



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(SWS1487)
Machine Id
9171
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample
Comment: Engine oil sample)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0103941	GFL0103936	GFL0093273
Sample Date		Client Info		14 Feb 2024	10 Jan 2024	25 Sep 2023
Machine Age	mls	Client Info		227087	17072	203374
Oil Age	mls	Client Info		227087	0	203374
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	18	19	16
Chromium	ppm	ASTM D5185m	>4	1	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	8	2	21
Lead	ppm	ASTM D5185m	>30	<1	<1	<1
Copper	ppm	ASTM D5185m	>35	4	21	38
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

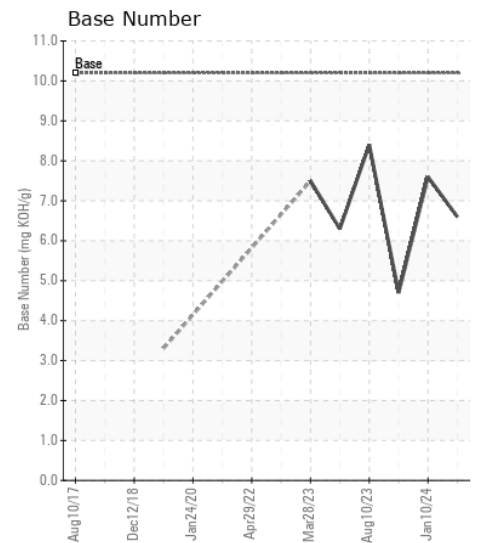
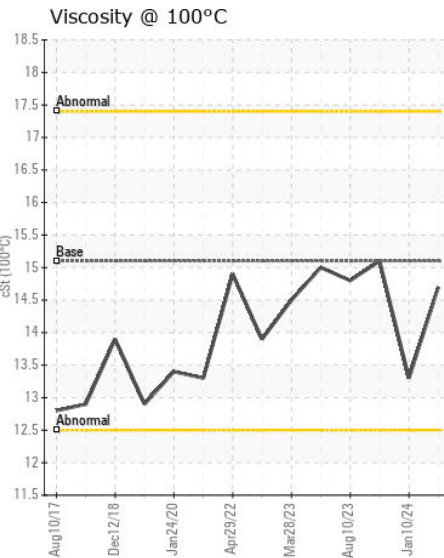
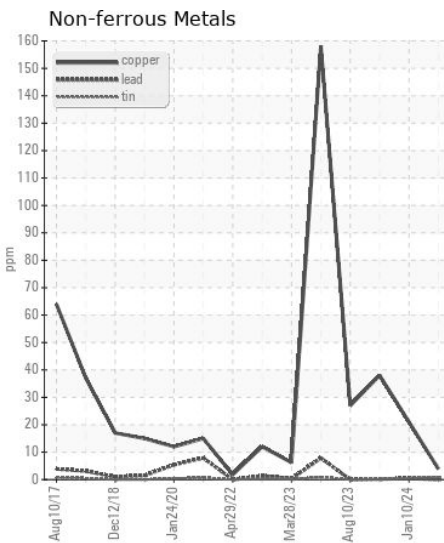
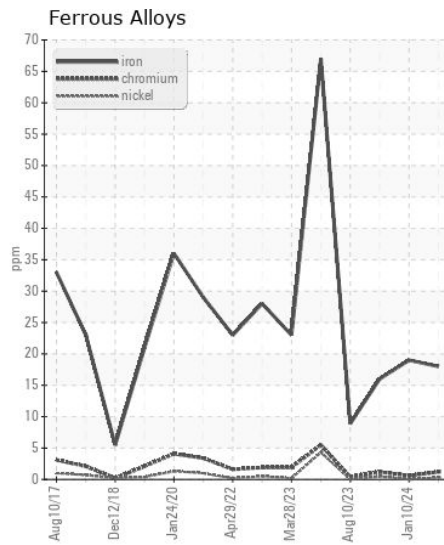
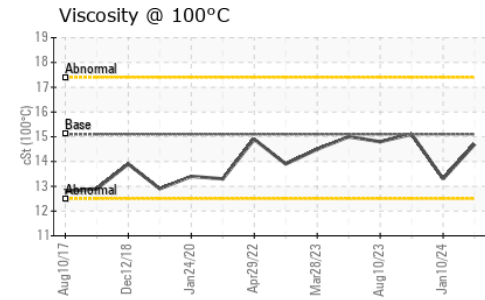
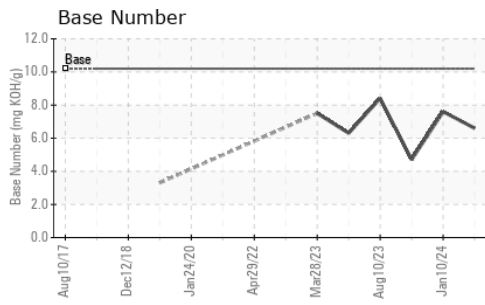
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	6	6	5
Potassium	ppm	ASTM D5185m	>20	5	13	26
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0.8	0
Nitration	Abs/cm	*ASTM D7624	>20	9.8	10.0	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	21.3	21.5
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	>0.1	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		8	35	22
Boron	ppm	ASTM D5185m	50	15	2	4
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	47	59	56
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	560	517	914	519
Calcium	ppm	ASTM D5185m	1510	1476	1025	1517
Phosphorus	ppm	ASTM D5185m	780	701	1029	625
Zinc	ppm	ASTM D5185m	870	885	1232	924
Sulfur	ppm	ASTM D5185m	2040	2295	2712	2691
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	18.2	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	6.6	7.6	4.7
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	13.3	15.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0103941
Lab Number : 06097514
Unique Number : 10890367
Test Package : FLEET

Received : 22 Feb 2024
Tested : 23 Feb 2024
Diagnosed : 24 Feb 2024 - Don Baldrige

GFL Environmental - 865 - East Mount Hauling
 7213 East Mount Houston Road
 Houston, TX
 US 77050
 Contact: Saul Castillo
 saul.castillo@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: