



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

Area

**(UA35897)**

Machine Id

**3619C**

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>GFL0119076</b>	GFL0119068	GFL0052189
Sample Date		Client Info		<b>31 May 2024</b>	22 May 2024	20 Sep 2022
Machine Age	hrs	Client Info		<b>20134</b>	20134	20134
Oil Age	hrs	Client Info		<b>20134</b>	20134	21790
Filter Age	hrs	Client Info		<b>0</b>	0	1324
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>6</b>	23	8
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	3	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>9	<b>1</b>	3	2
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	6	<1
Copper	ppm	ASTM D5185m	>35	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	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.

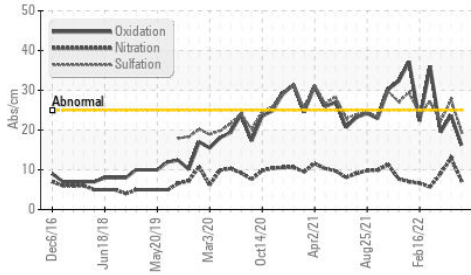
Silicon	ppm	ASTM D5185m	>+100	<b>3</b>	5	7
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.2</b>	12.9	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.6</b>	27.6	22.2
Silt	scalar	*Visual	NONE	<b>NONE</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**

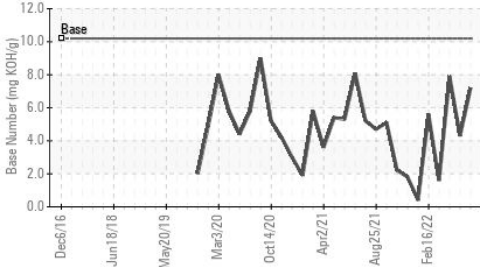
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>6</b>	9	2
Boron	ppm	ASTM D5185m	50	<b>29</b>	13	26
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>51</b>	64	51
Manganese	ppm	ASTM D5185m	0	<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m	560	<b>589</b>	691	497
Calcium	ppm	ASTM D5185m	1510	<b>1420</b>	1977	1453
Phosphorus	ppm	ASTM D5185m	780	<b>836</b>	947	755
Zinc	ppm	ASTM D5185m	870	<b>1012</b>	1139	866
Sulfur	ppm	ASTM D5185m	2040	<b>2715</b>	3086	2741
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.2</b>	23.7	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>7.2</b>	4.3	7.9
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.8</b>	14.8	13.9

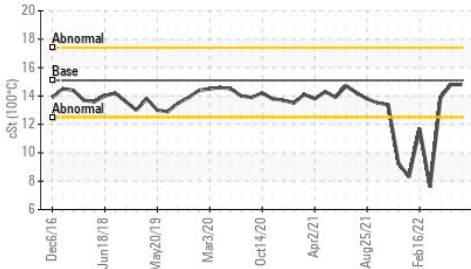
**FT-IR (Direct Trend)**



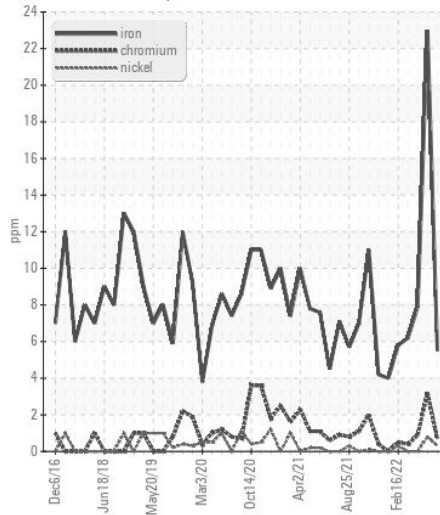
**Base Number**



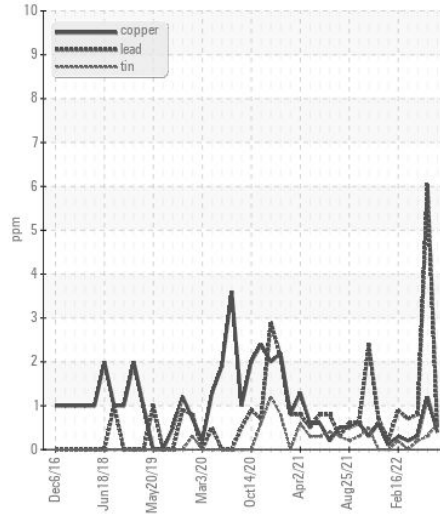
**Viscosity @ 100°C**



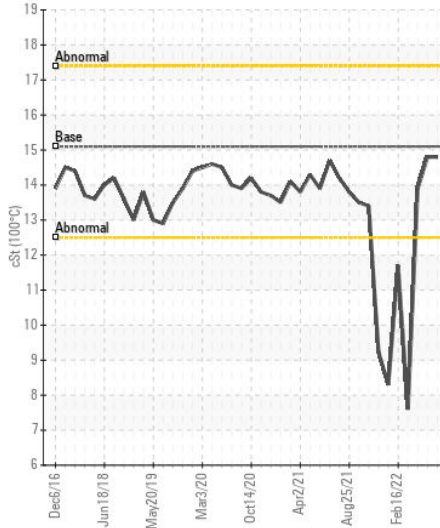
**Ferrous Alloys**



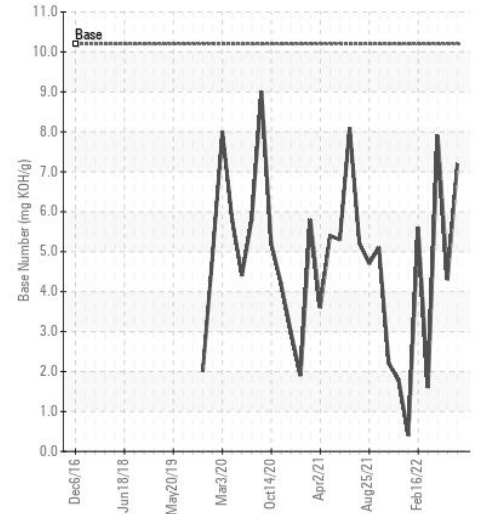
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0119076  
**Lab Number** : 06197511  
**Unique Number** : 11059634  
**Test Package** : FLEET

**Received** : 03 Jun 2024  
**Tested** : 04 Jun 2024  
**Diagnosed** : 04 Jun 2024 - Wes Davis

**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: