



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

Machine Id
812032
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0107939 | GFL0107972 | GFL0107953 |
| Sample Date | | Client Info | | 06 Feb 2024 | 30 Jan 2024 | 09 Jan 2024 |
| Machine Age | hrs | Client Info | | 5301 | 5242 | 5116 |
| Oil Age | hrs | Client Info | | 600 | 0 | 0 |
| Filter Age | hrs | Client Info | | 600 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >110 | 7 | 6 | 2 |
| Chromium | ppm | ASTM D5185m | >4 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 6 | 6 | 4 |
| Lead | ppm | ASTM D5185m | >45 | 0 | <1 | 0 |
| Copper | ppm | ASTM D5185m | >85 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >4 | <1 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

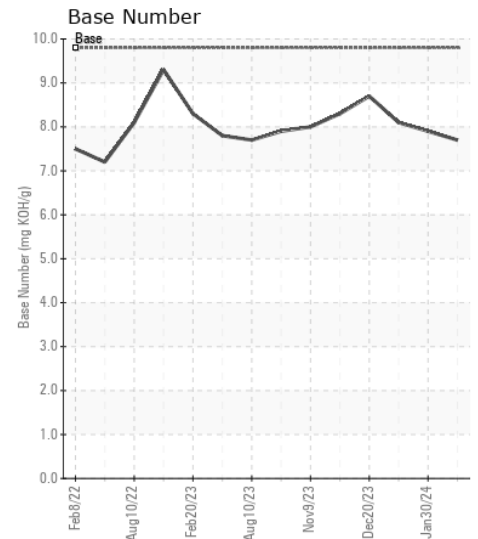
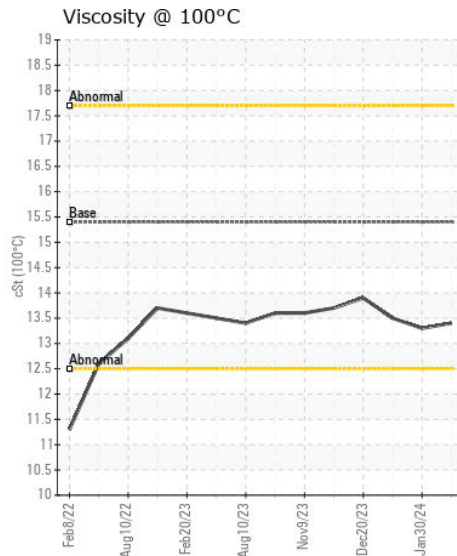
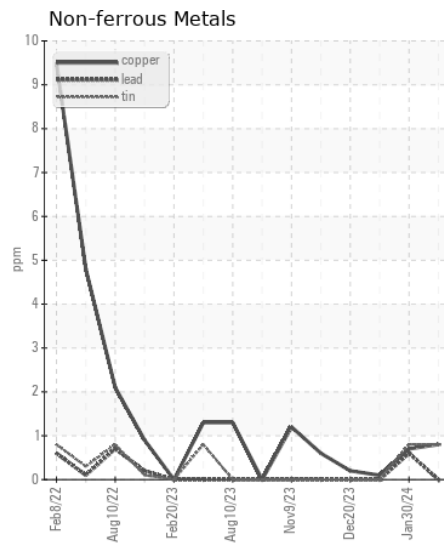
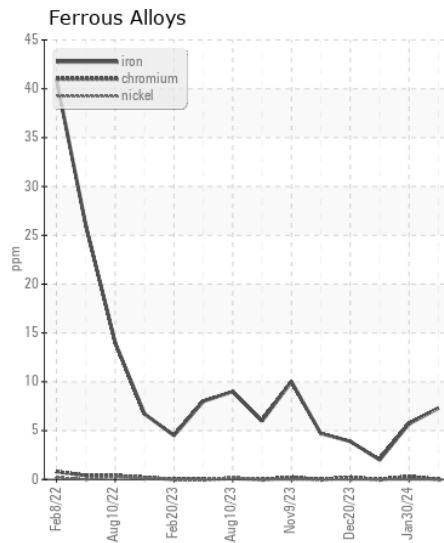
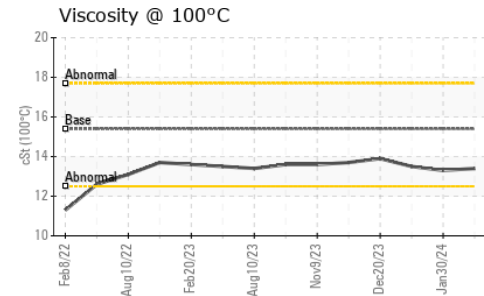
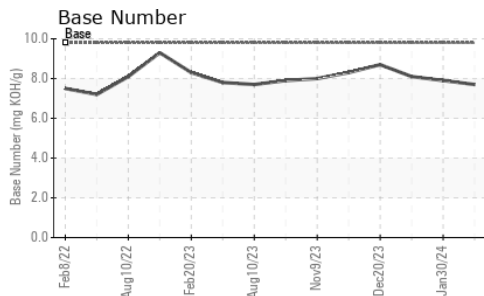
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >30 | 2 | 3 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 3 | 3 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.3 | 0.3 | 0.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.3 | 7.0 | 6.5 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.1 | 19.0 | 18.4 |
| 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 | | 3 | 1 | 1 |
| Boron | ppm | ASTM D5185m | 0 | 1 | <1 | 1 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 60 | 61 | 61 | 55 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 1010 | 988 | 908 | 949 |
| Calcium | ppm | ASTM D5185m | 1070 | 1087 | 1005 | 1030 |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1048 | 1007 | 968 |
| Zinc | ppm | ASTM D5185m | 1270 | 1282 | 1144 | 1275 |
| Sulfur | ppm | ASTM D5185m | 2060 | 3040 | 2757 | 2902 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.6 | 14.4 | 14.2 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.8 | 7.7 | 7.9 | 8.1 |
| Visc @ 100°C | cSt | ASTM D445 | 15.4 | 13.4 | 13.3 | 13.5 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0107939 **Received** : 08 Feb 2024
Lab Number : 06084245 **Tested** : 09 Feb 2024
Unique Number : 10871690 **Diagnosed** : 09 Feb 2024 - Wes Davis
Test Package : FLEET

GFL Environmental - 892 - Pauls Valley Hauling
 405 East Airport Industrial Road
 Pauls Valley, OK
 US 73075
 Contact: Tony Graham
 tgraham2@wcamerica.com
 T:
 F:

Certificate L2367
 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)