



Machine Id
12076
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0119645	GFL0092349	GFL0092335
Sample Date		Client Info		01 Jul 2024	11 Jan 2024	05 Dec 2023
Machine Age	mls	Client Info		320074	0	9358
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ATTENTION	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	18	20	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	4	5
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	19	0	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

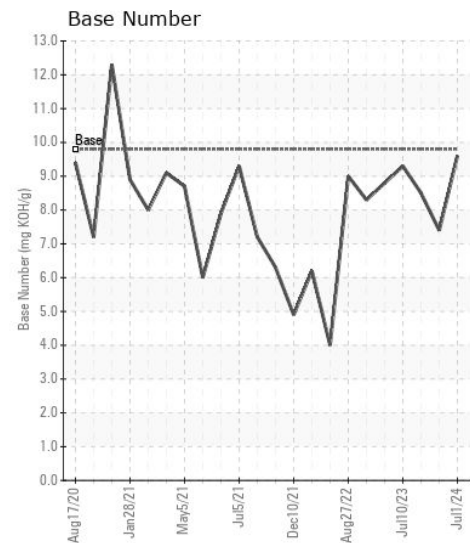
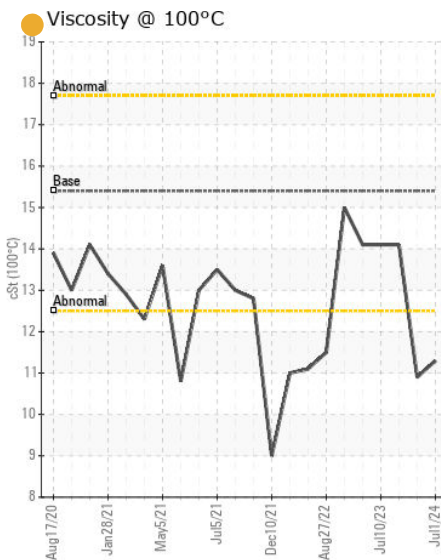
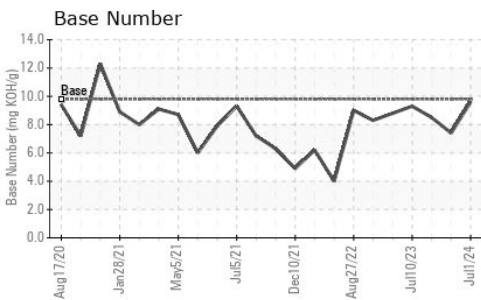
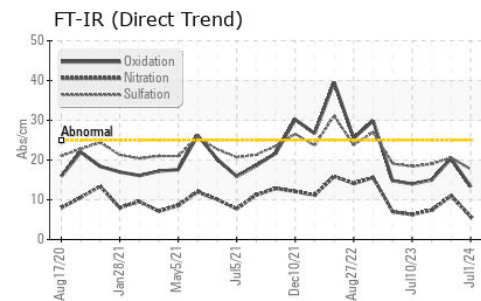
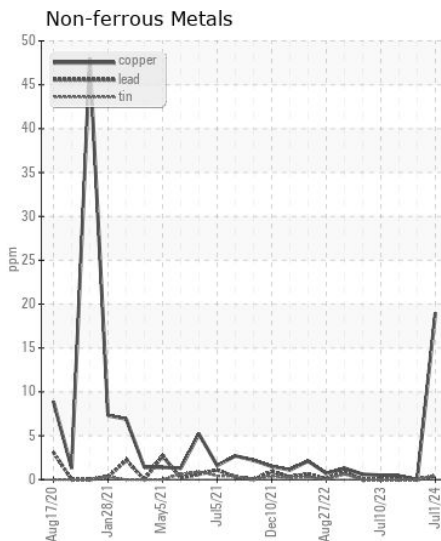
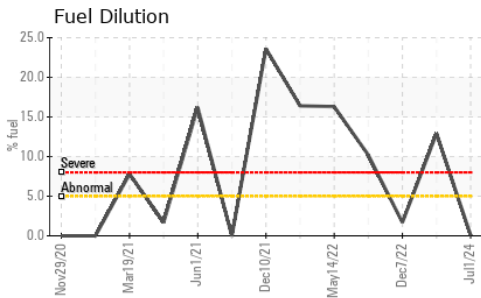
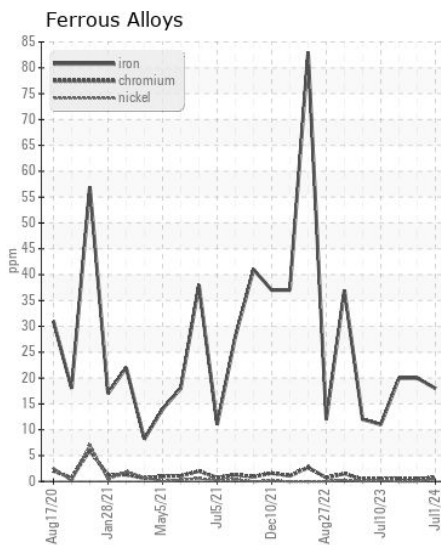
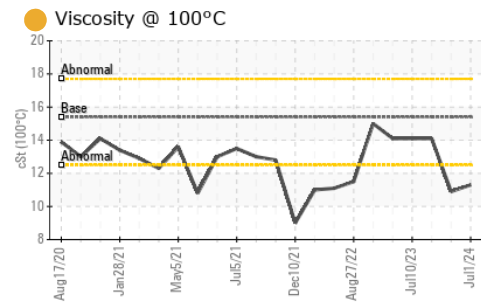
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	16	3	4
Potassium	ppm	ASTM D5185m	>20	11	0	<1
Fuel	%	ASTM D3524	>5	0.1	▲ 12.9	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	5.8	11.0	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	20.6	19.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		74	19	5
Boron	ppm	ASTM D5185m	0	6	8	7
Barium	ppm	ASTM D5185m	0	8	0	0
Molybdenum	ppm	ASTM D5185m	60	64	52	67
Manganese	ppm	ASTM D5185m	0	1	0	0
Magnesium	ppm	ASTM D5185m	1010	895	824	1000
Calcium	ppm	ASTM D5185m	1070	1128	958	1150
Phosphorus	ppm	ASTM D5185m	1150	1012	914	1049
Zinc	ppm	ASTM D5185m	1270	1193	1112	1345
Sulfur	ppm	ASTM D5185m	2060	2792	2810	3003
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.3	20.4	15.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.6	7.4	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	● 11.3	▲ 10.9	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0119645 **Received** : 02 Jul 2024
Lab Number : 06226082 **Tested** : 08 Jul 2024
Unique Number : 11109575 **Diagnosed** : 08 Jul 2024 - Don Baldridge
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 112 - New Bern
 705 Airport Road
 New Bern, NC
 US 28560
 Contact: Marquis Williams
 marquis.williams@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: