



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

Machine Id  
**10770C**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON GEO LD 15W40 (30 QTS)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0123390</b>	GFL05985446	GFL0050772
Sample Date		Client Info		<b>20 Jun 2024</b>	19 Oct 2023	12 Apr 2023
Machine Age	hrs	Client Info		<b>14518</b>	0	14518
Oil Age	hrs	Client Info		<b>14518</b>	0	1171
Filter Age	hrs	Client Info		<b>14518</b>	0	1171
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>ABNORMAL</b>	ABNORMAL	NORMAL

**WEAR**

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>50	<b>▲ 60</b>	▲ 65	37
Chromium	ppm	ASTM D5185m	>4	<b>▲ 4</b>	▲ 6	1
Nickel	ppm	ASTM D5185m	>2	<b>3</b>	2	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	3	11
Lead	ppm	ASTM D5185m	>30	<b>9</b>	2	3
Copper	ppm	ASTM D5185m	>35	<b>24</b>	7	2
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

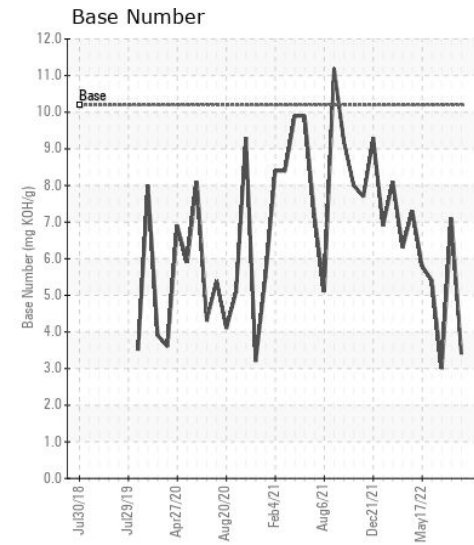
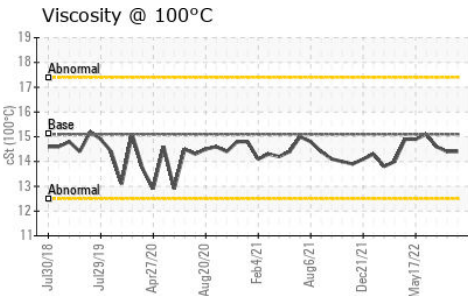
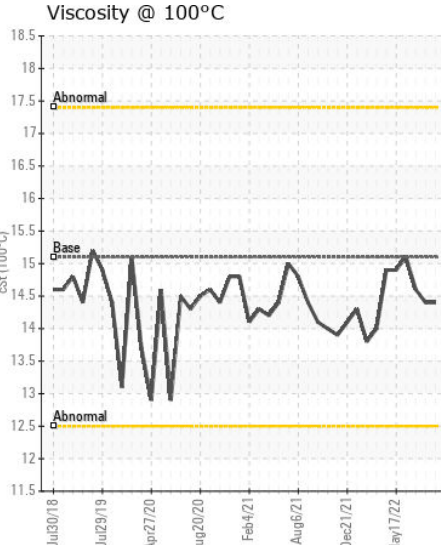
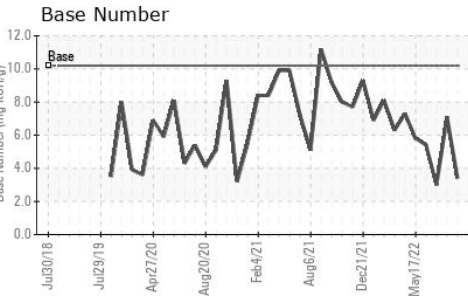
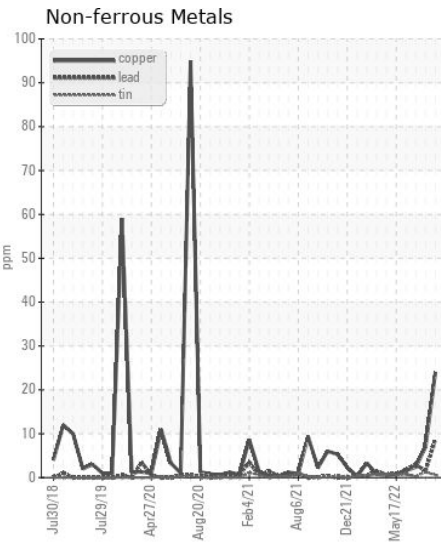
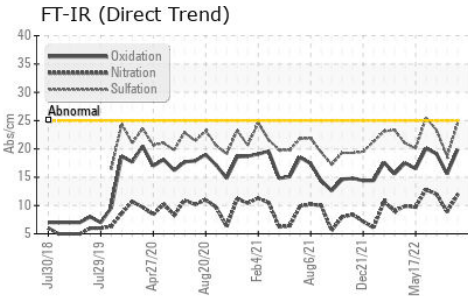
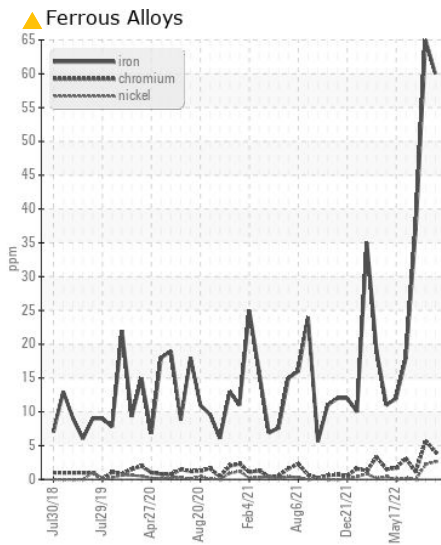
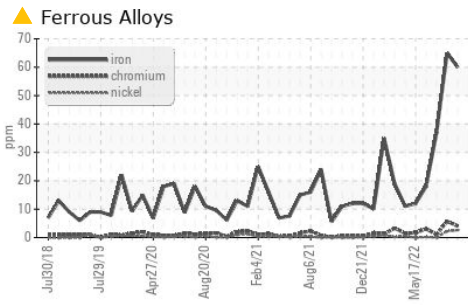
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	<b>13</b>	13	4
Potassium	ppm	ASTM D5185m	>20	<b>21</b>	4	8
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>11.9</b>	8.9	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.5</b>	18.7	23.3
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>17</b>	14	3
Boron	ppm	ASTM D5185m	50	<b>4</b>	20	8
Barium	ppm	ASTM D5185m	5	<b>&lt;1</b>	3	0
Molybdenum	ppm	ASTM D5185m	50	<b>56</b>	54	64
Manganese	ppm	ASTM D5185m	0	<b>1</b>	2	2
Magnesium	ppm	ASTM D5185m	560	<b>565</b>	543	967
Calcium	ppm	ASTM D5185m	1510	<b>1816</b>	1521	1147
Phosphorus	ppm	ASTM D5185m	780	<b>738</b>	758	1033
Zinc	ppm	ASTM D5185m	870	<b>1051</b>	940	1264
Sulfur	ppm	ASTM D5185m	2040	<b>2877</b>	2440	3761
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.9</b>	15.6	19.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>3.4</b>	7.1	3.0
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.4</b>	14.4	14.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0123390 **Received** : 28 Jun 2024  
**Lab Number** : 06223345 **Tested** : 01 Jul 2024  
**Unique Number** : 11101542 **Diagnosed** : 01 Jul 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 007 - Brunswick**  
 2809 Galloway Road  
 Bolivia, NC  
 US 28422  
 Contact: DONALD CRAVEN  
 dcraven@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)

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