



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

Machine Id  
**946016-260297**

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>GFL0106810</b>	GFL0084729	GFL0073643
Sample Date		Client Info		<b>13 Mar 2024</b>	16 Jun 2023	03 Mar 2023
Machine Age	hrs	Client Info		<b>6574</b>	122905	5344
Oil Age	hrs	Client Info		<b>600</b>	0	0
Filter Age	hrs	Client Info		<b>600</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	<b>37</b>	10	5
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>1</b>	1	1
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>35	<b>20</b>	10	1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

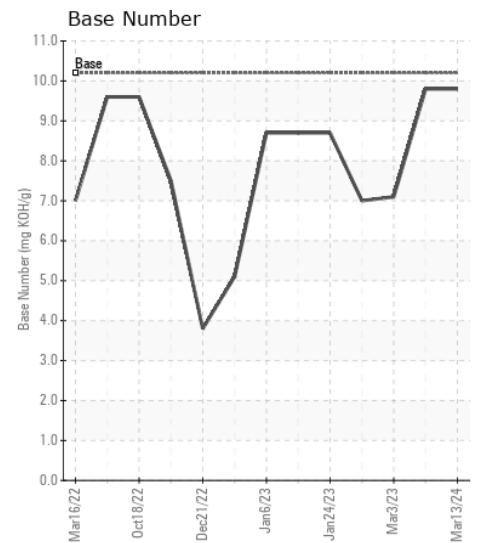
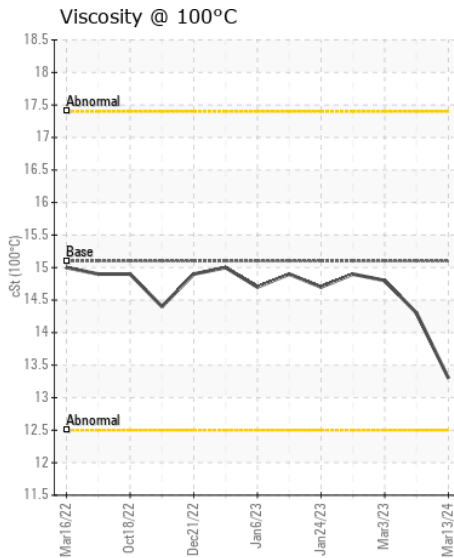
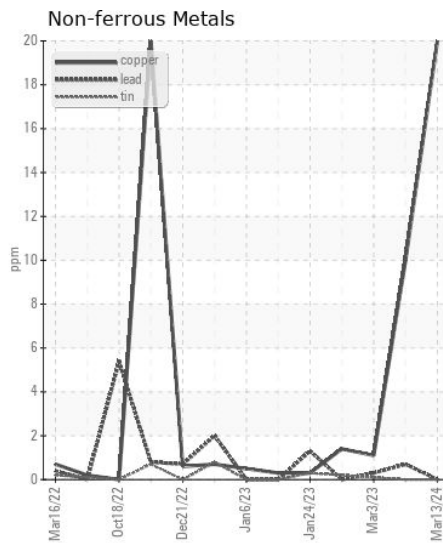
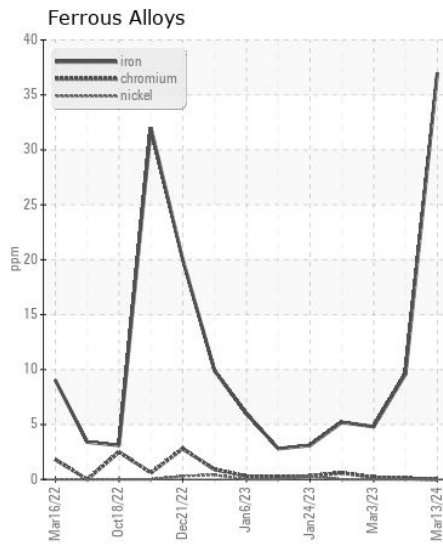
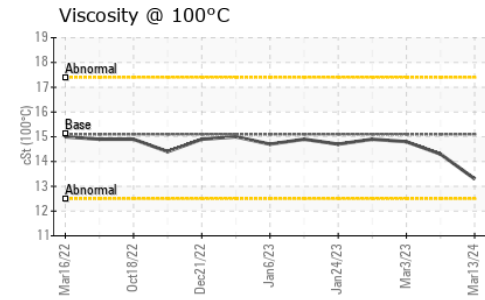
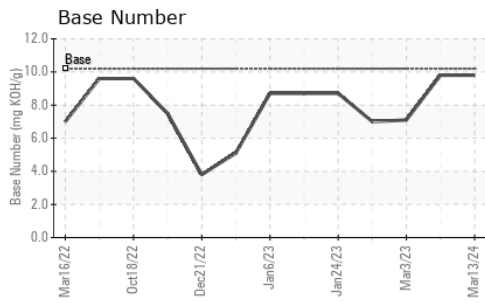
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	<b>10</b>	16	7
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	7.9	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.3</b>	19.8	19.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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>7</b>	6	6
Boron	ppm	ASTM D5185m	50	<b>17</b>	39	25
Barium	ppm	ASTM D5185m	5	<b>0</b>	10	0
Molybdenum	ppm	ASTM D5185m	50	<b>50</b>	46	46
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	3	1
Magnesium	ppm	ASTM D5185m	560	<b>618</b>	793	503
Calcium	ppm	ASTM D5185m	1510	<b>1680</b>	1265	1564
Phosphorus	ppm	ASTM D5185m	780	<b>838</b>	745	649
Zinc	ppm	ASTM D5185m	870	<b>1032</b>	911	868
Sulfur	ppm	ASTM D5185m	2040	<b>3064</b>	2867	2148
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.7</b>	16.5	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>9.8</b>	9.8	7.1
Visc @ 100°C	cSt	ASTM D445	15.1	<b>13.3</b>	14.3	14.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106810  
**Lab Number** : 06123378  
**Unique Number** : 10937529  
**Test Package** : FLEET

**Received** : 20 Mar 2024  
**Tested** : 21 Mar 2024  
**Diagnosed** : 21 Mar 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: