



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

Area
(62A1N89) TALLASSEE

Machine Id
10456

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (13 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0081929 | GFL0080702 | GFL0079725 |
| Sample Date | | Client Info | | 20 Jun 2024 | 11 Apr 2024 | 23 Jan 2024 |
| Machine Age | hrs | Client Info | | 12576 | 11949 | 11604 |
| Oil Age | hrs | Client Info | | 12576 | 11949 | 11604 |
| 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 | >75 | 22 | 6 | 19 |
| Chromium | ppm | ASTM D5185m | >5 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | 2 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >2 | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >15 | 3 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >25 | 3 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >100 | 6 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >4 | 3 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

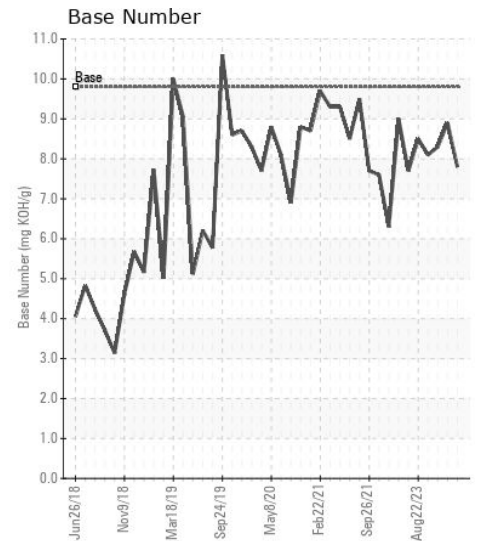
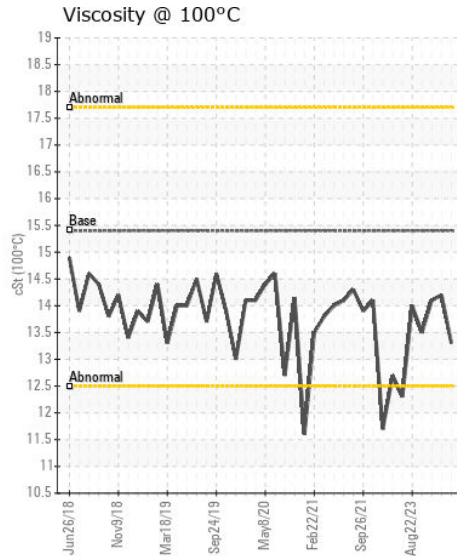
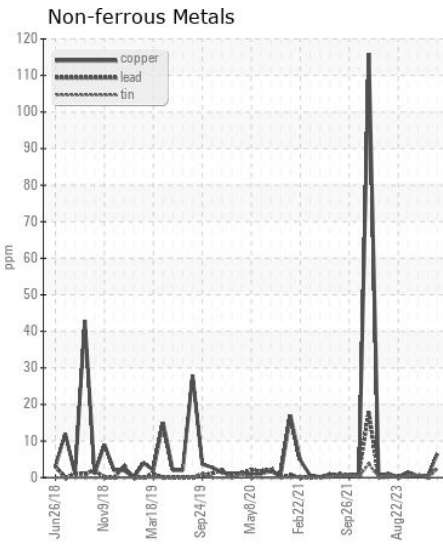
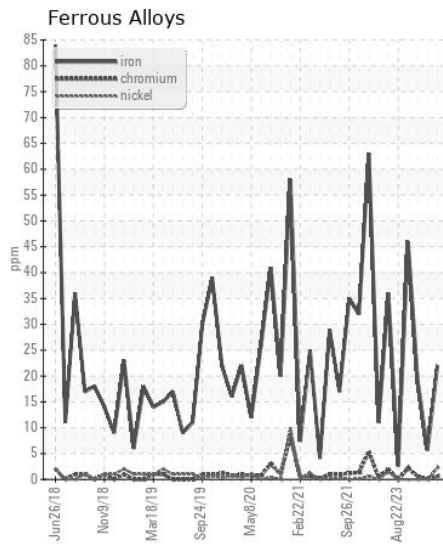
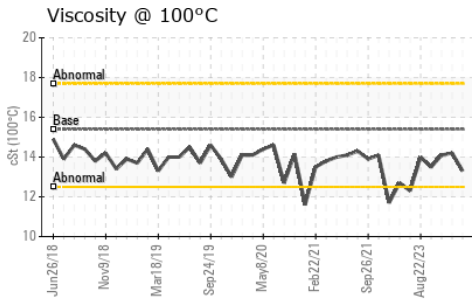
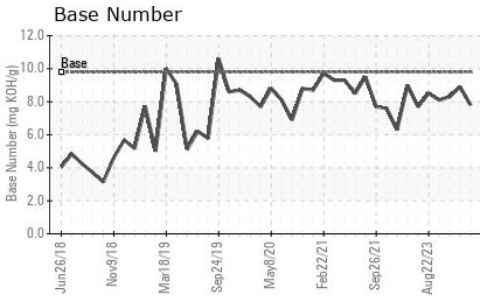
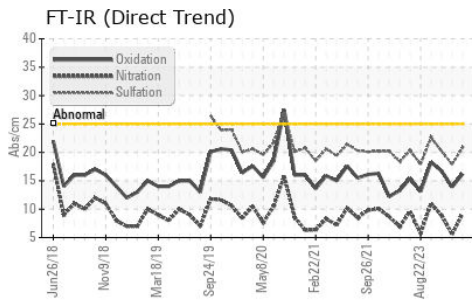
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 14 | 6 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 10 | 3 |
| Fuel | | WC Method | >3.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >6 | 0.6 | 0.1 | 0.6 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.2 | 5.6 | 8.9 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.8 | 17.9 | 20.2 |
| 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 |

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 5 | 2 | 3 |
| Boron | ppm | ASTM D5185m | 0 | 10 | 6 | 7 |
| Barium | ppm | ASTM D5185m | 0 | 1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 60 | 63 | 57 | 62 |
| Manganese | ppm | ASTM D5185m | 0 | 1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 1010 | 907 | 939 | 972 |
| Calcium | ppm | ASTM D5185m | 1070 | 1085 | 1086 | 1029 |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1023 | 1046 | 1065 |
| Zinc | ppm | ASTM D5185m | 1270 | 1222 | 1246 | 1305 |
| Sulfur | ppm | ASTM D5185m | 2060 | 2984 | 3673 | 3165 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 16.2 | 13.9 | 16.7 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.8 | 7.8 | 8.9 | 8.3 |
| Visc @ 100°C | cSt | ASTM D445 | 15.4 | 13.3 | 14.2 | 14.1 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0081929
Lab Number : 06219307
Unique Number : 11097504
Test Package : FLEET

GFL Environmental - 172 - Montgomery-Alexander City-Tallahassee
 Multiple Sites
 Montgomery, AL
 US 36108
 Contact: BRANDON HURST
 brandonhurst@gflenv.com

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)

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F: