



Machine Id
724020
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0093828	GFL0093834	---
Sample Date		Client Info		29 Jan 2024	16 Jan 2024	---
Machine Age	hrs	Client Info		15368	15332	---
Oil Age	hrs	Client Info		36	600	---
Filter Age	hrs	Client Info		36	600	---
Oil Changed		Client Info		Not Changd	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				SEVERE	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	28	▲ 110	---
Chromium	ppm	ASTM D5185m	>5	2	▲ 6	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>30	2	6	---
Lead	ppm	ASTM D5185m	>30	0	<1	---
Copper	ppm	ASTM D5185m	>150	1	2	---
Tin	ppm	ASTM D5185m	>5	1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

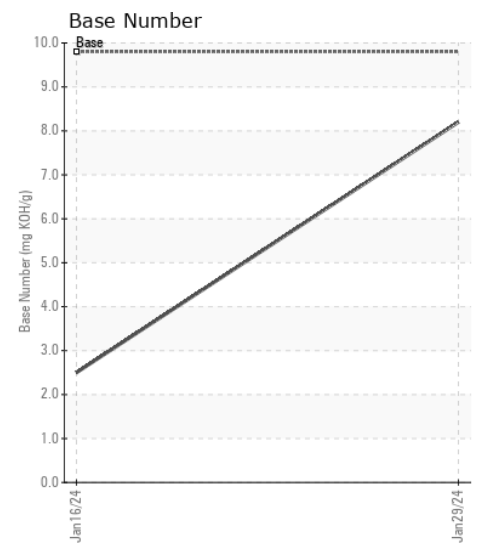
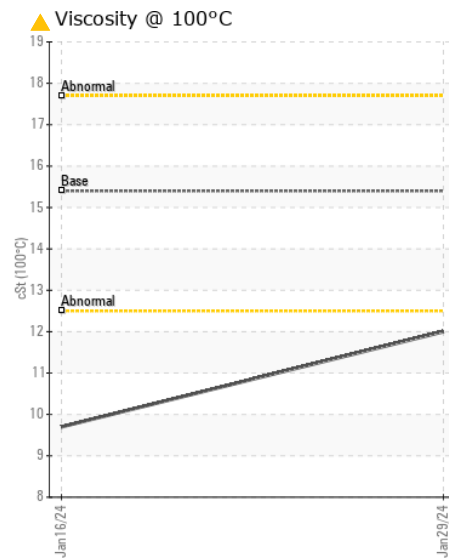
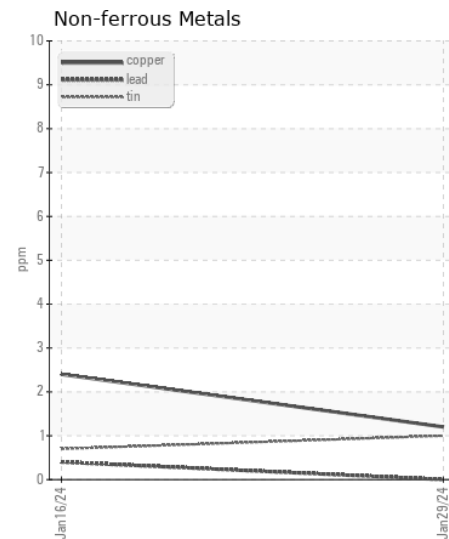
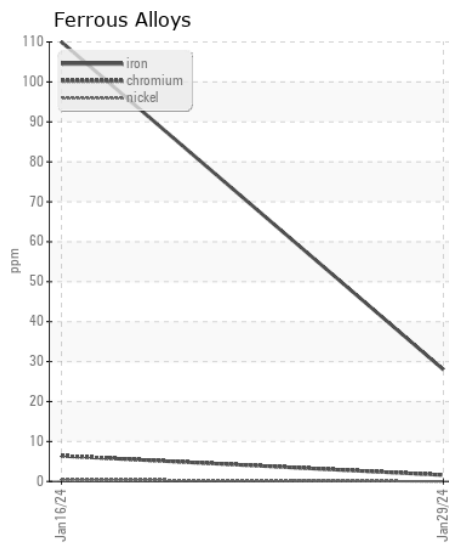
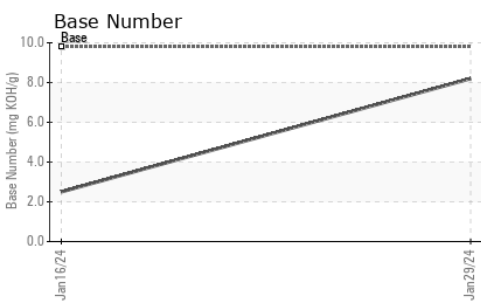
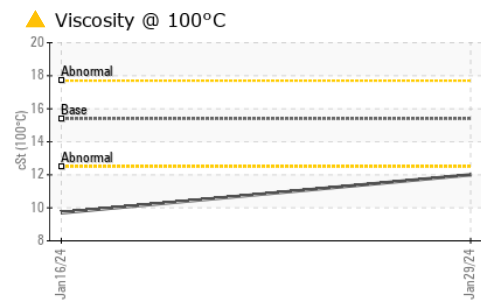
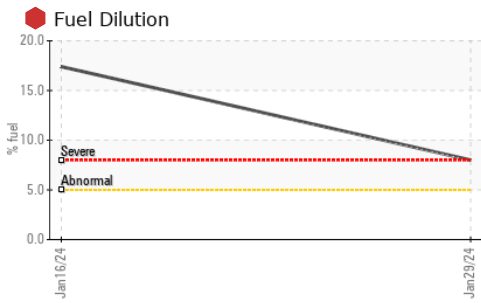
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>20	4	10	---
Potassium	ppm	ASTM D5185m	>20	0	1	---
Fuel	%	ASTM D3524	>5	8.0	17.4	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.9	▲ 3.4	---
Nitration	Abs/cm	*ASTM D7624	>20	8.1	17.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	33.7	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		2	2	---
Boron	ppm	ASTM D5185m	0	1	2	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	50	40	---
Manganese	ppm	ASTM D5185m	0	<1	1	---
Magnesium	ppm	ASTM D5185m	1010	780	655	---
Calcium	ppm	ASTM D5185m	1070	849	679	---
Phosphorus	ppm	ASTM D5185m	1150	871	612	---
Zinc	ppm	ASTM D5185m	1270	1020	828	---
Sulfur	ppm	ASTM D5185m	2060	2559	1796	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	38.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.2	▲ 2.5	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 12.0	▲ 9.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0093828
Lab Number : 06083273
Unique Number : 10870718
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 08 Feb 2024
Tested : 09 Feb 2024
Diagnosed : 09 Feb 2024 - Wes Davis

GFL Environmental - 952 - New London
 E8257 WIS-54
 NEW LONDON, WI
 US 54961
 Contact: MATTHEW TAYLOR

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)

T: (414)852-4404

F: