



OIL ANALYSIS REPORT

Sample Rating Trend

WATER



Area
Arcelor Mittal - D00400
 Machine Id
AM957
 Component
Unknown Component
 Fluid
MORG OIL 220 (--- GAL)

DIAGNOSIS

- ▲ **Recommendation**
This is a baseline read-out on the submitted sample.
- ▲ **Wear**
Iron ppm levels are noted.
- ▲ **Contamination**
Water contamination levels are abnormally high. Water contamination levels are abnormally high.. ppm Water contamination levels are abnormally high. ppm Water contamination levels are abnormally high.. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >21µm and oil cleanliness are abnormally high.
- ▲ **Fluid Condition**
Visc @ 100°C is abnormally low.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|------------------|-------------|-------------|--------------------|----------|----------|
| Department | Client Info | | Sales | --- | --- |
| Sample From | Client Info | | Machine | --- | --- |
| Production Stage | Client Info | | Initial | --- | --- |
| Sent to WC | Client Info | | 12/15/2023 | --- | --- |
| Sample Number | Client Info | | E30000702 | --- | --- |
| Sample Date | Client Info | | 13 Dec 2023 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|---------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) | ▲ 80 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | <1 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | 1 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | <1 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | 1 | --- | --- |
| Lead | ppm | ASTM D5185(m) | <1 | --- | --- |
| Copper | ppm | ASTM D5185(m) | 3 | --- | --- |
| Tin | ppm | ASTM D5185(m) | 2 | --- | --- |
| Antimony | ppm | ASTM D5185(m) | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Beryllium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185(m) | 0 | --- | --- |

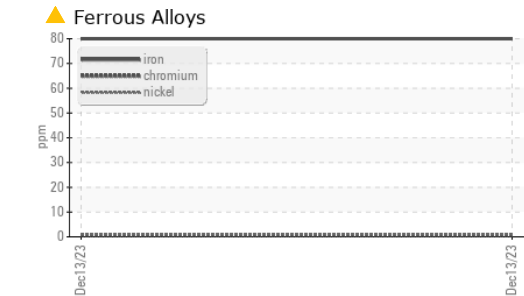
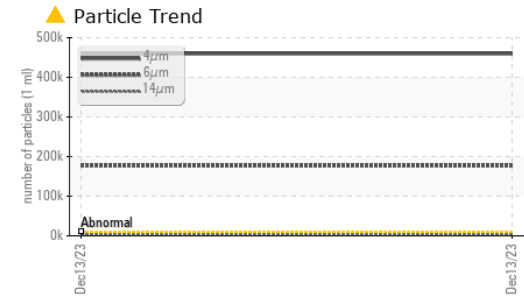
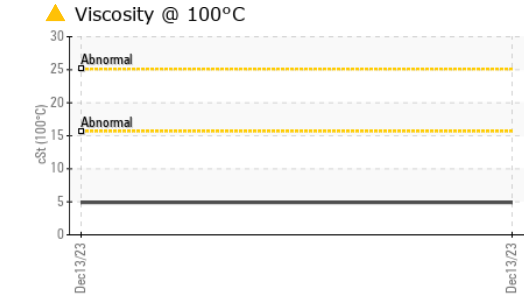
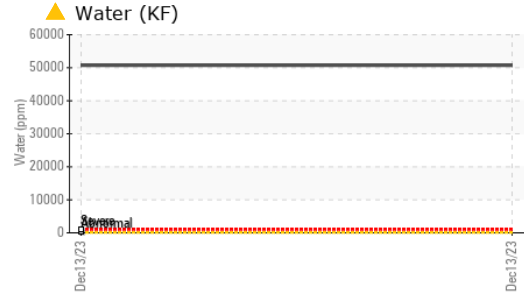
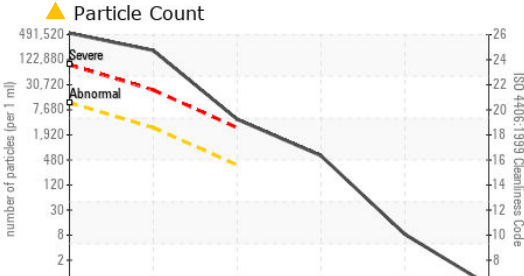
ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|---------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | 7 | --- | --- |
| Barium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | <1 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | 10 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | 12 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | 6 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | 6 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | 3651 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | <1 | --- | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|----------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | 2 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | 4 | --- | --- |
| Potassium | ppm | ASTM D5185(m) >20 | <1 | --- | --- |
| Water | % | ASTM D6304* | ▲ 5.073 | --- | --- |
| ppm Water | ppm | ASTM D6304* | ▲ 50739 | --- | --- |

OIL ANALYSIS REPORT



| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|-------------------|--------------|------------|------------|----------|----------|
| Particles >4µm | ASTM D7647 | >10000 | ▲ 459702 | --- | --- |
| Particles >6µm | ASTM D7647 | >2500 | ▲ 176974 | --- | --- |
| Particles >14µm | ASTM D7647 | >320 | 3974 | --- | --- |
| Particles >21µm | ASTM D7647 | >80 | ▲ 533 | --- | --- |
| Particles >38µm | ASTM D7647 | >20 | 7 | --- | --- |
| Particles >71µm | ASTM D7647 | >4 | 0 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | ▲ 26/25/19 | --- | --- |

| FLUID DEGRADATION | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|---------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.24 | --- | --- |

| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Precipitate | scalar | Visual* | NONE | NONE | --- | --- |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | VLITE | --- | --- |
| Appearance | scalar | Visual* | NORML | ▲ MILKY | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | .2% | --- | --- | |
| Free Water | scalar | Visual* | ▲ 1% | --- | --- | |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 239 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | ▲ 4.9 | --- | --- |

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

| | | | | | |
|--------|--|--|--|----------|----------|
| Color | | | | no image | no image |
| Bottom | | | | no image | no image |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30000702
Lab Number : 02604275
Unique Number : 5697360
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, TAN Man, VI)

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To discuss this sample report, contact Customer Service at 1-905-372-2251.
 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.