | <b>428</b>   | 232      |

## FLUID CLEANLINESS

|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >640       | <b>125</b>      | 271      | 662      |
| Particles >6µm  | ASTM D7647   | >160       | <b>42</b>       | 82       | 233      |
| Particles >14µm | ASTM D7647   | >10        | <b>5</b>        | 5        | 13       |
| Particles >21µm | ASTM D7647   | >3         | <b>1</b>        | 2        | 3        |
| Particles >38µm | ASTM D7647   | >3         | <b>1</b>        | 0        | 1        |
| Particles >71µm | ASTM D7647   | >3         | <b>0</b>        | 0        | 1        |
| Oil Cleanliness | ISO 4406 (c) | >16/14/10  | <b>14/13/10</b> | 15/14/10 | 17/15/11 |

# OIL ANALYSIS REPORT

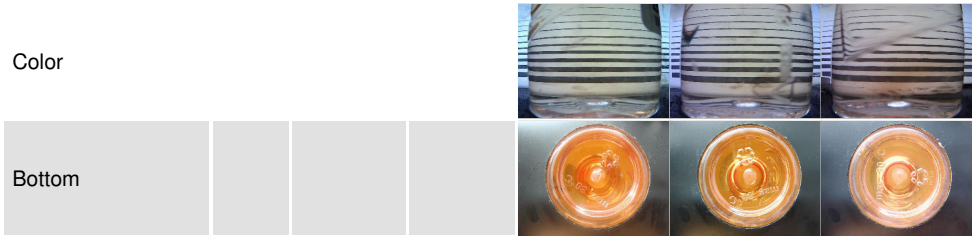


| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D974* | 0.51       | <b>0.10</b> | 0.11     | 0.15     |

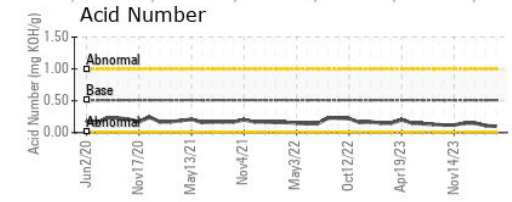
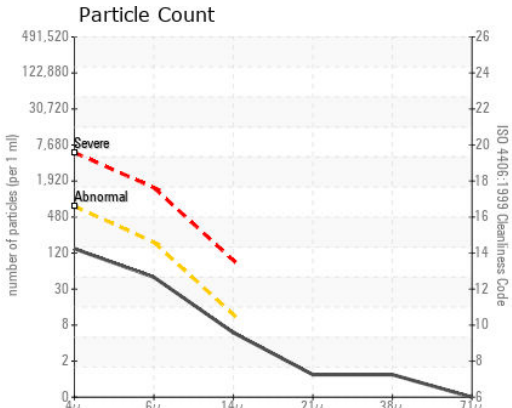
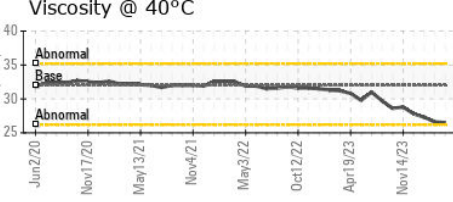
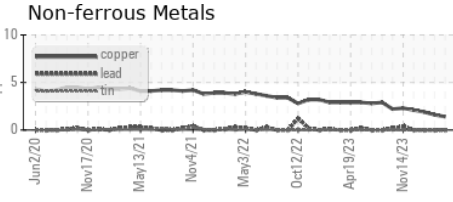
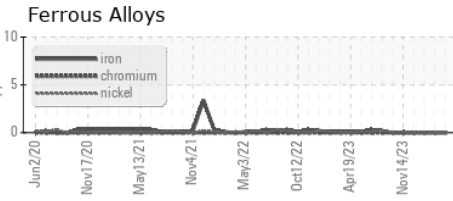
| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Precipitate      | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Silt             | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Debris           | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Sand/Dirt        | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Appearance       | scalar | Visual* | NORML      | <b>NORML</b> | NORML    | NORML    |
| Odor             | scalar | Visual* | NORML      | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water | scalar | Visual* | >0.1       | <b>NEG</b>   | NEG      | NEG      |
| Free Water       | scalar | Visual* |            | <b>NEG</b>   | NEG      | NEG      |

| FLUID PROPERTIES |     | method        | limit/base | current     | history1 | history2 |
|------------------|-----|---------------|------------|-------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D7279(m) | 32         | <b>26.5</b> | 26.6     | 27.3     |

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



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0931239  
**Lab Number** : **02642017**  
**Unique Number** : 5799556  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount, TAN Man )

**ALGOMA STEEL INC. - STORES DEPT.**  
 301 WALLACE TERRACE  
 SAULT STE MARIE, ON  
 CA P6C 1K8

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.

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 algomareliability@algoma.com  
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 F: (705)945-3585