



OIL ANALYSIS REPORT

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

Area

Boat Deck

Machine Id

G5-01131 Miranda Davit Winch (S/N SSEDC 01131)

Component

Gearbox

Fluid

PETRO CANADA ENDURATEX EP 68 (11 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|------|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0855464 | WC0855474 | WC0772090 |
| Sample Date | | Client Info | | 21 May 2024 | 02 Jan 2024 | 03 Jul 2023 |
| Machine Age | mths | Client Info | | 246 | 0 | 238 |
| Oil Age | mths | Client Info | | 22 | 0 | 11 |
| Filter Age | mths | Client Info | | 0 | 0 | 11 |
| Oil Changed | | Client Info | | Not Changd | N/A | Not Changd |
| Filter Changed | | Client Info | | None | N/A | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--------------|--------|---------------|-----------|--------------|----------|----------|
| PQ | | ASTM D8184* | | 26 | 0 | 0 |
| Iron | ppm | ASTM D5185(m) | >150 | 17 | 5 | 2 |
| Chromium | ppm | ASTM D5185(m) | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >10 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >5 | 0 | <1 | 0 |
| 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 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | VLITE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | VLITE | NONE |

CONTAMINATION

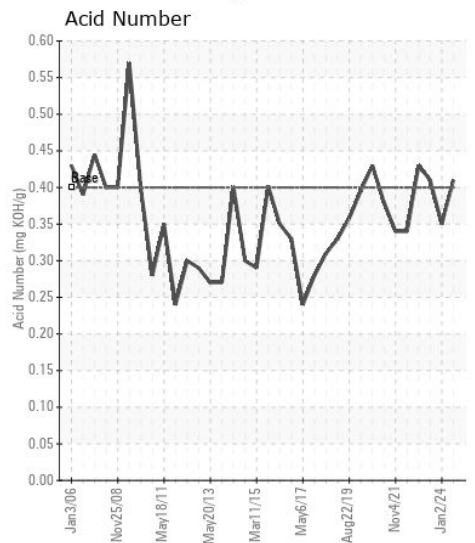
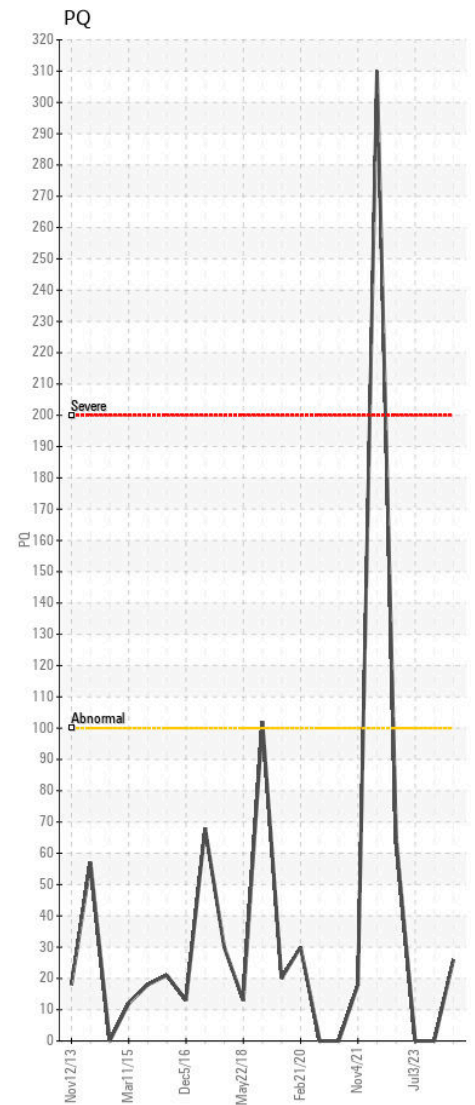
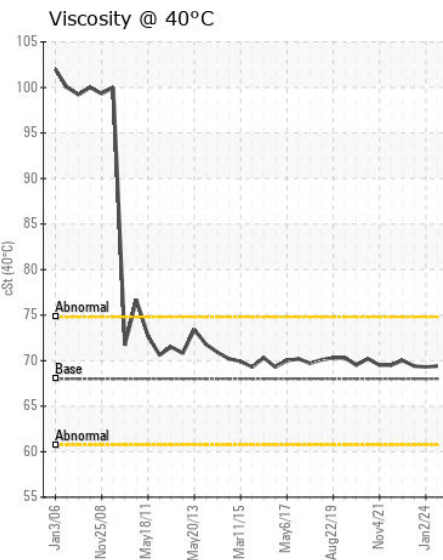
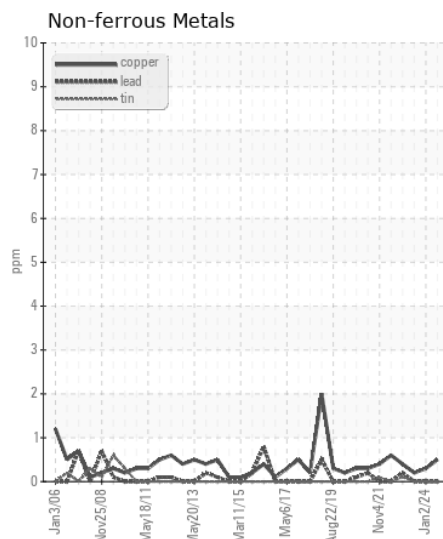
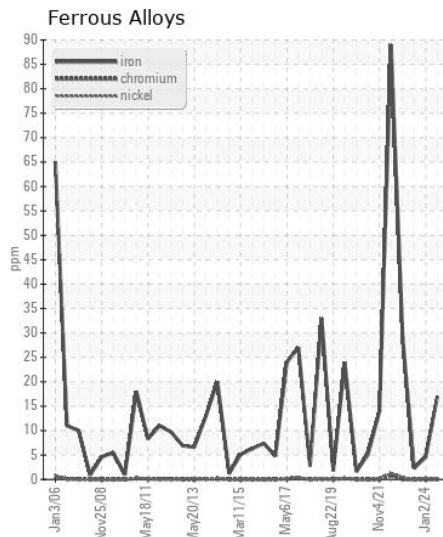
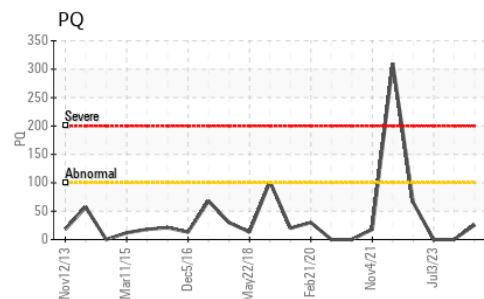
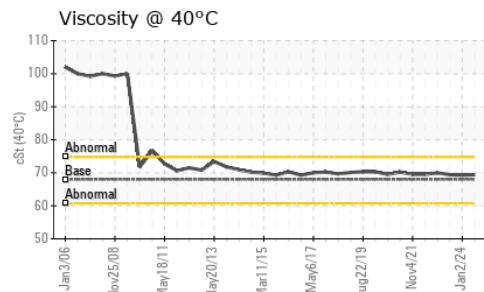
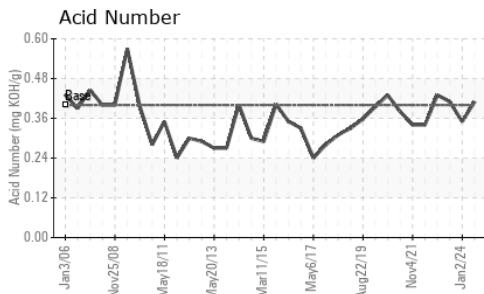
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|---------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >20 | 10 | 8 | 5 |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | <1 | <1 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Silt | scalar | Visual* | NONE | VLITE | 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 |

FLUID CONDITION

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

| | | | | | | |
|------------------|----------|---------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Boron | ppm | ASTM D5185(m) | 69 | 57 | 58 | 59 |
| Barium | ppm | ASTM D5185(m) | 1 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 1 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | 1 | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 1 | <1 | <1 | <1 |
| Calcium | ppm | ASTM D5185(m) | 1 | 3 | 2 | 2 |
| Phosphorus | ppm | ASTM D5185(m) | 246 | 233 | 237 | 253 |
| Zinc | ppm | ASTM D5185(m) | 1 | 4 | 3 | 3 |
| Sulfur | ppm | ASTM D5185(m) | 3670 | 3991 | 4515 | 4267 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.4 | 0.41 | 0.35 | 0.41 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 68.0 | 69.4 | 69.3 | 69.4 |



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0855464
Lab Number : 02637544
Unique Number : 5786706
Test Package : MAR 2 (Additional Tests: TAN Man)

Received : 24 May 2024
Tested : 24 May 2024
Diagnosed : 24 May 2024 - Wes Davis

CANADIAN COAST GUARD
 CCGS GRIFFON, PO BOX 1000, 401 KING ST.W
 Prescott, ON
 CA K6V 5T3
 Contact: Laurie Bosley
 Laurie.Bosley@dfo-mpo.gc.ca

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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