



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
923056
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		GFL0116708	GFL0116687	GFL0100874
Sample Date		Client Info		23 May 2024	14 May 2024	02 Jan 2024
Machine Age	mls	Client Info		509168	497595	497595
Oil Age	mls	Client Info		497595	497595	2400
Filter Age	mls	Client Info		0	0	2400
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	61	61	24
Chromium	ppm	ASTM D5185m	>20	2	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	<1
Lead	ppm	ASTM D5185m	>40	6	4	<1
Copper	ppm	ASTM D5185m	>330	5	3	2
Tin	ppm	ASTM D5185m	>15	<1	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

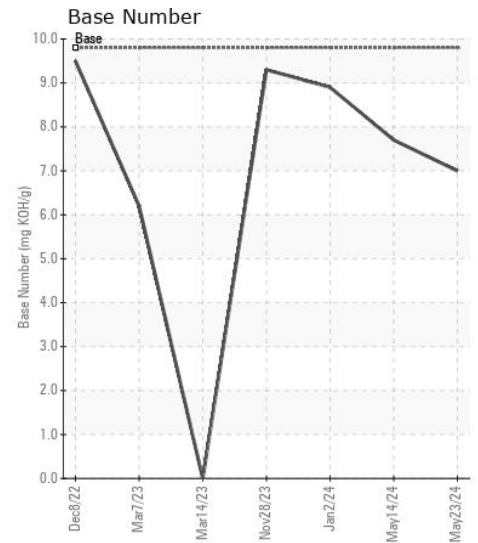
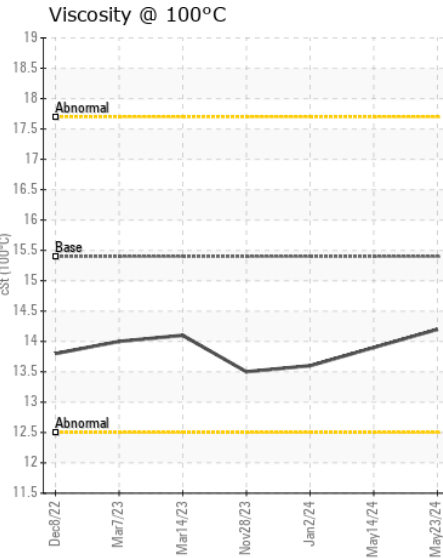
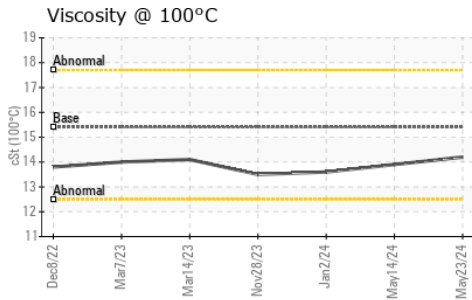
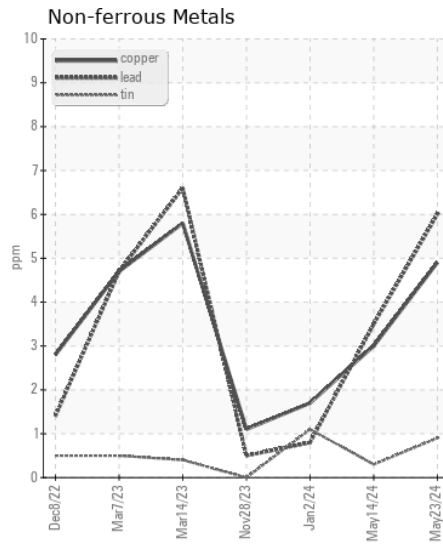
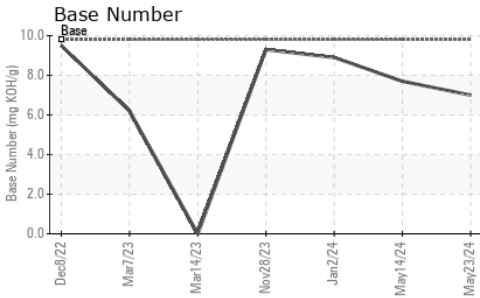
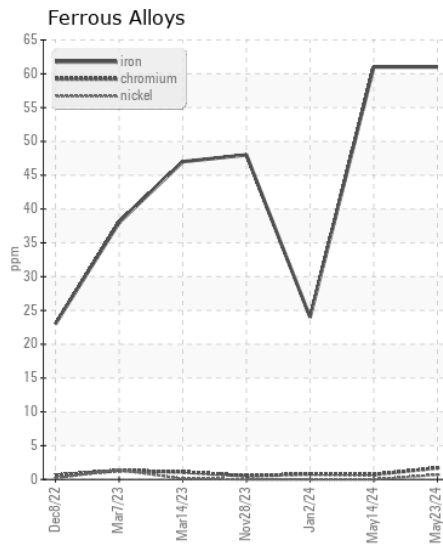
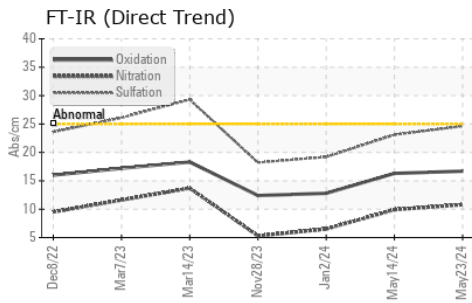
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	4	2
Potassium	ppm	ASTM D5185m	>20	5	0	0
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
Soot %	%	*ASTM D7844	>4	3.1	2.3	1.4
Nitration	Abs/cm	*ASTM D7624	>20	10.8	9.9	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	23.1	19.2
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	2	4
Boron	ppm	ASTM D5185m	0	5	6	8
Barium	ppm	ASTM D5185m	0	<1	0	<1
Molybdenum	ppm	ASTM D5185m	60	63	63	56
Manganese	ppm	ASTM D5185m	0	1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	920	904	824
Calcium	ppm	ASTM D5185m	1070	1143	1056	1013
Phosphorus	ppm	ASTM D5185m	1150	1014	1001	987
Zinc	ppm	ASTM D5185m	1270	1219	1195	1113
Sulfur	ppm	ASTM D5185m	2060	3093	3064	2828
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	16.3	12.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.0	7.7	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	13.9	13.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116708
Lab Number : 06191852
Unique Number : 11048604
Test Package : FLEET

Received : 28 May 2024
Tested : 29 May 2024
Diagnosed : 30 May 2024 - Sean Felton

GFL Environmental - 419 - Metro Saginaw
 6950 N Michigan
 Saginaw, MI
 US 48604
 Contact: Jeremy Hines
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 T: (800)684-1277
 F:

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)