



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

Area  
**(P662031)**

Machine Id  
**10892C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (11 GAL)**

**RECOMMENDATION**

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0096913</b>	GFL0069746	GFL0084243
Sample Date		Client Info		<b>07 Feb 2024</b>	28 Dec 2023	21 Jun 2023
Machine Age	hrs	Client Info		<b>5580</b>	5270	4004
Oil Age	hrs	Client Info		<b>5580</b>	5270	4004
Filter Age	hrs	Client Info		<b>0</b>	5270	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>43</b>	11	20
Chromium	ppm	ASTM D5185m	>4	<b>4</b>	<1	2
Nickel	ppm	ASTM D5185m	>2	<b>2</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>4</b>	2	4
Lead	ppm	ASTM D5185m	>30	<b>7</b>	3	<1
Copper	ppm	ASTM D5185m	>35	<b>2</b>	<1	1
Tin	ppm	ASTM D5185m	>4	<b>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**

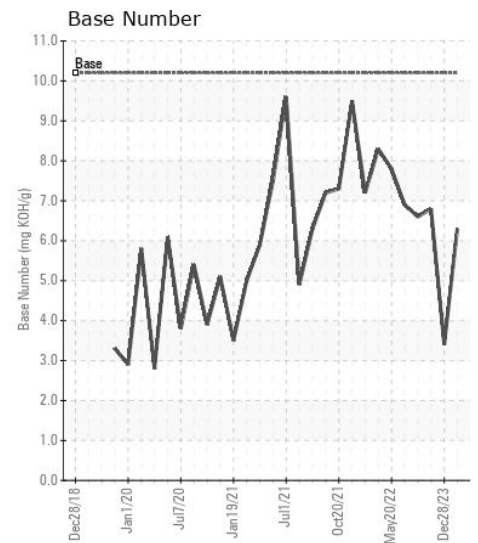
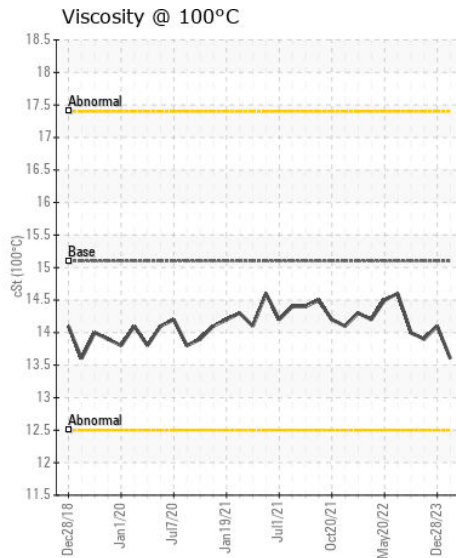
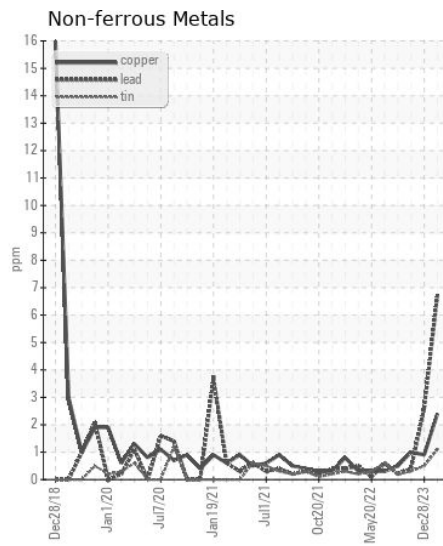
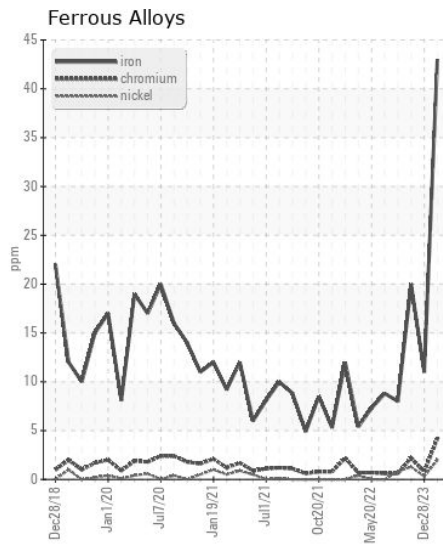
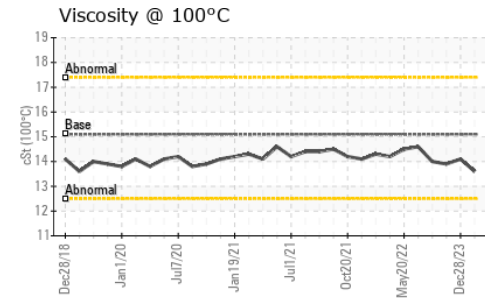
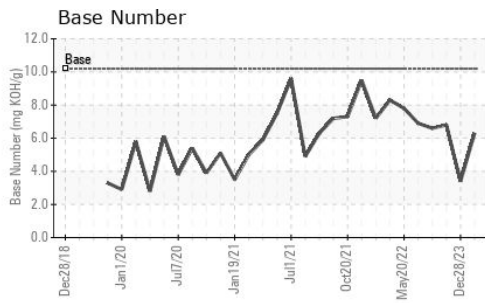
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>+100	<b>43</b>	8	11
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	0	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.6</b>	11.3	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.1</b>	24.3	20.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>▲ MODER</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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>8</b>	7	4
Boron	ppm	ASTM D5185m	50	<b>10</b>	6	28
Barium	ppm	ASTM D5185m	5	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>73</b>	63	88
Manganese	ppm	ASTM D5185m	0	<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m	560	<b>749</b>	678	859
Calcium	ppm	ASTM D5185m	1510	<b>1750</b>	1668	2135
Phosphorus	ppm	ASTM D5185m	780	<b>922</b>	801	1173
Zinc	ppm	ASTM D5185m	870	<b>1206</b>	1096	1407
Sulfur	ppm	ASTM D5185m	2040	<b>2595</b>	2561	4096
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.3</b>	19.4	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>6.3</b>	3.4	6.8
Visc @ 100°C	cSt	ASTM D445	15.1	<b>13.6</b>	14.1	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0096913  
**Lab Number** : 06085279  
**Unique Number** : 10872724  
**Test Package** : FLEET

**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Don Baldrige

**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)

T:  
F: