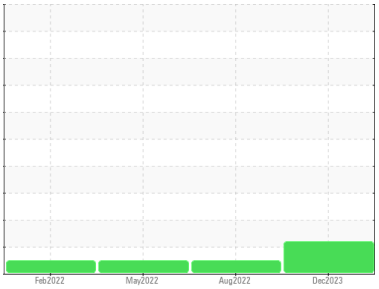
PROBLEM SUMMARY

Machine Id
948002-172503
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

Sample Rating Trend



DEGRADATION

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	NORMAL
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	▲ **3.5**	7	6.2

Customer Id: GFL146
Sample No.: GFL0088456
Lab Number: 06027321
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

25 Aug 2022 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

27 May 2022 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

28 Feb 2022 Diag: Wes Davis

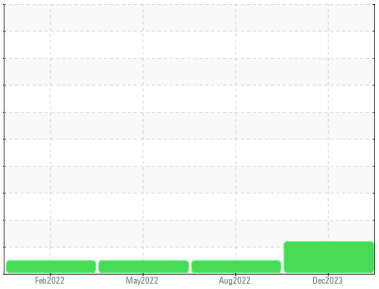
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Machine Id
948002-172503
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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

Fluid Condition
The BN level is low.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0088456**	GFL0040940	GFL0025028
Sample Date		Client Info		**04 Dec 2023**	25 Aug 2022	27 May 2022
Machine Age	hrs	Client Info		**14166**	12845	12217
Oil Age	hrs	Client Info		**600**	650	650
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**34**	15	13
Chromium	ppm	ASTM D5185m	>5	**2**	1	<1
Nickel	ppm	ASTM D5185m	>4	**<1**	<1	<1
Titanium	ppm	ASTM D5185m	>5	**4**	<1	0
Silver	ppm	ASTM D5185m	>3	**0**	<1	1
Aluminum	ppm	ASTM D5185m	>25	**10**	7	6
Lead	ppm	ASTM D5185m	>40	**<1**	2	1
Copper	ppm	ASTM D5185m	>150	**6**	<1	<1
Tin	ppm	ASTM D5185m	>4	**<1**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	<1	<1

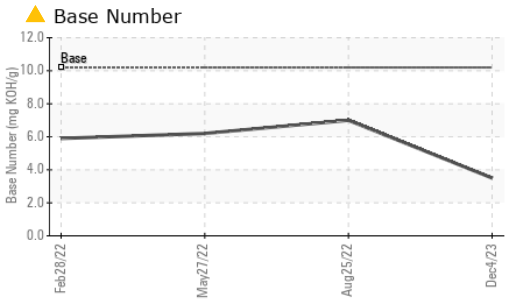
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	**3**	23	71
Barium	ppm	ASTM D5185m	5	**0**	0	0
Molybdenum	ppm	ASTM D5185m	50	**60**	90	117
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	560	**935**	610	701
Calcium	ppm	ASTM D5185m	1510	**1201**	1661	1549
Phosphorus	ppm	ASTM D5185m	780	**1061**	743	769
Zinc	ppm	ASTM D5185m	870	**1315**	947	907
Sulfur	ppm	ASTM D5185m	2040	**3427**	2697	2914

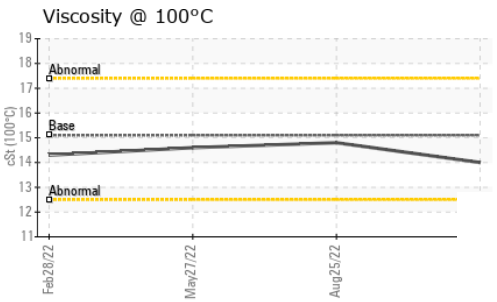
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**5**	9	7
Sodium	ppm	ASTM D5185m		**18**	3	3
Potassium	ppm	ASTM D5185m	>20	**10**	8	9

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0**	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**10.6**	10.0	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.6**	21.2	20.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**18.2**	16.4	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	**3.5**	7	6.2

OIL ANALYSIS REPORT

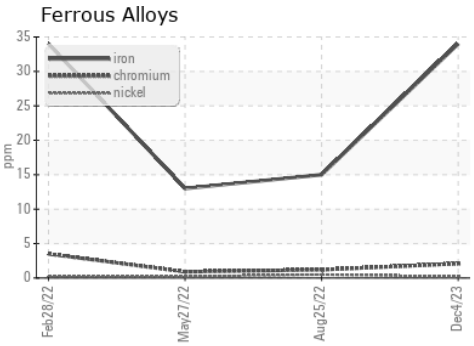


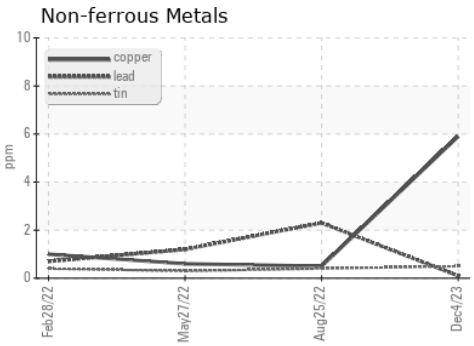


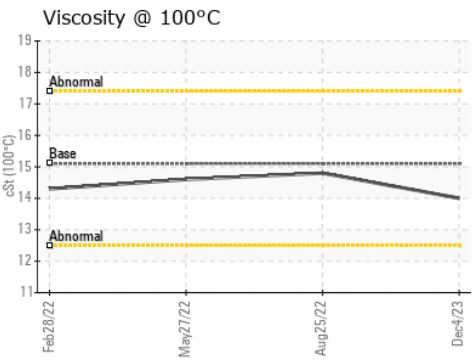
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

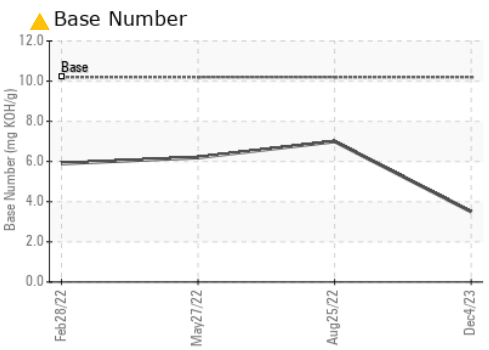
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	**14.0**	14.8	14.6

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0088456
Lab Number : 06027321
Unique Number : 10777112
Test Package : FLEET

Received : 07 Dec 2023
Diagnosed : 08 Dec 2023
Diagnostician : Sean Felton

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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Report Id: GFL146 [WUSCAR] 06027321 (Generated: 12/08/2023 15:28:55) Rev: 1

Submitted By: CHRISTOPHER FARRER