



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



Machine Id  
**934021**

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>GFL0109840</b>	GFL0103305	GFL0099917
Sample Date		Client Info		<b>07 Feb 2024</b>	16 Jan 2024	15 Dec 2023
Machine Age	hrs	Client Info		<b>1687</b>	1541	1344
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>20</b>	21	48
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>6</b>	2	4
Lead	ppm	ASTM D5185m	>40	<b>2</b>	9	<1
Copper	ppm	ASTM D5185m	>150	<b>3</b>	1	14
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**

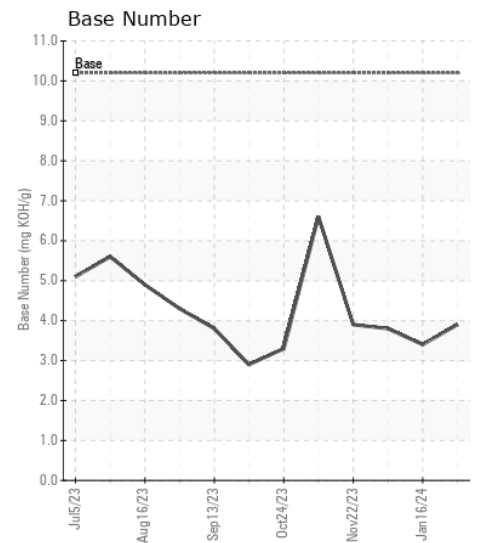
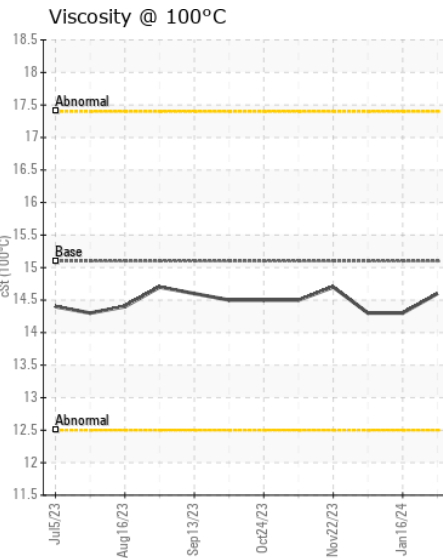
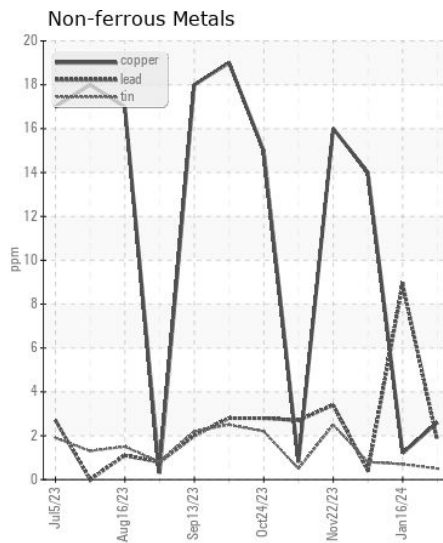
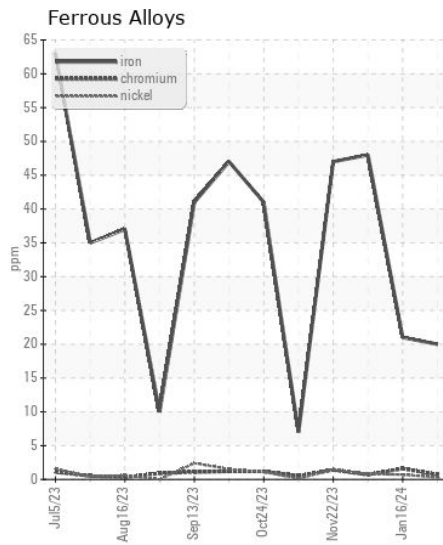
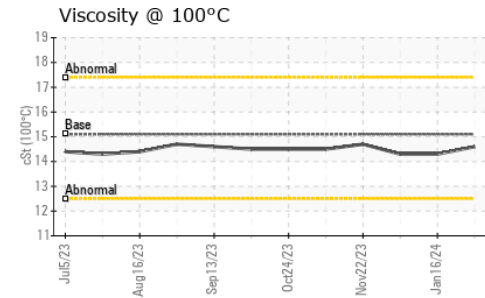
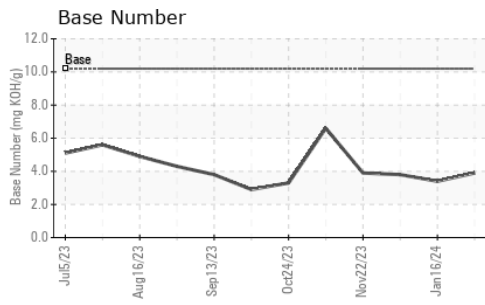
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	6	▲ 29
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	9
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.2</b>	12.8	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.7</b>	27.7	23.0
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>8</b>	7	2
Boron	ppm	ASTM D5185m	50	<b>4</b>	9	10
Barium	ppm	ASTM D5185m	5	<b>0</b>	3	<1
Molybdenum	ppm	ASTM D5185m	50	<b>55</b>	65	55
Manganese	ppm	ASTM D5185m	0	<b>2</b>	<1	12
Magnesium	ppm	ASTM D5185m	560	<b>612</b>	697	702
Calcium	ppm	ASTM D5185m	1510	<b>1840</b>	1791	1296
Phosphorus	ppm	ASTM D5185m	780	<b>812</b>	827	659
Zinc	ppm	ASTM D5185m	870	<b>1061</b>	1163	938
Sulfur	ppm	ASTM D5185m	2040	<b>2581</b>	2712	2123
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.0</b>	22.7	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>3.9</b>	3.4	3.8
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.6</b>	14.3	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109840  
**Lab Number** : 06085657  
**Unique Number** : 10873102  
**Test Package** : FLEET

**Received** : 12 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Wes Davis

**GFL Environmental - 836 - Kansas City Hauling**  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@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)

T:  
F: