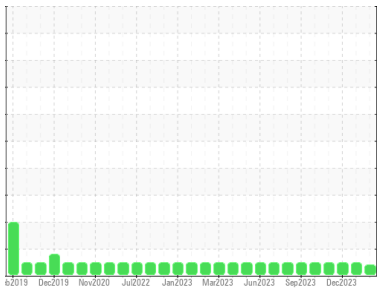
OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Machine Id
726036-310024
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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

▲ 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0109831**	GFL0103344	GFL0099924
Sample Date		Client Info		**06 Feb 2024**	05 Jan 2024	19 Dec 2023
Machine Age	hrs	Client Info		**16274**	16123	15990
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ATTENTION**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	**5**	1	17
Chromium	ppm	ASTM D5185m	>4	**<1**	0	2
Nickel	ppm	ASTM D5185m	>2	**2**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**5**	1	2
Lead	ppm	ASTM D5185m	>45	**0**	0	0
Copper	ppm	ASTM D5185m	>85	**3**	<1	<1
Tin	ppm	ASTM D5185m	>4	**1**	<1	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	<1
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**55**	6	34
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**16**	56	51
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	1010	**792**	916	612
Calcium	ppm	ASTM D5185m	1070	**1161**	1062	1380
Phosphorus	ppm	ASTM D5185m	1150	**718**	1083	864
Zinc	ppm	ASTM D5185m	1270	**835**	1257	1016
Sulfur	ppm	ASTM D5185m	2060	**2200**	3123	2732

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	**3**	3	5
Sodium	ppm	ASTM D5185m		**1**	2	32
Potassium	ppm	ASTM D5185m	>20	**3**	2	2
Fuel	%	ASTM D3524	>5	**0.6**	<1.0	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.2**	0.2	1.1
Nitration	Abs/cm	*ASTM D7624	>20	**8.9**	6.1	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	**21.9**	18.1	20.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**19.3**	14.5	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**7.8**	8.3	9.1

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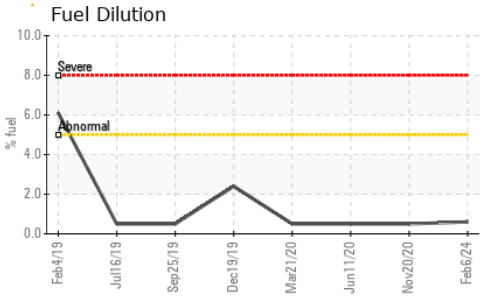
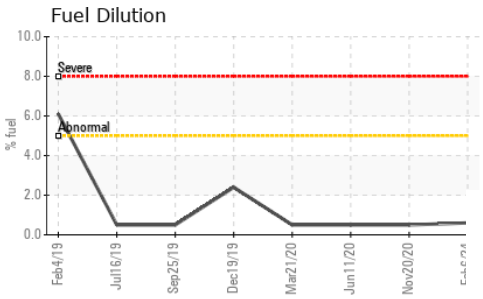
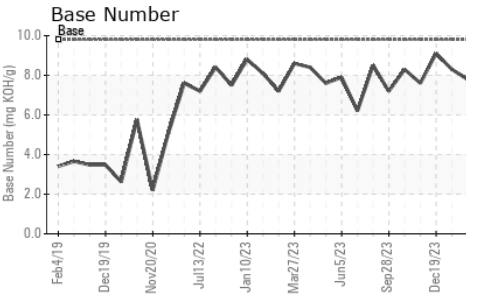


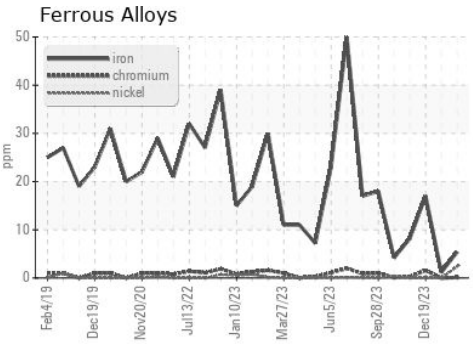


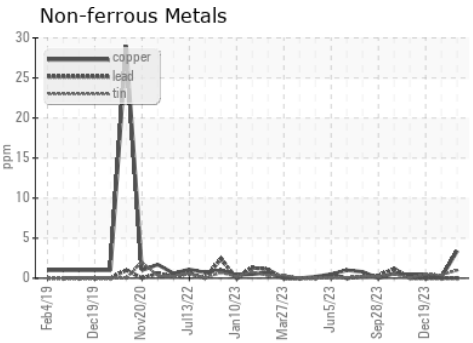


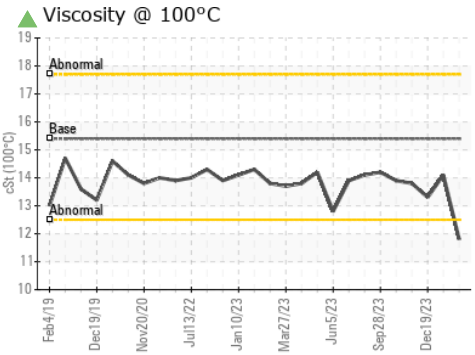
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

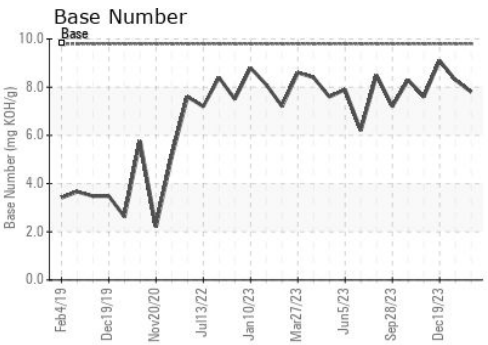
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **11.8**	14.1	13.3

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109831
Lab Number : 06083286
Unique Number : 10870731
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 08 Feb 2024
Tested : 09 Feb 2024
Diagnosed : 09 Feb 2024 - Don Baldridge

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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