

Sample Rating Trend

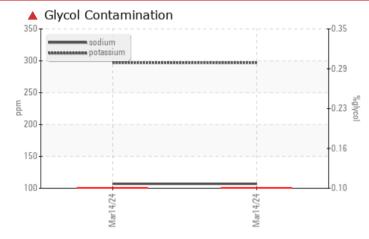




Machine Id 723056

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. (Customer Sample Comment: Sample only)

| PROBLEMATIC TEST RESULTS | | | | | | | | |
|--------------------------|-----|-------------|-----|---------------|--|--|--|--|
| Sample Status | | | | SEVERE | | | | |
| Sodium | ppm | ASTM D5185m | | <u> </u> | | | | |
| Potassium | ppm | ASTM D5185m | >20 | <u> </u> | | | | |
| Glycol | % | *ASTM D2982 | | A 0.10 | | | | |

Customer Id: GFL625 Sample No.: GFL0116265 Lab Number: 06122967 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

| RECOMMENDED | ACTIONS | | | |
|---------------------|---------|------|---------|--|
| Action | Status | Date | Done By | Description |
| Change Fluid | | | ? | We recommend that you drain the oil and perform a filter service on this component if not already done. |
| Change Filter | | | ? | We recommend that you drain the oil and perform a filter service on this component if not already done. |
| Resample | | | ? | We recommend an early resample to monitor this condition. |
| Check Glycol Access | | | ? | We advise that you check for the source of the coolant leak. |

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL

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Machine Id 723056

Component Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. (Customer Sample Comment: Sample only)

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is positive. There is a high concentration of glycol present in the oil.

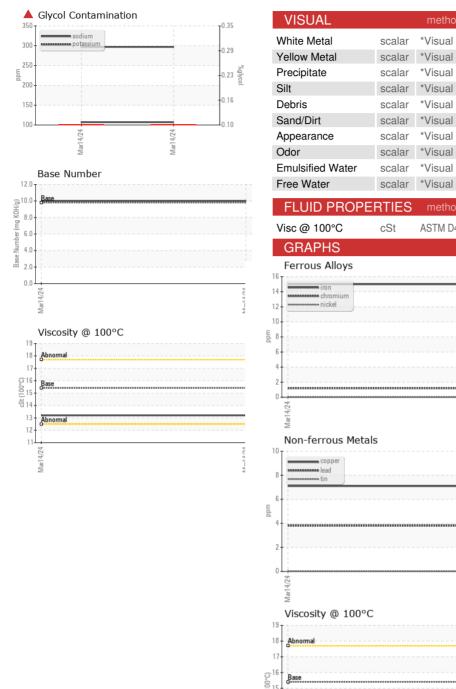
Fluid Condition

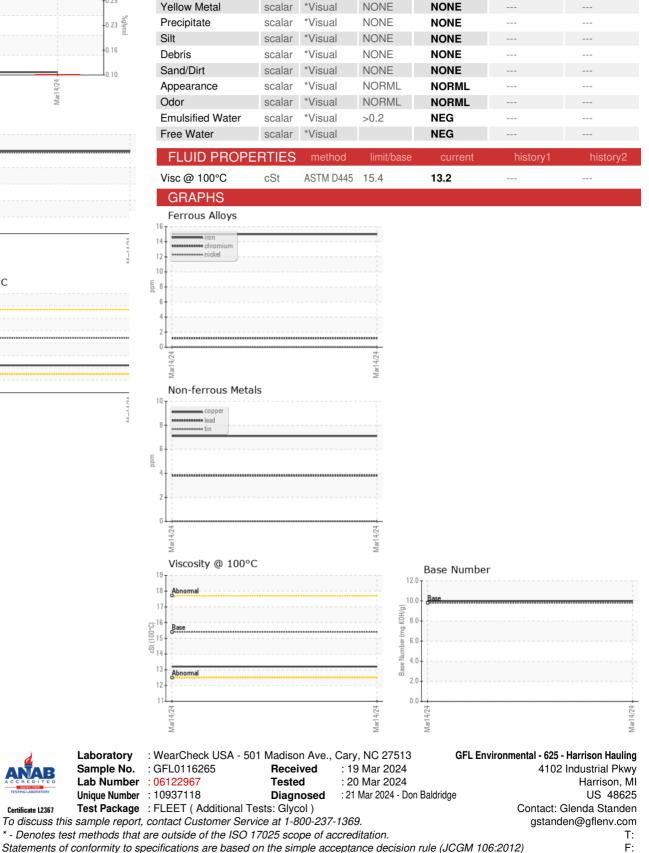
The oil is no longer serviceable due to the presence of contaminants.

| AL) | | | , | Mar2024 | | |
|---|--|---|---|---|--|--|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | GFL0116265 | | |
| Sample Date | | Client Info | | 14 Mar 2024 | | |
| Machine Age | hrs | Client Info | | 13996 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | Not Changd | | |
| Sample Status | | | | SEVERE | | |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >2.0 | <1.0 | | |
| Water | | WC Method | >0.2 | NEG | | |
| WEAR METALS | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 15 | | |
| Chromium | ppm | ASTM D5185m | >20 | 1 | | |
| Nickel | ppm | ASTM D5185m | >4 | 0 | | |
| Titanium | ppm | ASTM D5185m | | 5 | | |
| Silver | ppm | ASTM D5185m | >3 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >20 | 4 | | |
| Lead | ppm | ASTM D5185m | >40 | 4 | | |
| Copper | ppm | ASTM D5185m | >330 | 7 | | |
| Tin | ppm | ASTM D5185m | >15 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 209 | | |
| Barium | ppm | ASTM D5185m | 0 | 2 | | |
| Molybdenum | ppm | ASTM D5185m | 60 | 97 | | |
| Manganese | ppm | ASTM D5185m | 0 | <1 | | |
| Magnesium | ppm | ASTM D5185m | 1010 | 615 | | |
| Calcium | ppm | ASTM D5185m | 1070 | | | |
| Dhaanharua | | | 1070 | 1527 | | |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1527 734 | | |
| | ppm ppm | | | | | |
| Zinc | | ASTM D5185m | 1150 | 734 | | |
| Zinc | ppm ppm | ASTM D5185m ASTM D5185m | 1150 1270 | 734 848 | | |
| Zinc Sulfur CONTAMINAN | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | 1150 1270 2060 | 734 848 3308 | | |
| Zinc Sulfur CONTAMINAN Silicon | ppm ppm TS | ASTM D5185m ASTM D5185m ASTM D5185m method | 1150 1270 2060 limit/base | 734 848 3308 current | history1 | history2 |
| Zinc Sulfur CONTAMINAN Silicon Sodium | ppm ppm TS ppm | ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | 1150 1270 2060 limit/base | 734 848 3308 current 9 | history1 | history2 |
| Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol | ppm ppm TS ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m | 1150 1270 2060 limit/base >25 | 734 848 3308 <u>current</u> 9 ▲ 107 | history1 | history2 |
| Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm ppm TS ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m | 1150 1270 2060 limit/base >25 | 734 848 3308 <u>current</u> 9 ▲ 107 ▲ 297 | history1 | history2 |
| Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED | ppm ppm TS ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D2982 | 1150 1270 2060 limit/base >25 >20 | 734 848 3308 <u>current</u> 9 ▲ 107 ▲ 297 ▲ 0.10 | history1 | history2 |
| Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % | ppm ppm TS ppm ppm ppm % | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D2982 Method | 1150 1270 2060 limit/base >25 >20 limit/base | 734 848 3308 <u>current</u> 9 ▲ 107 ▲ 297 ▲ 0.10 <u>current</u> | history1 history1 | history2 history2 |
| Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol | ppm ppm TS ppm ppm ppm % | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D2982 method *ASTM D7844 | 1150 1270 2060 limit/base >25 >20 limit/base >3 | 734 848 3308 <u>current</u> 9 ▲ 107 ▲ 297 ▲ 0.10 <u>current</u> 0.1 | history1 history1 | history2 history2 |
| Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation | ppm ppm TS ppm ppm % % Abs/cm Abs/.1mm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D2982 method *ASTM D7844 *ASTM D7624 | 1150 1270 2060 limit/base >25 >20 limit/base >3 >20 | 734 848 3308 <u>current</u> 9 ▲ 107 ▲ 297 ▲ 0.10 <u>current</u> 0.1 6.0 | history1 history1 history1 | history2 history2 history2 |
| Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration | ppm ppm TS ppm ppm % % Abs/cm Abs/.1mm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D2982 method *ASTM D7844 *ASTM D7624 | 1150 1270 2060 >25 >20 >20 <u>limit/base</u> >3 >20 >30 | 734 848 3308 <u>current</u> 9 ▲ 107 ▲ 297 ▲ 0.10 <u>current</u> 0.1 6.0 20.2 | history1 history1 history1 | history2 history2 history2 |



OIL ANALYSIS REPORT





NONE

NONE

Certificate L2367

Submitted By: also GFL632 and GFL638 - Glenda Standen