



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

Area

**(UA12964)**

Machine Id

**3592C**

Component

**Natural Gas Engine**

Fluid

**PETRO CANADA DURON GEO LD 15W40 (7 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0112180</b>	GFL0098048	GFL0052195
Sample Date		Client Info		<b>11 Apr 2024</b>	29 Nov 2023	02 Sep 2022
Machine Age	hrs	Client Info		<b>19198</b>	19198	19198
Oil Age	hrs	Client Info		<b>19198</b>	19198	21553
Filter Age	hrs	Client Info		<b>0</b>	0	1424
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>30</b>	10	17
Chromium	ppm	ASTM D5185m	>4	<b>4</b>	<1	3
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>5</b>	2	5
Lead	ppm	ASTM D5185m	>30	<b>1</b>	0	4
Copper	ppm	ASTM D5185m	>35	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<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.

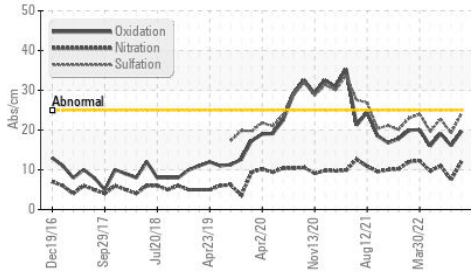
Silicon	ppm	ASTM D5185m	>+100	<b>6</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.2</b>	7.5	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.2</b>	19.2	22.8
Silt	scalar	*Visual	NONE	<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**

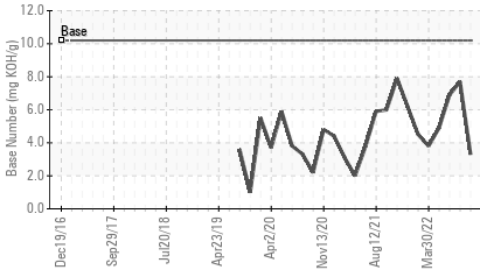
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>7</b>	3	5
Boron	ppm	ASTM D5185m	50	<b>4</b>	27	17
Barium	ppm	ASTM D5185m	5	<b>0</b>	2	<1
Molybdenum	ppm	ASTM D5185m	50	<b>55</b>	46	58
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	560	<b>596</b>	503	548
Calcium	ppm	ASTM D5185m	1510	<b>1721</b>	1444	1435
Phosphorus	ppm	ASTM D5185m	780	<b>862</b>	694	706
Zinc	ppm	ASTM D5185m	870	<b>1002</b>	879	864
Sulfur	ppm	ASTM D5185m	2040	<b>2755</b>	3343	2121
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.7</b>	16.1	19.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>3.3</b>	7.7	6.9
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.5</b>	14.6	15.2

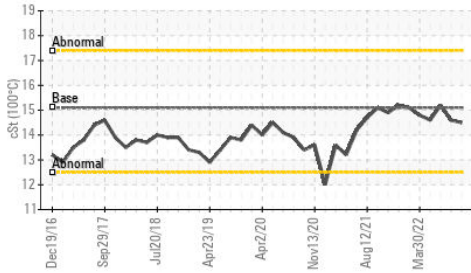
**FT-IR (Direct Trend)**



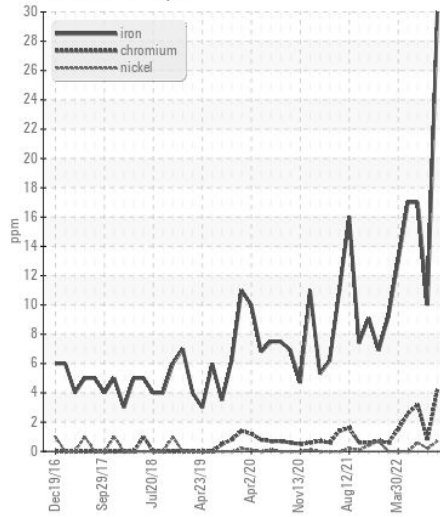
**Base Number**



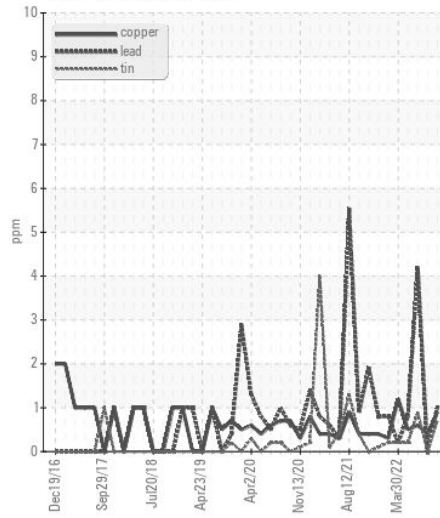
**Viscosity @ 100°C**



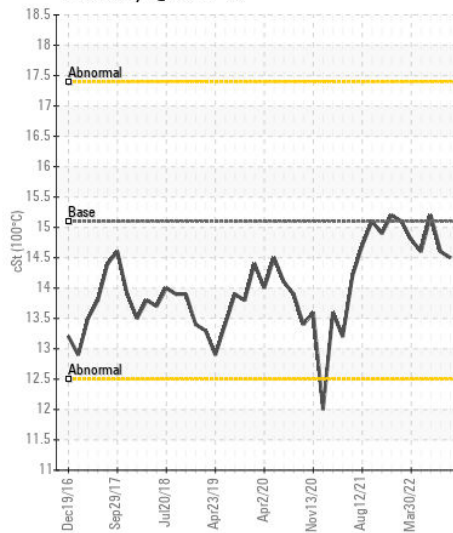
**Ferrous Alloys**



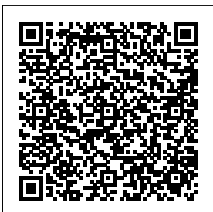
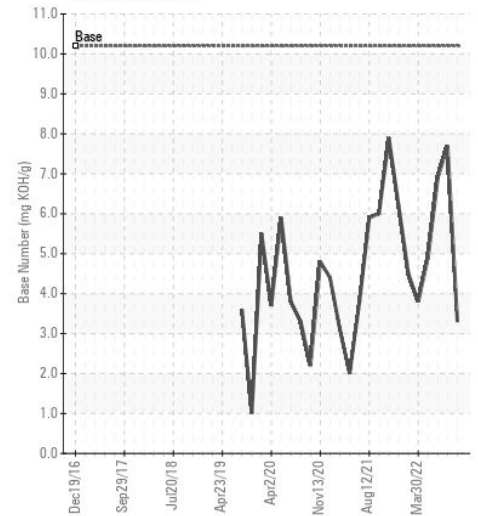
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0112180  
**Lab Number** : 06148435  
**Unique Number** : 10978513  
**Test Package** : FLEET

**GFL Environmental - 045 - Tidewater**  
 3821 Cook Blvd.  
 Chesapeake, VA  
 US 23323  
 Contact: ELVIN RODRIGUEZ  
 elvinrodriguez@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: