



OIL ANALYSIS REPORT

Sample Rating Trend

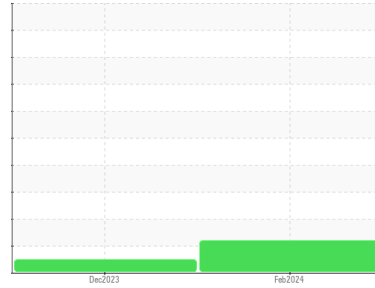
GLYCOL



Machine Id
834006

Component
Natural Gas Engine

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



DIAGNOSIS

Recommendation

We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0092184	GFL0092006	---
Sample Date	Client Info	08 Feb 2024	07 Dec 2023	---
Machine Age	hrs	1172	0	---
Oil Age	hrs	1172	0	---
Oil Changed	Client Info	N/A	Not Changd	---
Sample Status		ABNORMAL	NORMAL	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	32	24	---
Chromium	ppm ASTM D5185m >4	<1	<1	---
Nickel	ppm ASTM D5185m >2	1	<1	---
Titanium	ppm ASTM D5185m	0	<1	---
Silver	ppm ASTM D5185m >3	0	0	---
Aluminum	ppm ASTM D5185m >9	9	2	---
Lead	ppm ASTM D5185m >30	<1	0	---
Copper	ppm ASTM D5185m >35	2	2	---
Tin	ppm ASTM D5185m >4	<1	<1	---
Vanadium	ppm ASTM D5185m	0	0	---
Cadmium	ppm ASTM D5185m	0	<1	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	13	33	---
Barium	ppm ASTM D5185m 0	0	3	---
Molybdenum	ppm ASTM D5185m 60	53	50	---
Manganese	ppm ASTM D5185m 0	2	2	---
Magnesium	ppm ASTM D5185m 1010	572	552	---
Calcium	ppm ASTM D5185m 1070	1491	1485	---
Phosphorus	ppm ASTM D5185m 1150	695	720	---
Zinc	ppm ASTM D5185m 1270	941	887	---
Sulfur	ppm ASTM D5185m 2060	2424	2620	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	8	7	---
Sodium	ppm ASTM D5185m	7	6	---
Potassium	ppm ASTM D5185m >20	▲ 116	19	---

INFRA-RED

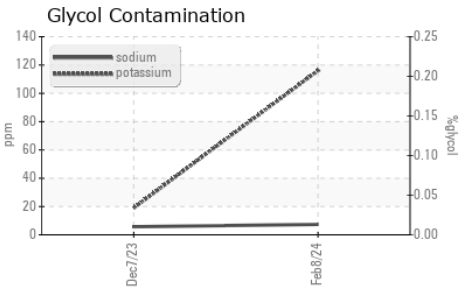
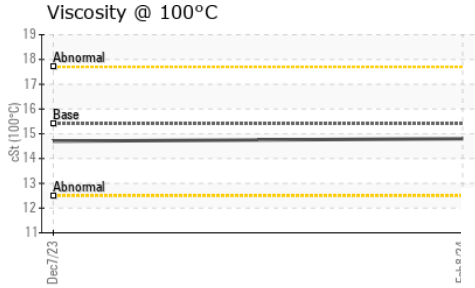
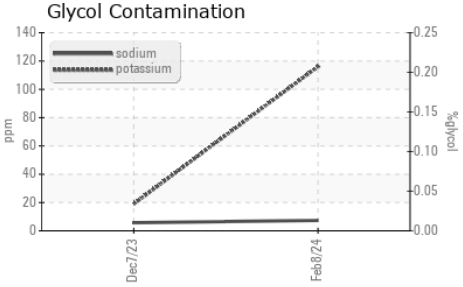
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0	---
Nitration	Abs/cm *ASTM D7624 >20	10.4	7.2	---
Sulfation	Abs/.1mm *ASTM D7415 >30	22.1	19.1	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	18.1	16.3	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	4.6	8.1	---



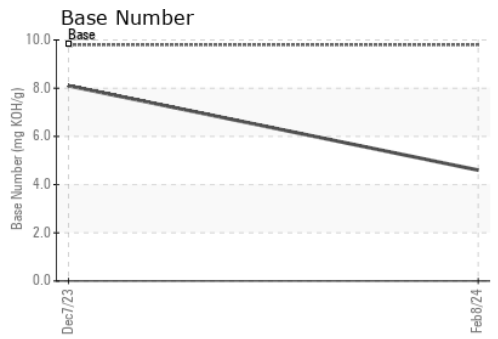
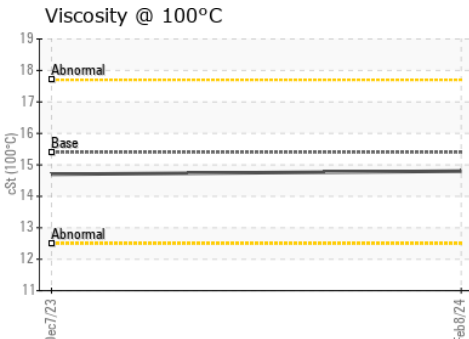
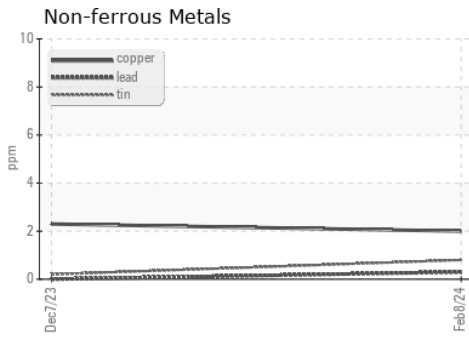
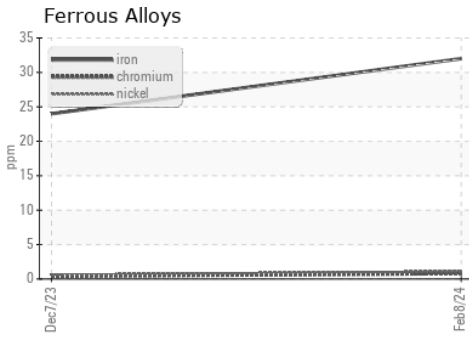
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	14.8	14.7	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0092184 **Received** : 13 Feb 2024
Lab Number : 06088047 **Tested** : 15 Feb 2024
Unique Number : 10875492 **Diagnosed** : 15 Feb 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 856 - Houston South
 8515 Highway 6 South
 Houston, TX
 US 77083
 Contact: Apolinar Zacarias
 pzacariascano@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: