



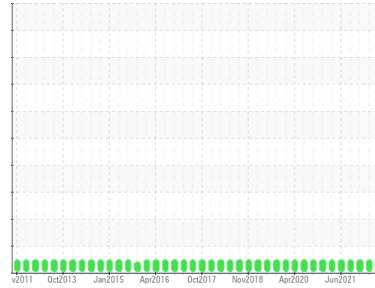
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
STARBOARD CRANE
 Machine Id
58-GB-7647B STARBOARD CRANE ROTATION NO 2 (S/N Maint Plan 28275)
 Component
Starboard Gearbox
 Fluid
MOBIL MOBILUBE HD PLUS 75W (--- LTR)



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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0711693 | WC0590007 | WC0590022 |
| Sample Date | Client Info | | 03 Aug 2023 | 15 May 2022 | 18 Jan 2022 |
| 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 | 35 | 34 | 32 |
| Chromium | ppm | ASTM D5185(m) >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) >10 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) >5 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185(m) >65 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) >80 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) >8 | 0 | 0 | 0 |
| 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) | 103 | 102 | 99 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185(m) | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 2 | 1 | 1 |
| Calcium | ppm | ASTM D5185(m) | 15 | 16 | 16 |
| Phosphorus | ppm | ASTM D5185(m) | 1028 | 1026 | 998 |
| Zinc | ppm | ASTM D5185(m) | 17 | 16 | 16 |
| Sulfur | ppm | ASTM D5185(m) | 21690 | 22623 | 22175 |
| Lithium | ppm | ASTM D5185(m) | <1 | <1 | <1 |

CONTAMINANTS

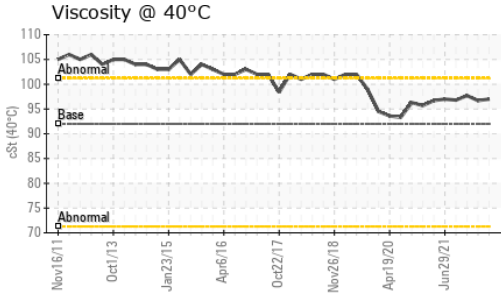
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >20 | 2 | 1 | 1 |
| Sodium | ppm | ASTM D5185(m) | 1 | <1 | <1 |
| Potassium | ppm | ASTM D5185(m) >20 | <1 | 0 | <1 |

VISUAL

| | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal | scalar | Visual* NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* NONE | NONE | NONE | NONE |
| Precipitate | scalar | Visual* NONE | NONE | NONE | NONE |
| Silt | scalar | Visual* NONE | NONE | NONE | NONE |
| Debris | scalar | Visual* NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | Visual* NONE | NONE | NONE | NONE |
| Appearance | scalar | Visual* NORML | NORML | NORML | NORML |
| Odor | scalar | Visual* NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* >0.2 | NEG | NEG | NEG |
| Free Water | scalar | Visual* | NEG | NEG | NEG |

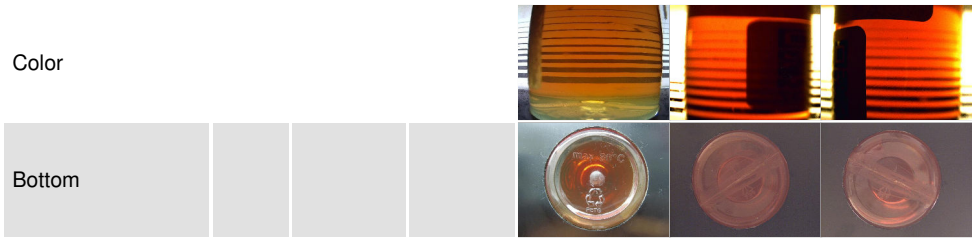


OIL ANALYSIS REPORT

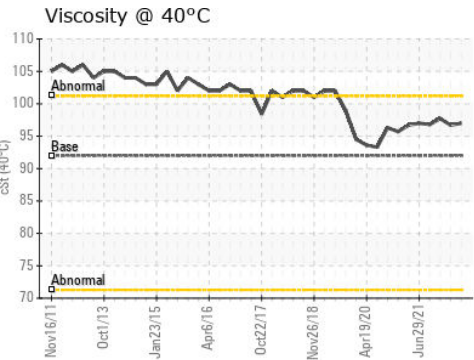
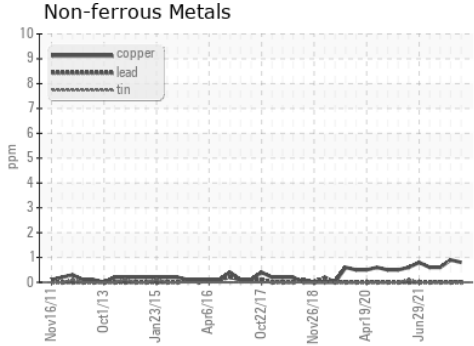
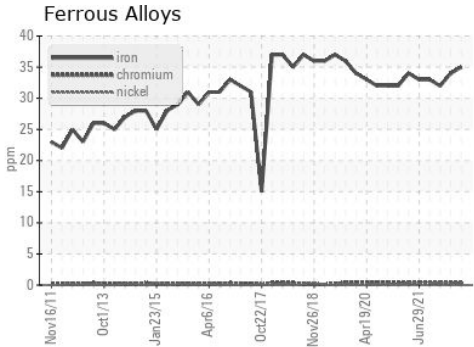


| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 97.0 | 96.7 | 97.7 |

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



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **HUSKY SEA ROSE /AKER SOLUTIONS**
Sample No. : WC0711693 **Received** : 05 Sep 2023 PO BOX 20
Lab Number : 02580489 **Diagnosed** : 06 Sep 2023 ST. JOHN'S, NL
Unique Number : 5633549 **Diagnostician** : Wes Davis CA A1C 6C9
Test Package : IND 1 Contact: Maintenance Supervisor

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