



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

Area

(P659749)

Machine Id

10899C

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (11 GAL)

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0124435</b>	GFL0096967	GFL0110374
Sample Date		Client Info		<b>09 Jul 2024</b>	23 Feb 2024	13 Feb 2024
Machine Age	hrs	Client Info		<b>14438</b>	13361	13305
Oil Age	hrs	Client Info		<b>13305</b>	56	12308
Filter Age	hrs	Client Info		<b>13305</b>	0	12308
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>13</b>	4	15
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>9	<b>4</b>	1	1
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185m	>35	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</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.

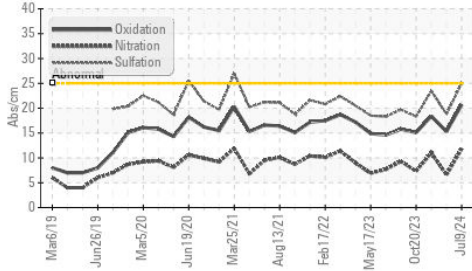
Silicon	ppm	ASTM D5185m	>+100	<b>5</b>	4	8
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	3	56
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.8</b>	6.6	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.0</b>	18.8	23.5
Silt	scalar	*Visual	NONE	<b>NONE</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**

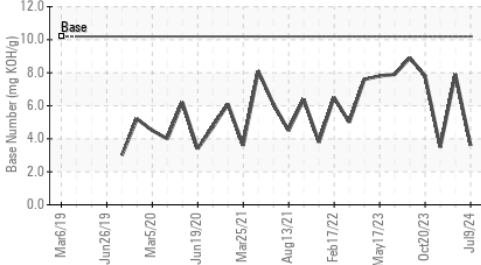
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>12</b>	8	32
Boron	ppm	ASTM D5185m	50	<b>4</b>	39	7
Barium	ppm	ASTM D5185m	5	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	50	<b>62</b>	53	66
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185m	560	<b>628</b>	586	600
Calcium	ppm	ASTM D5185m	1510	<b>1662</b>	1463	1457
Phosphorus	ppm	ASTM D5185m	780	<b>824</b>	777	754
Zinc	ppm	ASTM D5185m	870	<b>1044</b>	887	985
Sulfur	ppm	ASTM D5185m	2040	<b>2207</b>	2376	2707
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.7</b>	15.3	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>3.6</b>	7.9	3.5
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.3</b>	14.2	14.0

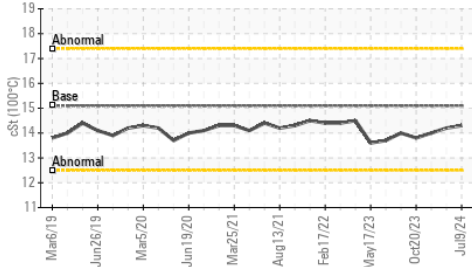
**FT-IR (Direct Trend)**



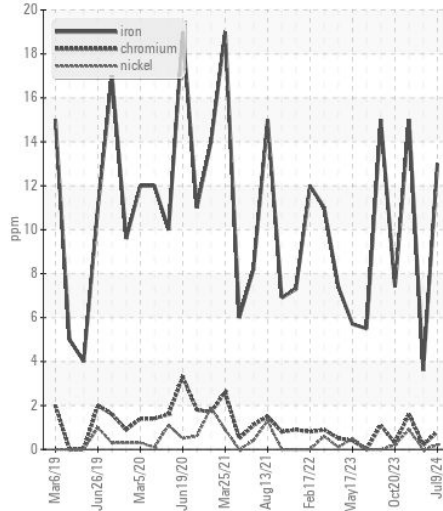
**Base Number**



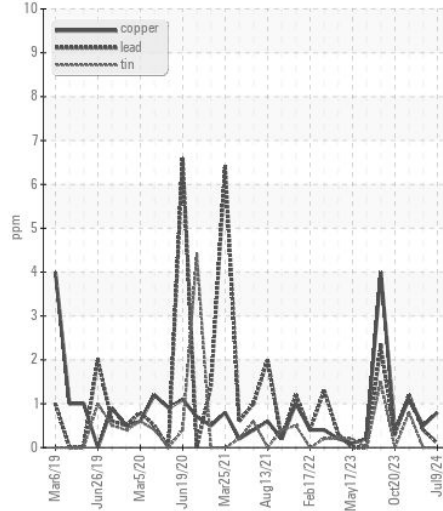
**Viscosity @ 100°C**



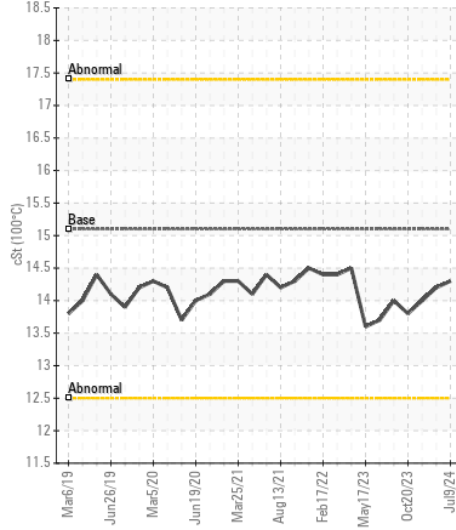
**Ferrous Alloys**



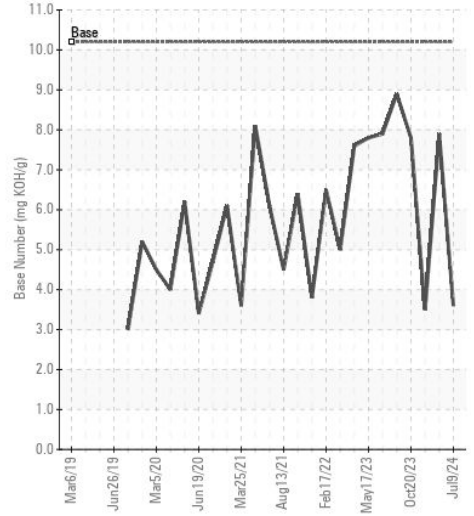
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0124435  
**Lab Number** : 06234688  
**Unique Number** : 11123522  
**Test Package** : FLEET

**Received** : 12 Jul 2024  
**Tested** : 15 Jul 2024  
**Diagnosed** : 15 Jul 2024 - Wes Davis

**GFL Environmental - 031 - Greenville/Spartanburg**  
 1635 Antioch Church Rd  
 Piedmont, SC  
 US 29673  
 Contact: TECHNICIAN ACCOUNT  
 catherine.anastasio@wearcheck.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)

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F: