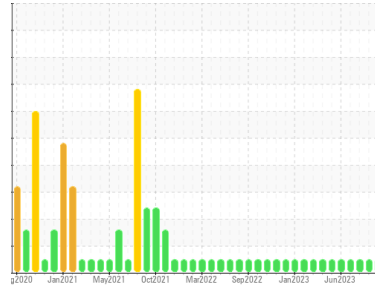




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**ENGINE ROOM FLOOR**  
 Machine Id  
**22-BE-6462C-01 PROPELLER SHAFT BEARING (S/N Maint Plan 22480)**  
 Component  
**Starboard Bearing**  
 Fluid  
**MOBIL MOBILGARD 412 (12 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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     | <b>PP</b>          | PP          | PP          |
| Sample Date   | Client Info     | <b>19 Sep 2023</b> | 11 Sep 2023 | 23 Aug 2023 |
| 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      | NORMAL      |

## WEAR METALS

| method    | limit/base            | current      | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| PQ        | ASTM D8184*           | <b>0</b>     | 0        | 0        |
| Iron      | ppm ASTM D5185(m) >20 | <b>3</b>     | 3        | 3        |
| Chromium  | ppm ASTM D5185(m) >2  | <b>0</b>     | 0        | 0        |
| Nickel    | ppm ASTM D5185(m) >2  | <b>0</b>     | <1       | 0        |
| Titanium  | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Silver    | ppm ASTM D5185(m)     | <b>&lt;1</b> | <1       | <1       |
| Aluminum  | ppm ASTM D5185(m) >5  | <b>2</b>     | 1        | 2        |
| Lead      | ppm ASTM D5185(m) >25 | <b>0</b>     | <1       | 0        |
| Copper    | ppm ASTM D5185(m) >5  | <b>&lt;1</b> | <1       | <1       |
| Tin       | ppm ASTM D5185(m) >15 | <b>&lt;1</b> | <1       | 1        |
| Antimony  | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Vanadium  | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Beryllium | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Cadmium   | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |

## ADDITIVES

| method     | limit/base             | current      | history1 | history2 |
|------------|------------------------|--------------|----------|----------|
| Boron      | ppm ASTM D5185(m) 0    | <b>2</b>     | 1        | 1        |
| Barium     | ppm ASTM D5185(m) 0    | <b>&lt;1</b> | <1       | 0        |
| Molybdenum | ppm ASTM D5185(m) 0    | <b>0</b>     | 0        | <1       |
| Manganese  | ppm ASTM D5185(m) 0    | <b>0</b>     | 0        | <1       |
| Magnesium  | ppm ASTM D5185(m) 18   | <b>22</b>    | 22       | 22       |
| Calcium    | ppm ASTM D5185(m) 6350 | <b>6245</b>  | 6335     | 5869     |
| Phosphorus | ppm ASTM D5185(m) 200  | <b>211</b>   | 216      | 221      |
| Zinc       | ppm ASTM D5185(m) 380  | <b>356</b>   | 371      | 354      |
| Sulfur     | ppm ASTM D5185(m) 6950 | <b>5018</b>  | 5091     | 4902     |
| Lithium    | ppm ASTM D5185(m)      | <b>&lt;1</b> | <1       | <1       |

## CONTAMINANTS

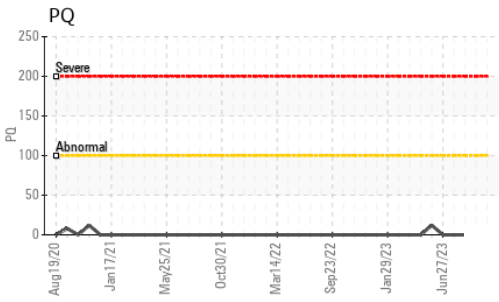
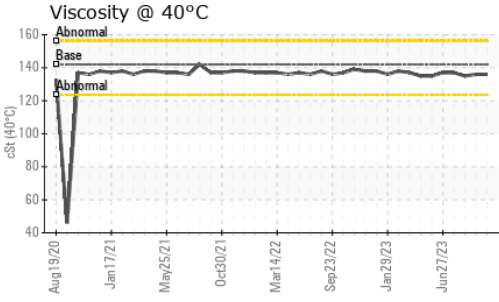
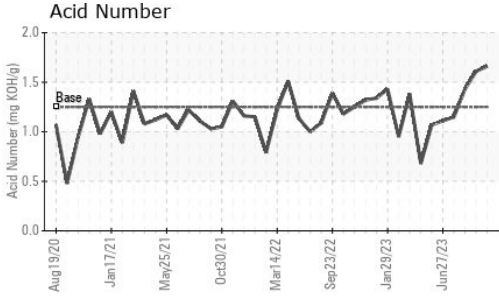
| method    | limit/base            | current      | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| Silicon   | ppm ASTM D5185(m) >15 | <b>11</b>    | 11       | 10       |
| Sodium    | ppm ASTM D5185(m)     | <b>1</b>     | 1        | <1       |
| Potassium | ppm ASTM D5185(m) >20 | <b>&lt;1</b> | 1        | 2        |

## FLUID DEGRADATION

| method           | limit/base               | current     | history1 | history2 |
|------------------|--------------------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g ASTM D974* 1.25 | <b>1.66</b> | 1.61     | 1.43     |



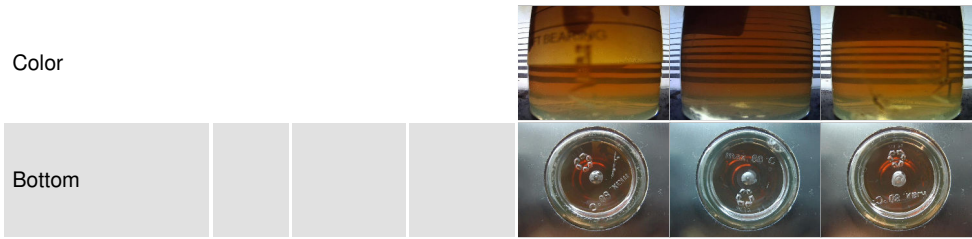
# OIL ANALYSIS REPORT



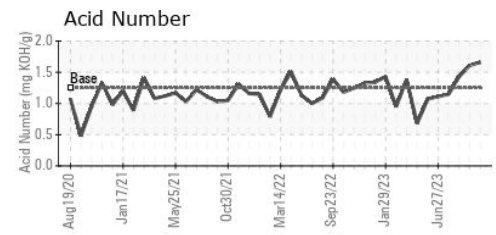
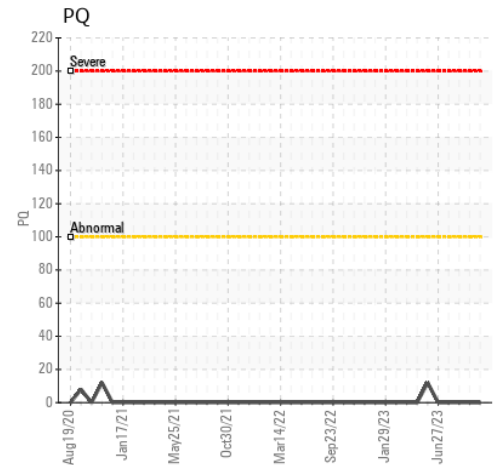
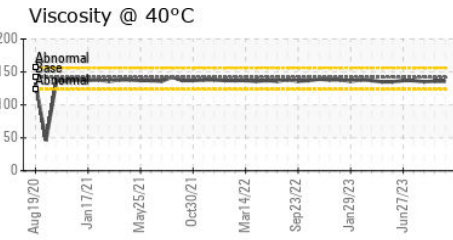
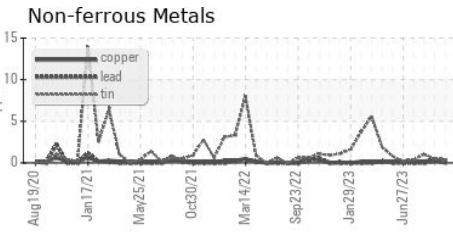
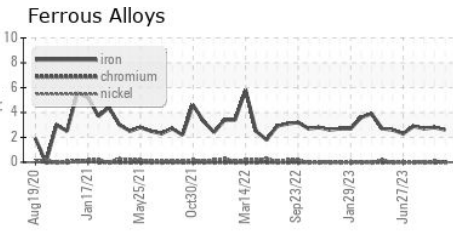
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | Visual*    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | Visual*    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | Visual*    | NONE    | NONE     | NONE     |
| Silt             | scalar | Visual*    | NONE    | NONE     | NONE     |
| Debris           | scalar | Visual*    | NONE    | VLITE    | 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) | 142     | <b>136</b> | 136      |

| 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.** : PP **Received** : 26 Oct 2023  
**Lab Number** : 02592125 **Diagnosed** : 27 Oct 2023  
**Unique Number** : 5669204 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

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: Maintenance Supervisor  
 maintsuper.searose@huskyenergy.ca  
 T: x:  
 F: x: