



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

Area

**(YA122719)**

Machine Id

**3635C**

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>GFL0109711</b>	GFL0109692	GFL0092734
Sample Date		Client Info		<b>10 Apr 2024</b>	18 Mar 2024	13 Dec 2023
Machine Age	hrs	Client Info		<b>0</b>	19875	18750
Oil Age	hrs	Client Info		<b>0</b>	611	711
Filter Age	hrs	Client Info		<b>0</b>	611	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>17</b>	21	20
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	2	3
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	3	2
Lead	ppm	ASTM D5185m	>30	<b>0</b>	1	0
Copper	ppm	ASTM D5185m	>35	<b>11</b>	12	25
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**

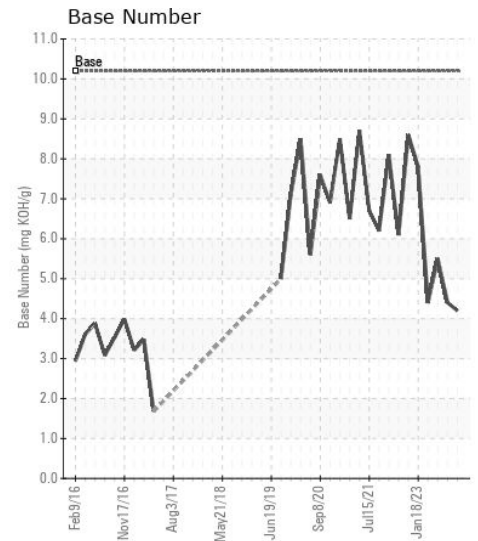
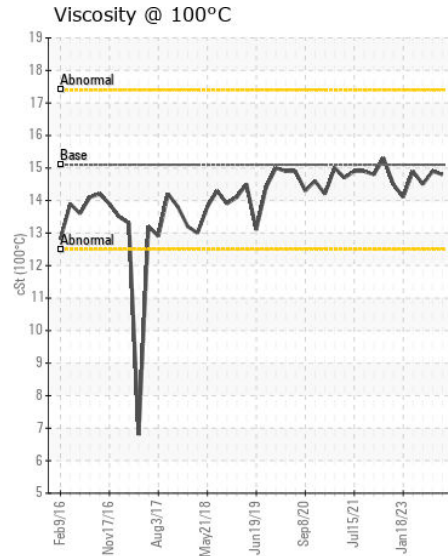
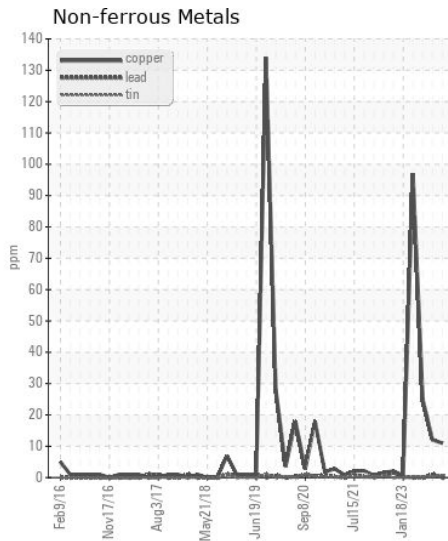
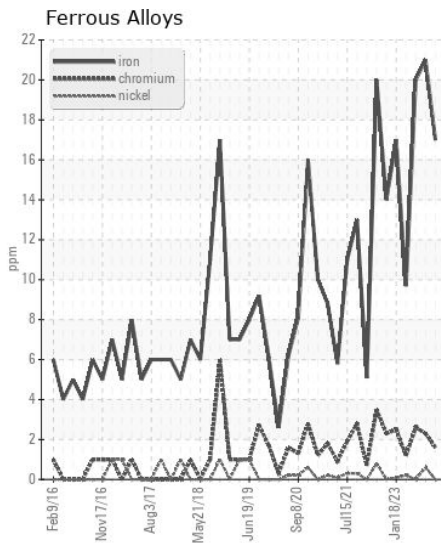
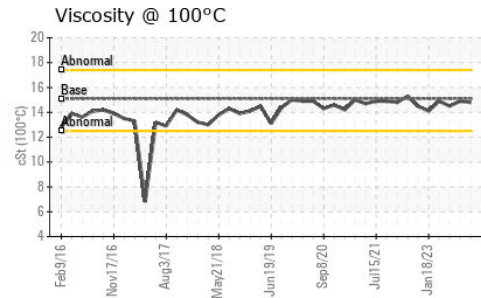
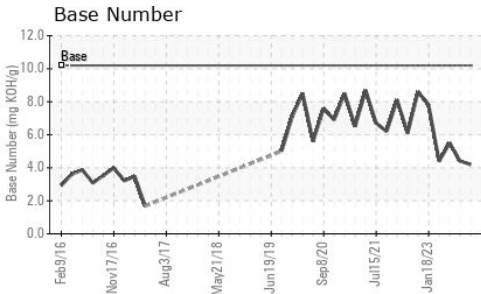
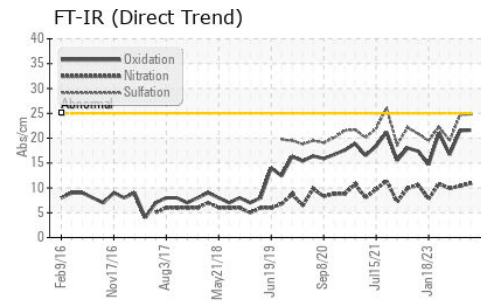
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	<b>8</b>	11	18
Potassium	ppm	ASTM D5185m	>20	<b>29</b>	17	34
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>10.9</b>	10.4	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.8</b>	24.7	19.5
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>49</b>	44	93
Boron	ppm	ASTM D5185m	50	<b>32</b>	10	12
Barium	ppm	ASTM D5185m	5	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>57</b>	62	59
Manganese	ppm	ASTM D5185m	0	<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m	560	<b>639</b>	643	616
Calcium	ppm	ASTM D5185m	1510	<b>1547</b>	1552	1466
Phosphorus	ppm	ASTM D5185m	780	<b>756</b>	780	706
Zinc	ppm	ASTM D5185m	870	<b>1012</b>	1051	966
Sulfur	ppm	ASTM D5185m	2040	<b>2725</b>	2447	2300
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.6</b>	21.5	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>4.2</b>	4.4	5.5
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.8</b>	14.9	14.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109711  
**Lab Number** : 06155623  
**Unique Number** : 10991046  
**Test Package** : FLEET

**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**GFL Environmental - 005 - Wilson/Tri-East (CNG)**  
 2810 Contentnea Road S  
 Wilson, NC  
 US 27893-8501  
 Contact: SPENCER LIGGON  
 spencer.liggon@gflenv.com  
 T: (800)207-6618  
 F:

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)