



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

Machine Id
PRS
Component
Starboard Reduction Gear
Fluid
PETRO CANADA DURON MARINE SAE 40 (28 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | MW05863164 | MW05824225 | MW05824221 |
| Sample Date | | Client Info | | 01 Jun 2023 | 18 Apr 2023 | 18 Apr 2023 |
| Machine Age | hrs | Client Info | | 29389 | 28186 | 28766 |
| Oil Age | hrs | Client Info | | 1203 | 1200 | 580 |
| 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 | 4 | 7 | 5 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | <1 | 1 |
| Lead | ppm | ASTM D5185m | >100 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >50 | <1 | 1 | <1 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

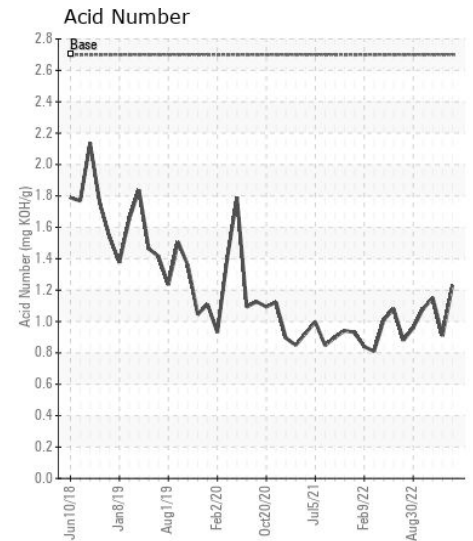
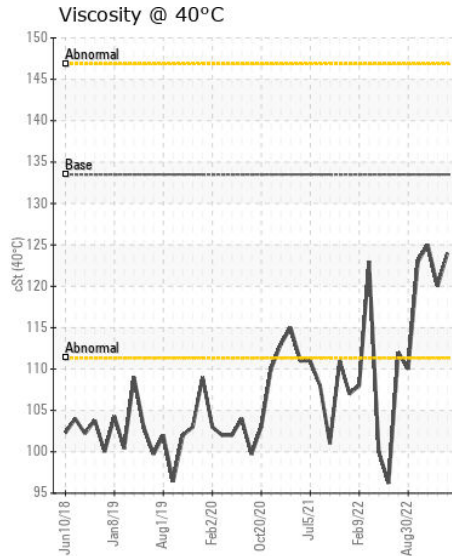
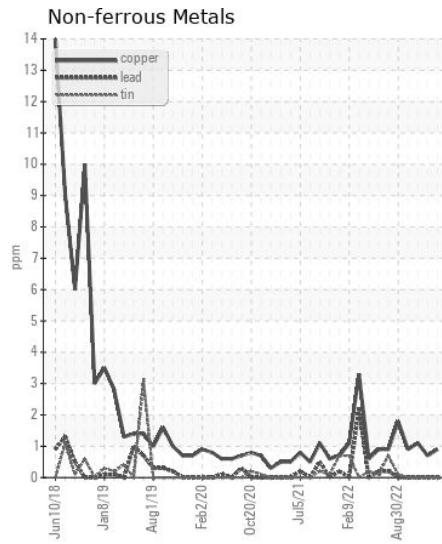
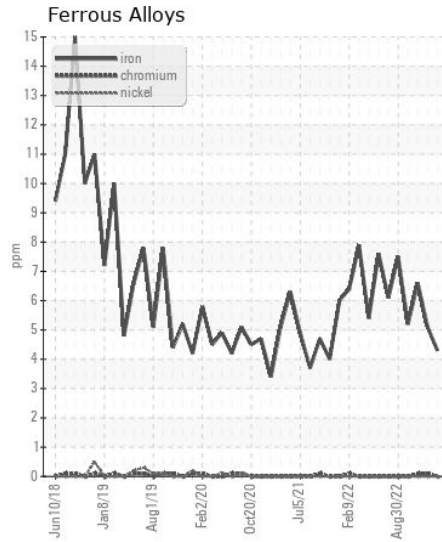
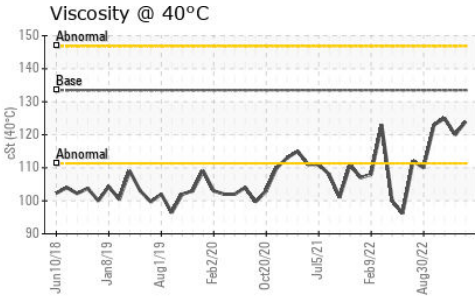
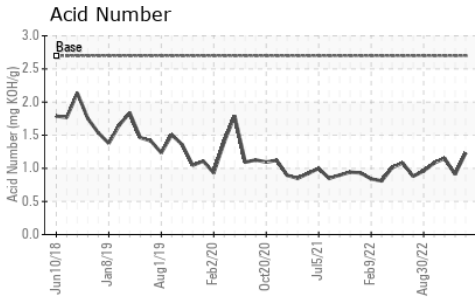
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >50 | 4 | 3 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| 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 | >0.1 | 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 | | 3 | 3 | 2 |
| Boron | ppm | ASTM D5185m | 1.0 | 360 | 290 | 372 |
| Barium | ppm | ASTM D5185m | 1.0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 1.0 | 37 | 37 | 39 |
| Manganese | ppm | ASTM D5185m | 1 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 15 | 73 | 101 | 52 |
| Calcium | ppm | ASTM D5185m | 2540 | 2740 | 2192 | 2863 |
| Phosphorus | ppm | ASTM D5185m | 1000 | 805 | 697 | 845 |
| Zinc | ppm | ASTM D5185m | 1110 | 925 | 795 | 964 |
| Sulfur | ppm | ASTM D5185m | 3700 | 3656 | 3242 | 3871 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 2.7 | 1.23 | 0.91 | 1.15 |
| Visc @ 40°C | cSt | ASTM D445 | 133.5 | 124 | 120 | 125 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW05863164
Lab Number : 05863164
Unique Number : 10497629
Test Package : MAR 2
Received : 02 Jun 2023
Tested : 05 Jun 2023
Diagnosed : 05 Jun 2023 - Don Baldrige

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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)