



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**749012-310059**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0092160</b>	GFL0092010	GFL0084672
Sample Date		Client Info		<b>08 Feb 2024</b>	04 Dec 2023	18 Sep 2023
Machine Age	hrs	Client Info		<b>14977</b>	14418	13829
Oil Age	hrs	Client Info		<b>0</b>	600	0
Filter Age	hrs	Client Info		<b>0</b>	600	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	<b>8</b>	7	9
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	2	0
Copper	ppm	ASTM D5185m	>35	<b>1</b>	5	9
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

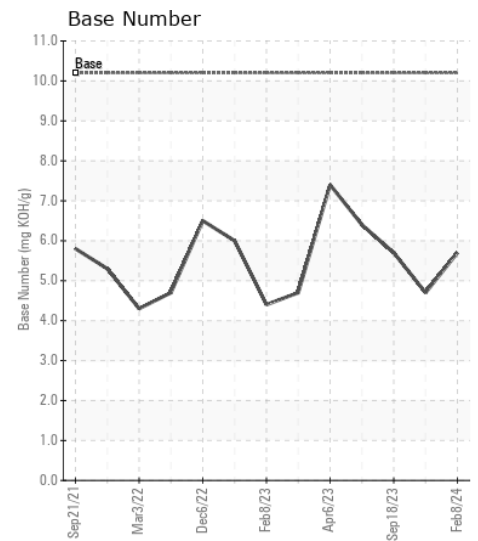
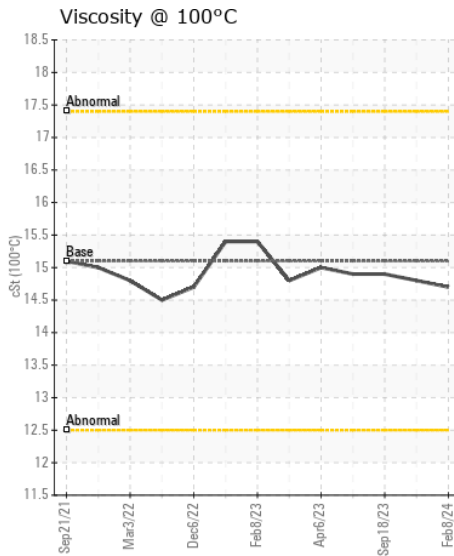
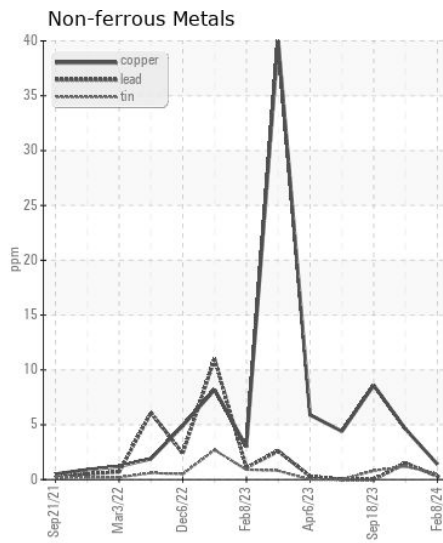
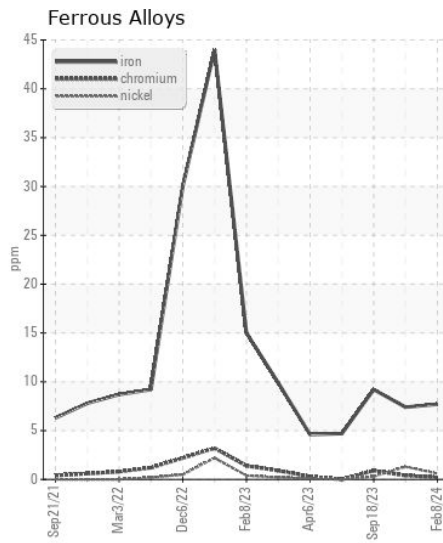
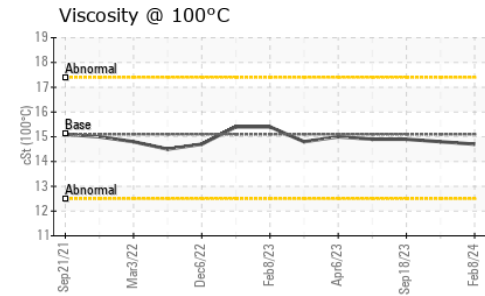
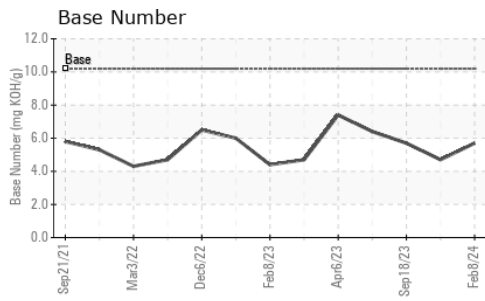
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	<b>5</b>	8	11
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	5	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.7</b>	10.6	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.9</b>	20.6	23.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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		<b>6</b>	6	6
Boron	ppm	ASTM D5185m	50	<b>14</b>	7	10
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>51</b>	50	53
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	560	<b>573</b>	639	625
Calcium	ppm	ASTM D5185m	1510	<b>1488</b>	1770	1666
Phosphorus	ppm	ASTM D5185m	780	<b>757</b>	821	707
Zinc	ppm	ASTM D5185m	870	<b>981</b>	1133	964
Sulfur	ppm	ASTM D5185m	2040	<b>2495</b>	2725	2897
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.0</b>	18.0	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>5.7</b>	4.7	5.7
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.7</b>	14.8	14.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092160  
**Lab Number** : 06088048  
**Unique Number** : 10875493  
**Test Package** : FLEET

**Received** : 13 Feb 2024  
**Tested** : 14 Feb 2024  
**Diagnosed** : 14 Feb 2024 - Wes Davis

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Apolinar Zacarias  
 pzacariascano@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: