



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(SB14417) S0916A-Suamico
Machine Id
412065
Component
Front Center Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (42 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0095937	GFL0095957	GFL0095960
Sample Date		Client Info		12 Mar 2024	18 Dec 2023	21 Sep 2023
Machine Age	hrs	Client Info		3841	3244	2639
Oil Age	hrs	Client Info		597	605	595
Filter Age	hrs	Client Info		0	605	595
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	>100	22	14	17
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	5	5	6
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	3	0	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

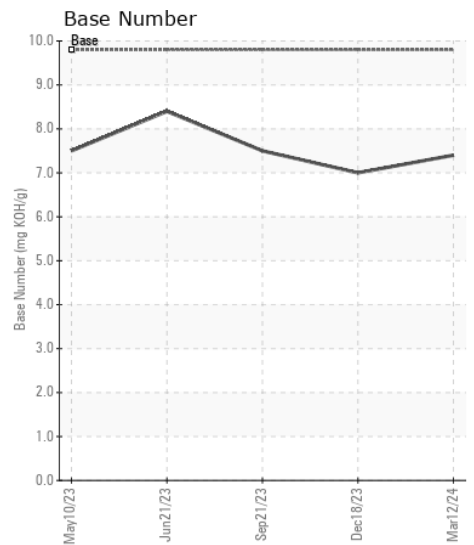
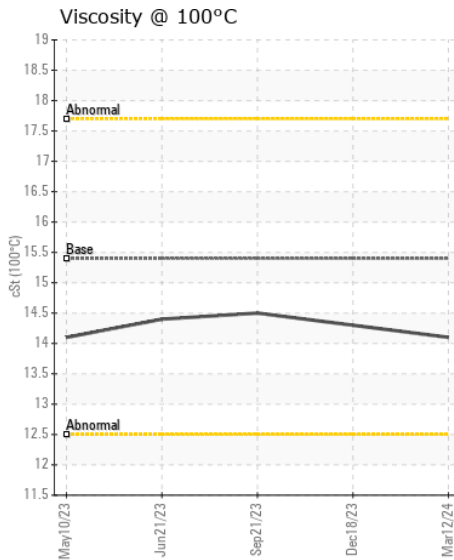
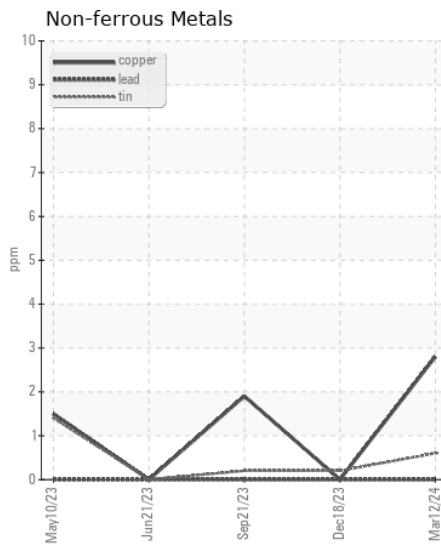
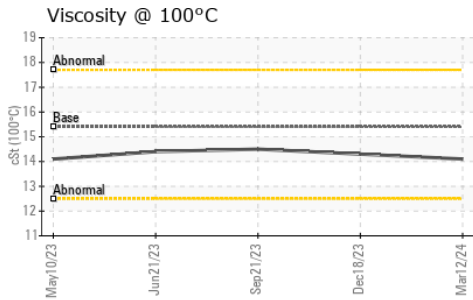
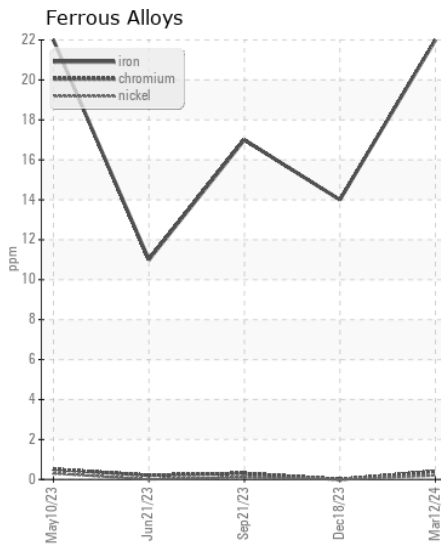
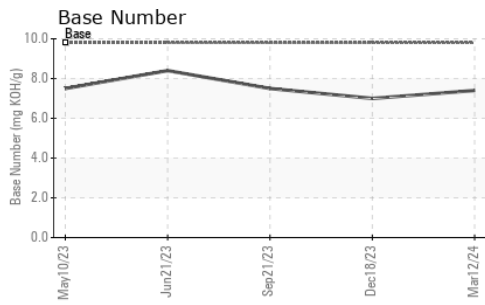
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	8	8
Potassium	ppm	ASTM D5185m	>20	6	8	15
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.3	9.3	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	21.1	20.9
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		0	0	0
Boron	ppm	ASTM D5185m	0	2	3	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	67	58	60
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	1006	959	904
Calcium	ppm	ASTM D5185m	1070	1147	1061	1117
Phosphorus	ppm	ASTM D5185m	1150	1086	1102	975
Zinc	ppm	ASTM D5185m	1270	1337	1266	1209
Sulfur	ppm	ASTM D5185m	2060	3303	2950	3107
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	17.9	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.4	7.0	7.5
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	14.3	14.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0095937
Lab Number : 06122217
Unique Number : 10936368
Test Package : FLEET

Received : 19 Mar 2024
Tested : 20 Mar 2024
Diagnosed : 20 Mar 2024 - Wes Davis

GFL Environmental - 916A - Suamico
 2300 Deerfield Ave E
 Suamico, WI
 US 54313
 Contact: NICHOLAS WEIDNER
 nweidner@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: