



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
223027-18
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON UHP 5W30 (12 GAL)

RECOMMENDATION

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		GFL0125844	GFL0100194	---
Sample Date		Client Info		10 Jul 2024	14 Dec 2023	---
Machine Age	hrs	Client Info		136154	136154	---
Oil Age	hrs	Client Info		600	0	---
Filter Age	hrs	Client Info		600	0	---
Oil Changed		Client Info		Not Changd	Changed	---
Filter Changed		Client Info		Not Changd	Changed	---
Sample Status				ABNORMAL	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	26	---
Chromium	ppm	ASTM D5185m	>20	0	2	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	3	6	---
Lead	ppm	ASTM D5185m	>40	2	10	---
Copper	ppm	ASTM D5185m	>330	2	4	---
Tin	ppm	ASTM D5185m	>15	<1	2	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

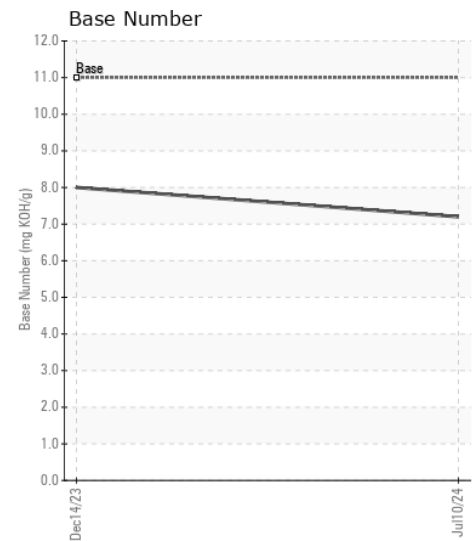
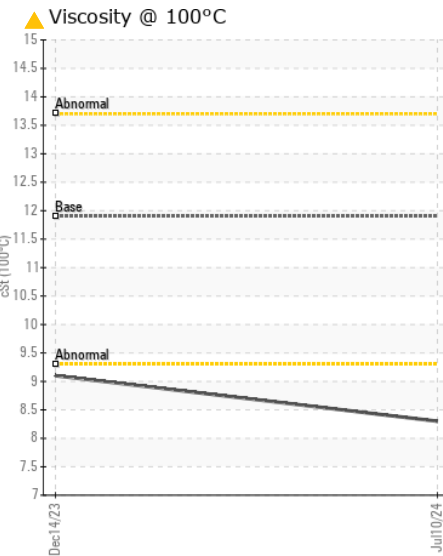
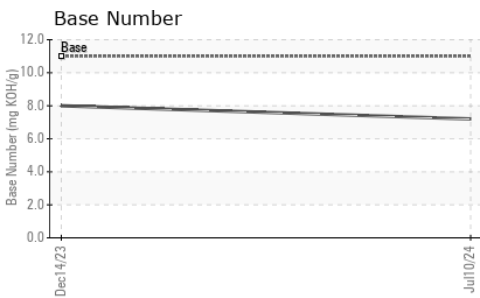
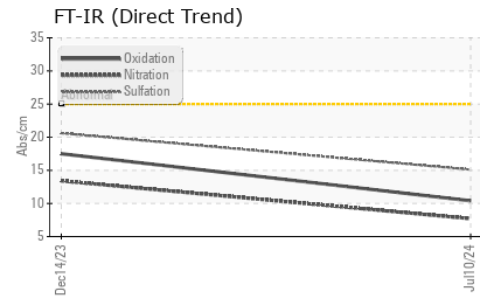
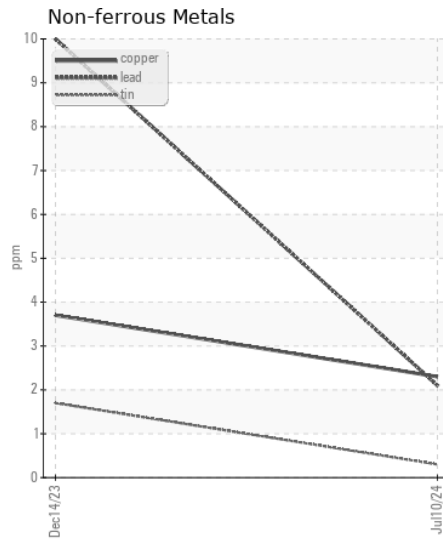
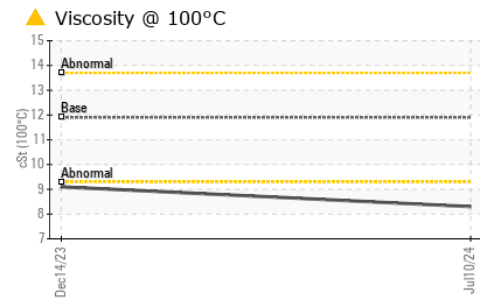
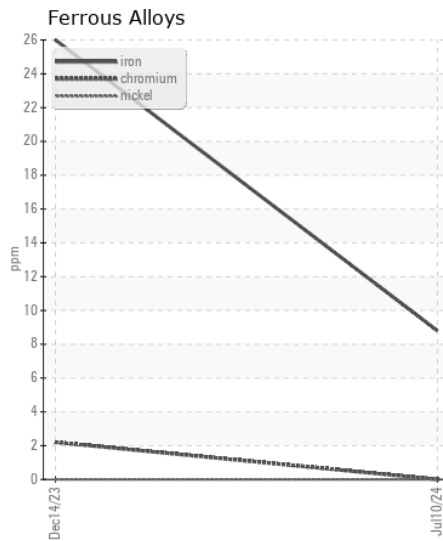
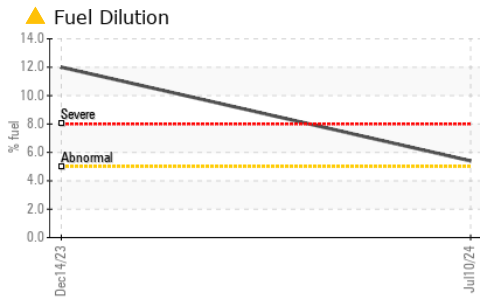
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	10	22	---
Potassium	ppm	ASTM D5185m	>20	2	4	---
Fuel	%	ASTM D3524	>5	▲ 5.4	▲ 12.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	7.7	13.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.1	20.6	---
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		9	36	---
Boron	ppm	ASTM D5185m	0	111	74	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	64	166	56	---
Manganese	ppm	ASTM D5185m	0	0	<1	---
Magnesium	ppm	ASTM D5185m	1160	589	523	---
Calcium	ppm	ASTM D5185m	820	1128	1060	---
Phosphorus	ppm	ASTM D5185m	1160	601	602	---
Zinc	ppm	ASTM D5185m	1260	724	745	---
Sulfur	ppm	ASTM D5185m	3000	3211	2001	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.4	17.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	7.2	8.0	---
Visc @ 100°C	cSt	ASTM D445	11.9	▲ 8.3	▲ 9.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0125844 **Received** : 18 Jul 2024
Lab Number : 06240075 **Tested** : 19 Jul 2024
Unique Number : 11128909 **Diagnosed** : 19 Jul 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 166 - Phenix City
 18 Old Brickyard Rd
 Phenix City, AL
 US 36869
 Contact: DEAN PEACE JR
 dean.peace@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: