

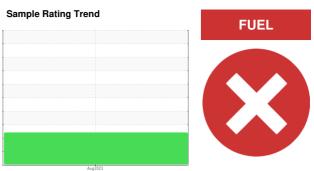
OIL ANALYSIS REPORT

SHARP BUS LINES Machine Id INTERNATIONAL 1140

Component

Diesel Engine

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



DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

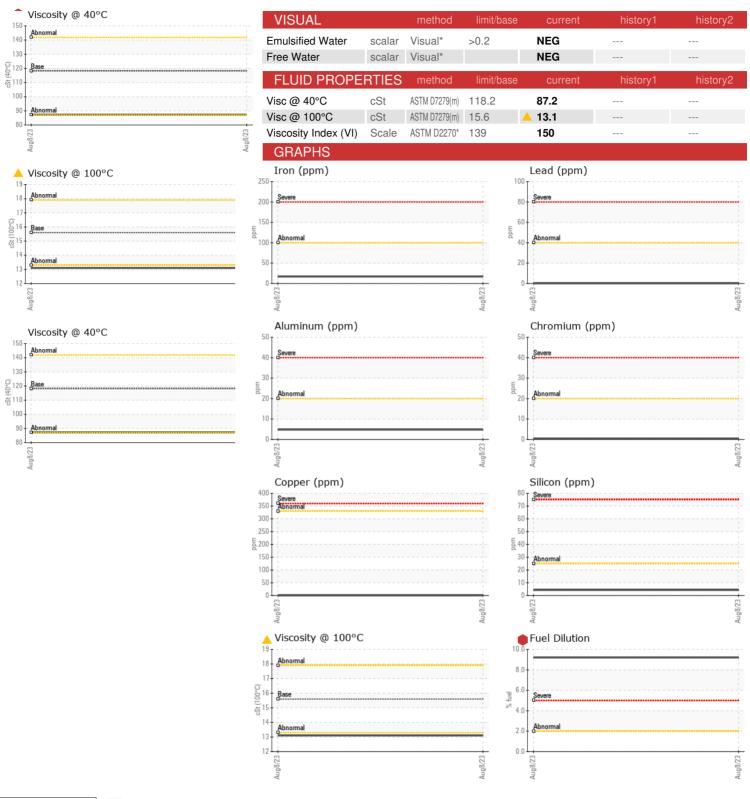
Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

| AL) | | | | | | |
|---|---|--|---|---|----------------------------|----------------------------|
| | MATION | | | ug2023 | | |
| SAMPLE INFOR | MATION | | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | PC0081360 | | |
| Sample Date | | Client Info | | 08 Aug 2023 | | |
| Machine Age | kms | Client Info | | 242319 | | |
| Oil Age | kms | Client Info | | 1519 | | |
| Oil Changed | | Client Info | | Changed | | |
| Sample Status | | | | SEVERE | | |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Glycol | | WC Method | | NEG | | |
| WEAR METAL | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >100 | 17 | | |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | | |
| Nickel | ppm | ASTM D5185(m) | >4 | <1 | | |
| Titanium | ppm | ASTM D5185(m) | | 0 | | |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | | |
| Aluminum | ppm | ASTM D5185(m) | >20 | 5 | | |
| Lead | ppm | ASTM D5185(m) | >40 | <1 | | |
| Copper | ppm | ASTM D5185(m) | >330 | <1 | | |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | | |
| Antimony | ppm | ASTM D5185(m) | | 0 | | |
| Vanadium | ppm | ASTM D5185(m) | | 0 | | |
| Beryllium | ppm | ASTM D5185(m) | | 0 | | |
| Cadmium | ppm | ASTM D5185(m) | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | 0 | 2 | | |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | | |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 53 | | |
| Manganese | ppm | ASTM D5185(m) | 0 | <1 | | |
| Magnesium | ppm | ASTM D5185(m) | 1010 | | | |
| Calcium | | | 1010 | 856 | | |
| | ppm | ASTM D5185(m) | 1070 | 856 924 | | |
| Phosphorus | ppm ppm | ASTM D5185(m) ASTM D5185(m) | | | | |
| Phosphorus Zinc | | . , | 1070 | 924 | | |
| | ppm | ASTM D5185(m) | 1070 1150 1270 | 924 943 | | |
| Zinc | ppm | ASTM D5185(m) ASTM D5185(m) | 1070 1150 1270 | 924 943 1046 | | |
| Zinc Sulfur | ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | 1070 1150 1270 | 924 943 1046 2321 | | |
| Zinc Sulfur Lithium | ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | 1070 1150 1270 2060 | 924 943 1046 2321 <1 | | |
| Zinc Sulfur Lithium | ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method | 1070 1150 1270 2060 | 924 943 1046 2321 <1 | history1 | history2 |
| Zinc Sulfur Lithium CONTAMINAN Silicon | ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) | 1070 1150 1270 2060 | 924 943 1046 2321 <1 current | history1 | history2 |
| Zinc Sulfur Lithium CONTAMINAN Silicon Sodium | ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | 1070 1150 1270 2060 limit/base >25 | 924 943 1046 2321 <1 current 4 | history1 | history2 |
| Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium | ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | 1070 1150 1270 2060 limit/base >25 | 924 943 1046 2321 <1 current 4 2 | history1 | history2 |
| Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Fuel | ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | 1070 1150 1270 2060 limit/base >25 >20 >2.0 | 924 943 1046 2321 <1 current 4 2 <1 | history1 | history2 |
| Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED | ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7593* | 1070 1150 1270 2060 limit/base >25 >20 >2.0 | 924 943 1046 2321 <1 current 4 2 <1 9.2 current | history1 | history2 history2 |
| Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % | ppm ppm ppm ppm ppm ppm ppm ppm % | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) METHOD METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7593* METHOD ASTM D7844* | 1070 1150 1270 2060 limit/base >25 >20 >2.0 limit/base >3 | 924 943 1046 2321 <1 current 4 2 <1 9.2 current 2 | history1 history1 | history2 history2 history2 |
| Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration | ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7593* METHOD ASTM D7844* ASTM D7844* ASTM D7624* ASTM D7415* | 1070 1150 1270 2060 limit/base >25 >20 >2.0 limit/base >3 >20 | 924 943 1046 2321 <1 current 4 2 <1 9.2 current 2 8.8 | history1 history1 history1 | history2 history2 history2 |



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number**

: 02575812

: PC0081360 : 5620863

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received Diagnosed

: 16 Aug 2023 Diagnostician : Wes Davis

: 15 Aug 2023

Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI)

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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