



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

Machine Id  
**732010**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (28 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0121780</b>	GFL0106792	GFL0092054
Sample Date		Client Info		<b>21 May 2024</b>	06 Mar 2024	15 Dec 2023
Machine Age	hrs	Client Info		<b>7226</b>	6646	6024
Oil Age	hrs	Client Info		<b>11349</b>	11349	31866
Filter Age	hrs	Client Info		<b>11349</b>	11349	31866
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>	9	8
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<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>4</b>	3	3
Lead	ppm	ASTM D5185m	>30	<b>2</b>	0	2
Copper	ppm	ASTM D5185m	>35	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
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.

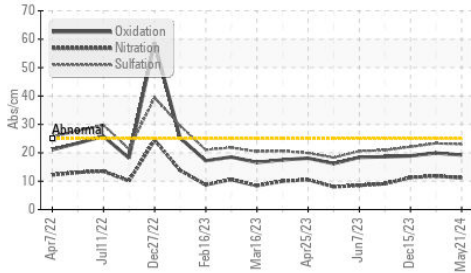
Silicon	ppm	ASTM D5185m	>+100	<b>5</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	5	6
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.2</b>	11.8	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.0</b>	23.3	22.1
Silt	scalar	*Visual	NONE	<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**

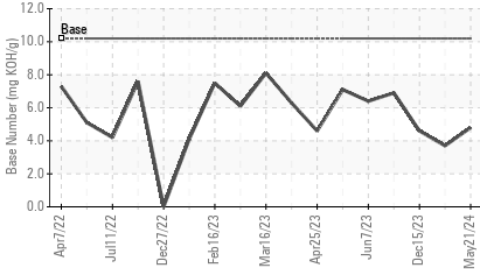
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>8</b>	7	6
Boron	ppm	ASTM D5185m	50	<b>10</b>	5	6
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>54</b>	50	55
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	560	<b>585</b>	496	548
Calcium	ppm	ASTM D5185m	1510	<b>1665</b>	1624	1614
Phosphorus	ppm	ASTM D5185m	780	<b>734</b>	669	654
Zinc	ppm	ASTM D5185m	870	<b>977</b>	912	988
Sulfur	ppm	ASTM D5185m	2040	<b>2748</b>	2471	2428
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.2</b>	19.9	18.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>4.8</b>	3.7	4.6
Visc @ 100°C	cSt	ASTM D445	15.1	<b>15.0</b>	14.8	15.0

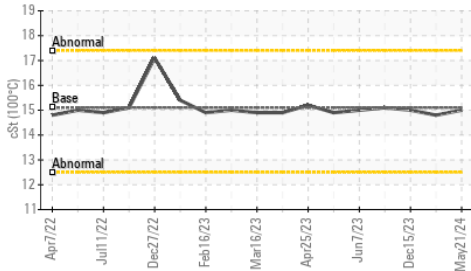
**FT-IR (Direct Trend)**



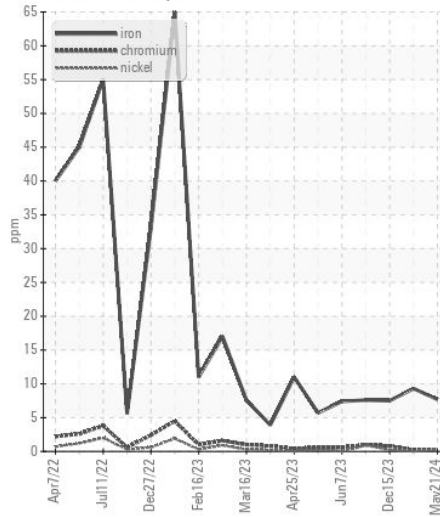
**Base Number**



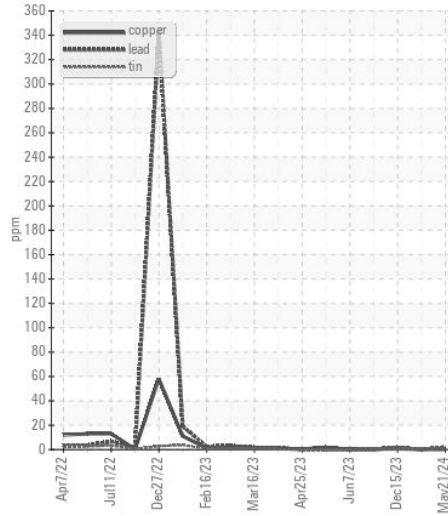
**Viscosity @ 100°C**



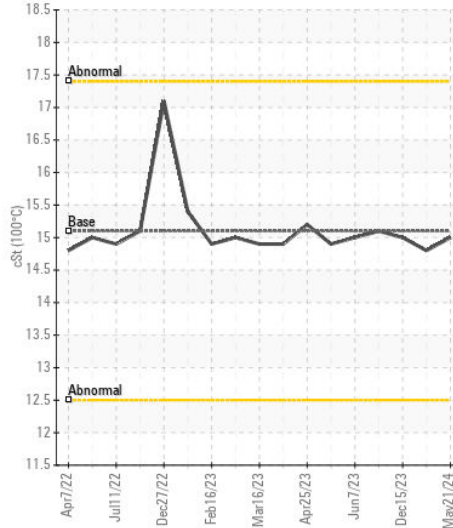
**Ferrous Alloys**



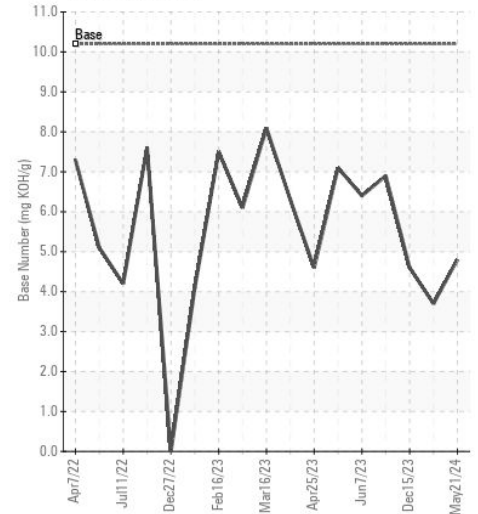
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0121780  
**Lab Number** : 06193705  
**Unique Number** : 11050457  
**Test Package** : FLEET

**Received** : 29 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 30 May 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)

T:  
F: