



OIL ANALYSIS REPORT

| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Area
ALVIN C JOHNSON
 Machine Id
[ALVIN C JOHNSON] 006 578276-6
 Component
Starboard Reduction Gear
 Fluid
MOBIL MOBILGEAR 600 XP 320 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | MW0064493 | MW0030800 | MW0030895 |
| Sample Date | | Client Info | | 01 Jan 2024 | 01 Oct 2023 | 13 Apr 2023 |
| Machine Age | hrs | Client Info | | 74703 | 72592 | 71399 |
| Oil Age | hrs | Client Info | | 0 | 0 | 380 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >150 | 24 | 0 | 109 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 23 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 2 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | <1 | 14 | 2 |
| Lead | ppm | ASTM D5185m | >100 | 0 | 13 | 0 |
| Copper | ppm | ASTM D5185m | >50 | 5 | 0 | 5 |
| Tin | ppm | ASTM D5185m | >10 | <1 | 4 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 2 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

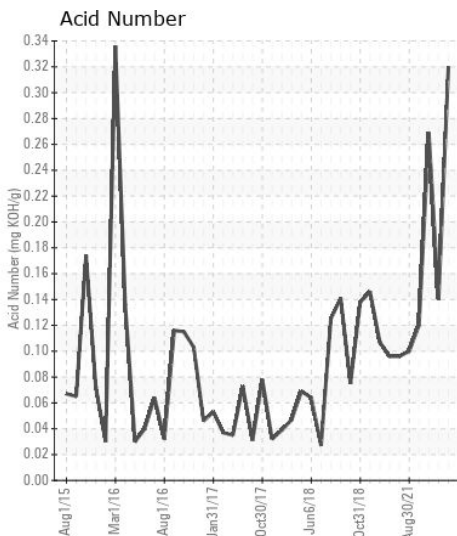
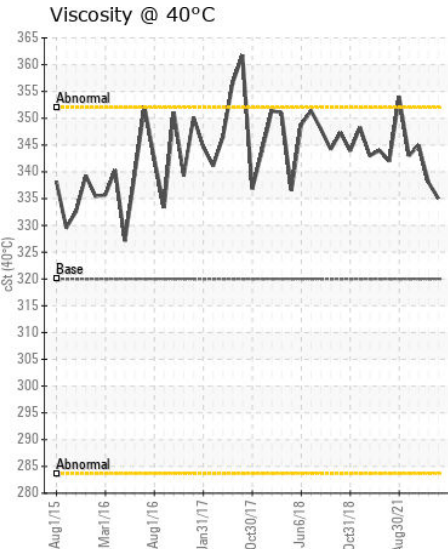
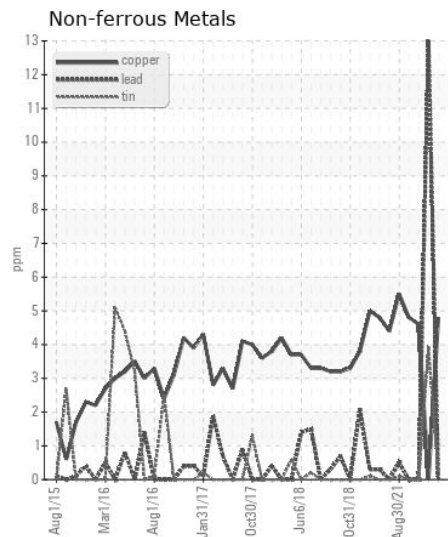
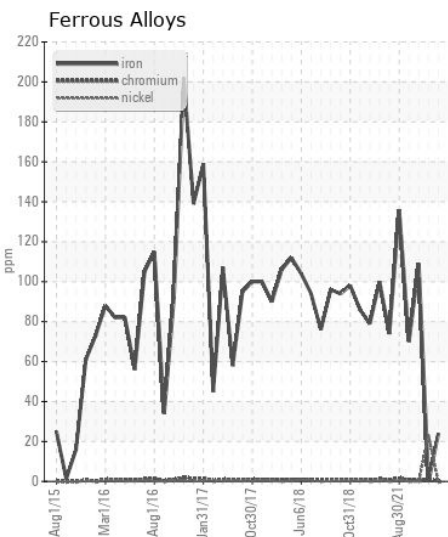
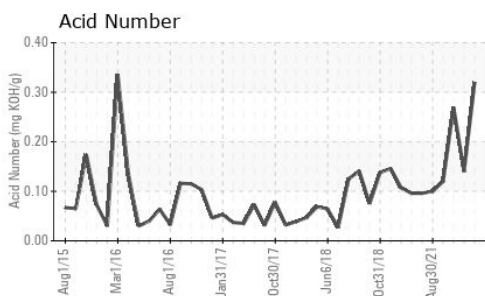
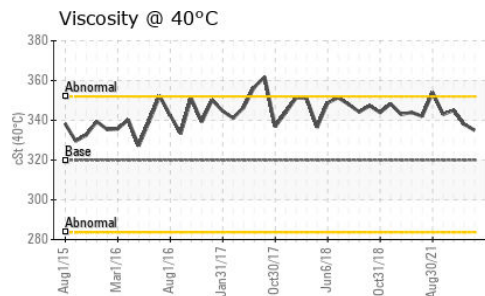
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >50 | 4 | 3 | 14 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 88 | 0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | MODER | 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 | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|-----|--------------|------|-------|
| Sodium | ppm | ASTM D5185m | | 136 | 69 | 217 |
| Boron | ppm | ASTM D5185m | | 11 | 6 | 22 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 1 |
| Magnesium | ppm | ASTM D5185m | | <1 | 26 | 3 |
| Calcium | ppm | ASTM D5185m | | 8 | 3 | 31 |
| Phosphorus | ppm | ASTM D5185m | | 120 | 79 | 173 |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | | 5319 | 6292 | 5643 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.32 | 0.14 | 0.269 |
| Visc @ 40°C | cSt | ASTM D445 | 320 | 335 | 338 | 345 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0064493
Lab Number : 06105361
Unique Number : 10903591
Test Package : MAR 2
Received : 29 Feb 2024
Tested : 02 Mar 2024
Diagnosed : 04 Mar 2024 - Don Baldrige

INGRAM BARGE
 900 S 3RD ST
 PADUCAH, KY
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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)