



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
922012
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		GFL0107482	GFL0064264	GFL0056827
Sample Date		Client Info		31 Jan 2024	17 Jan 2023	19 Oct 2022
Machine Age	hrs	Client Info		26885	26338	25859
Oil Age	hrs	Client Info		547	610	620
Filter Age	hrs	Client Info		547	610	620
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	32	11	8
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	4
Lead	ppm	ASTM D5185m	>40	5	3	<1
Copper	ppm	ASTM D5185m	>330	3	1	1
Tin	ppm	ASTM D5185m	>15	2	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

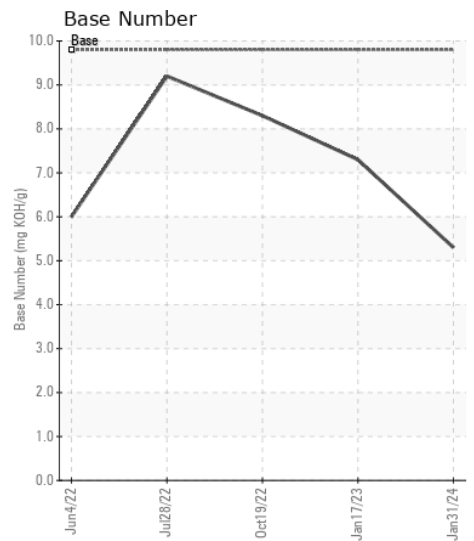
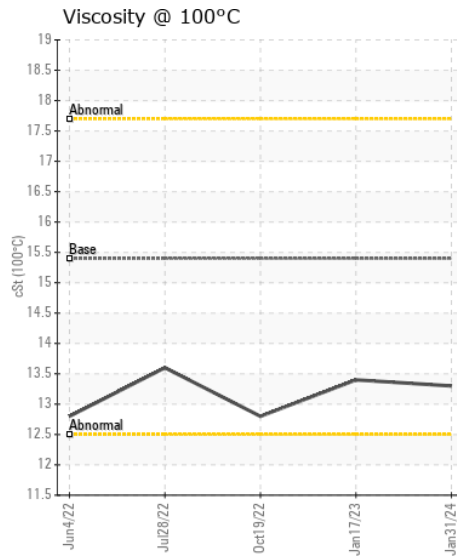
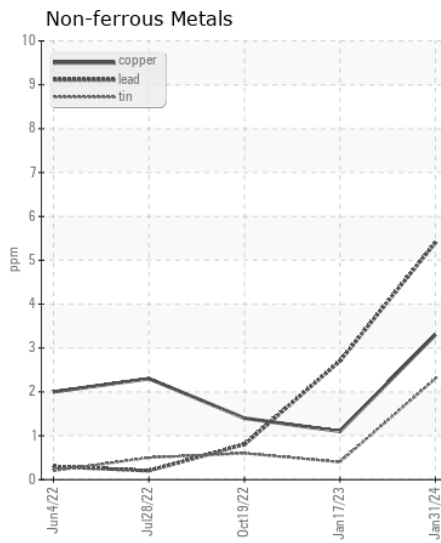
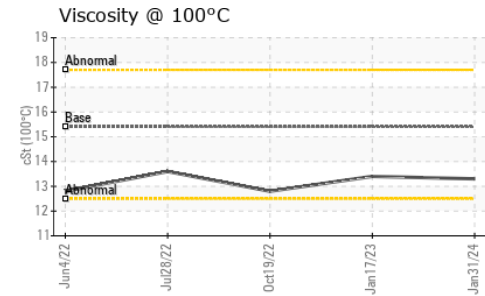
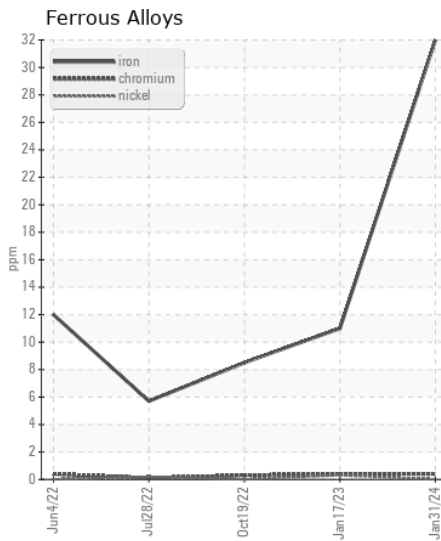
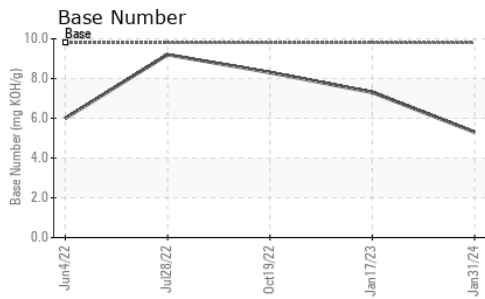
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	6	4
Potassium	ppm	ASTM D5185m	>20	2	4	4
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	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	15.0	11.1	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.4	21.7	21.4
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		10	5	4
Boron	ppm	ASTM D5185m	0	6	2	3
Barium	ppm	ASTM D5185m	0	0	1	0
Molybdenum	ppm	ASTM D5185m	60	63	60	59
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	932	911	928
Calcium	ppm	ASTM D5185m	1070	983	1059	1064
Phosphorus	ppm	ASTM D5185m	1150	977	981	973
Zinc	ppm	ASTM D5185m	1270	1231	1194	1170
Sulfur	ppm	ASTM D5185m	2060	2849	2840	3365
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.3	20.4	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.3	7.3	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	13.4	12.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0107482
Lab Number : 06082957
Unique Number : 10870402
Test Package : FLEET
Received : 07 Feb 2024
Tested : 08 Feb 2024
Diagnosed : 09 Feb 2024 - Don Baldrige

GFL Environmental - 912 - Fort Atkinson HC
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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)