



OIL ANALYSIS REPORT

Sample Rating Trend

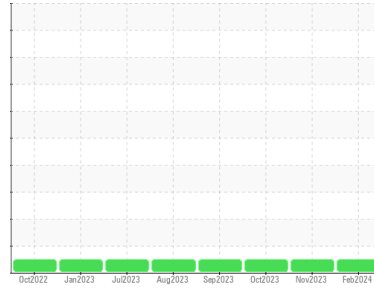
NORMAL



Area
(FAN292)
Machine Id
424076

Component
Diesel Engine
Fluid

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



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0089603	GFL0083073	GFL0097211
Sample Date	Client Info		27 Feb 2024	02 Nov 2023	24 Oct 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >165	60	45	48
Chromium	ppm	ASTM D5185m >5	3	2	2
Nickel	ppm	ASTM D5185m >4	0	0	0
Titanium	ppm	ASTM D5185m >2	<1	1	1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >20	3	11	7
Lead	ppm	ASTM D5185m >150	12	6	6
Copper	ppm	ASTM D5185m >90	58	59	60
Tin	ppm	ASTM D5185m >5	<1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	13	8	7
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	66	63	63
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 1010	920	882	871
Calcium	ppm	ASTM D5185m 1070	1122	1047	1064
Phosphorus	ppm	ASTM D5185m 1150	957	897	1018
Zinc	ppm	ASTM D5185m 1270	1134	1217	1155
Sulfur	ppm	ASTM D5185m 2060	2194	2313	2221

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	10	19	17
Sodium	ppm	ASTM D5185m	10	8	46
Potassium	ppm	ASTM D5185m >20	<1	0	2

INFRA-RED

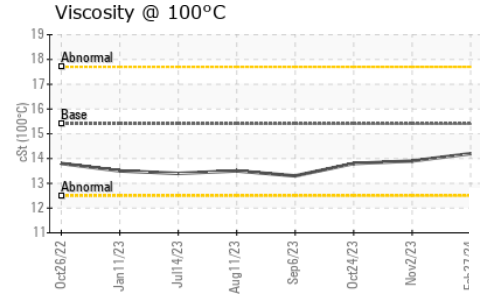
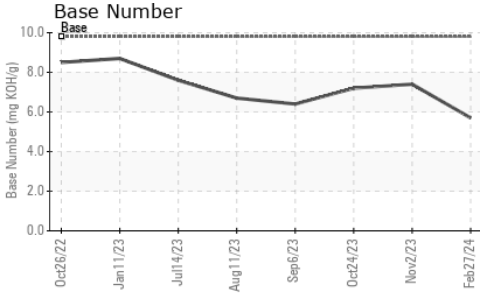
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >7.5	2.3	1.5	1.5
Nitration	Abs/cm	*ASTM D7624 >20	16.3	12.8	12.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	29.2	24.1	24.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	27.5	20.2	20.8
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	5.7	7.4	7.2



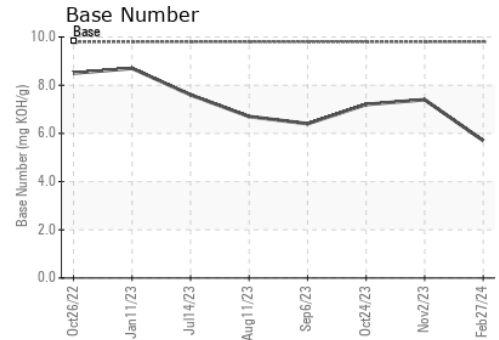
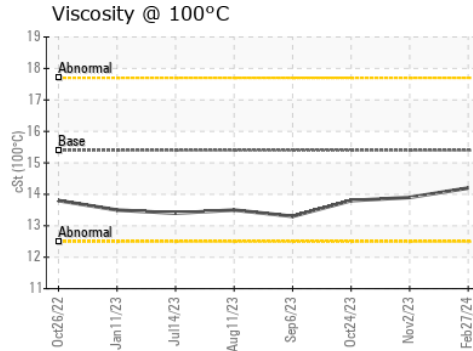
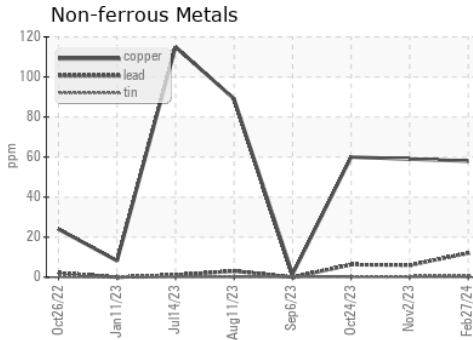
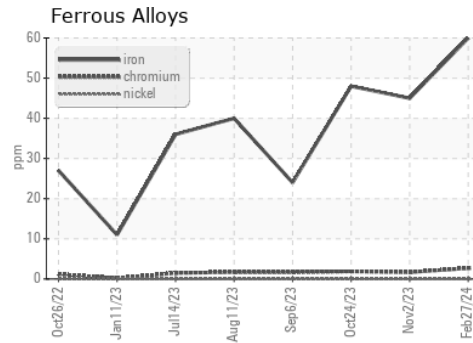
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VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	13.9	13.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0089603
Lab Number : **06111056**
Unique Number : 10914553
Test Package : FLEET

Received : 07 Mar 2024
Tested : 07 Mar 2024
Diagnosed : 09 Mar 2024 - Don Baldrige

GFL Environmental - 072 - Americus - Transwaste
 361 McMath Mill Road
 Americus, GA
 US 31719

Contact: RICHARD HEINZERLING
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T: (229)924-3669

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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