



Machine Id  
**9240**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON GEO LD 15W40 (24 LTR)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0094421</b>	GFL0094465	GFL0042900
Sample Date		Client Info		<b>17 Apr 2024</b>	05 Oct 2023	20 Jul 2022
Machine Age	hrs	Client Info		<b>17901</b>	13203	13203
Oil Age	hrs	Client Info		<b>17901</b>	13203	14014
Filter Age	hrs	Client Info		<b>1200</b>	500	14014
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

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	<b>14</b>	11	17
Chromium	ppm	ASTM D5185(m)	>4	<b>1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	<b>2</b>	1	2
Lead	ppm	ASTM D5185(m)	>30	<b>9</b>	3	<1
Copper	ppm	ASTM D5185(m)	>35	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

### CONTAMINATION

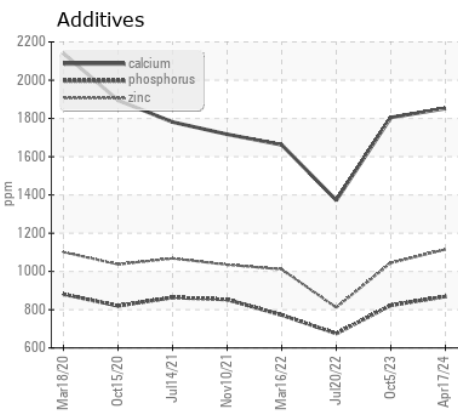
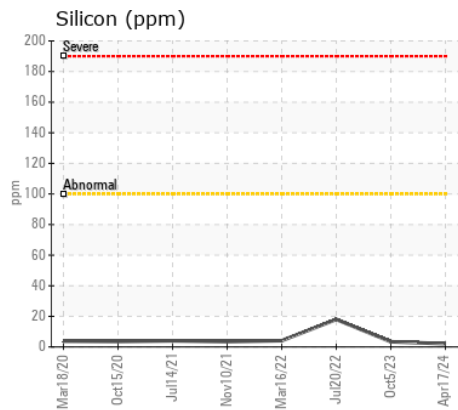
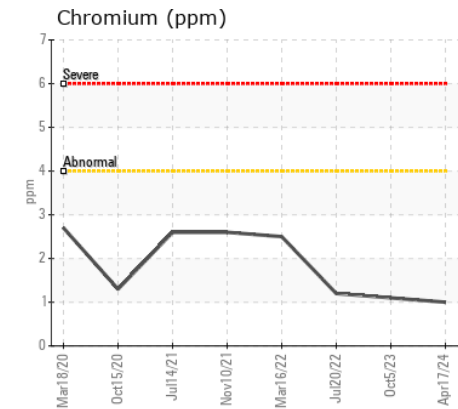
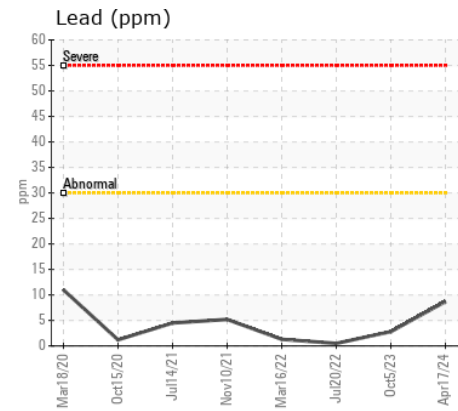
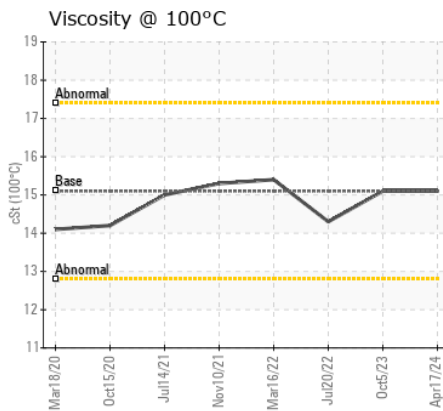
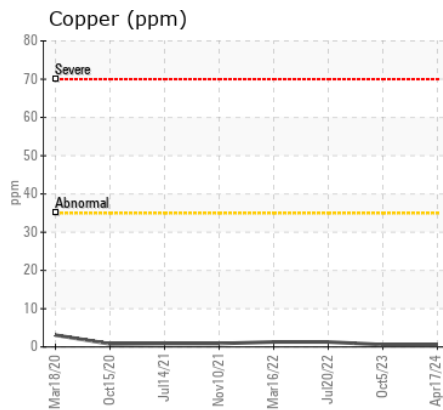
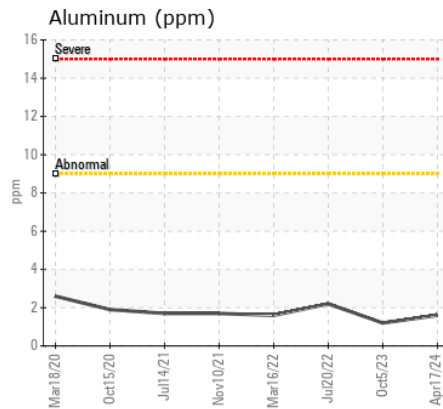
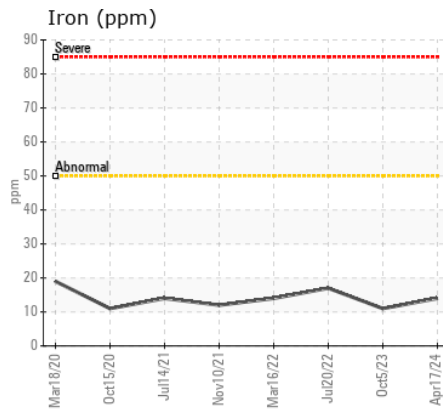
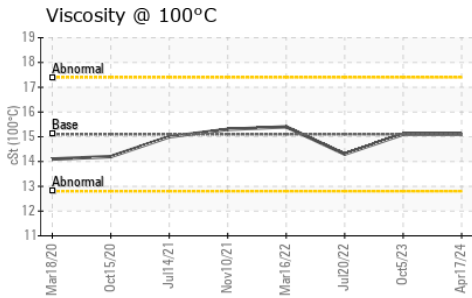
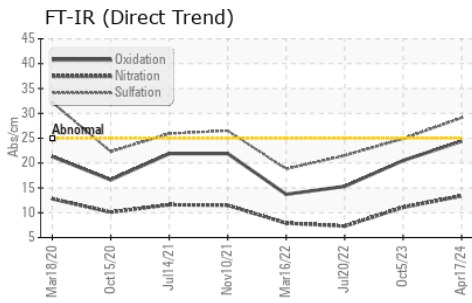
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	<b>2</b>	3	18
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
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>13.4</b>	11.1	7.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>29.1</b>	24.9	21.5
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>6</b>	6	7
Boron	ppm	ASTM D5185(m)	50	<b>16</b>	17	26
Barium	ppm	ASTM D5185(m)	5	<b>0</b>	<1	4
Molybdenum	ppm	ASTM D5185(m)	50	<b>65</b>	62	112
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	2
Magnesium	ppm	ASTM D5185(m)	560	<b>713</b>	636	646
Calcium	ppm	ASTM D5185(m)	1510	<b>1852</b>	1805	1372
Phosphorus	ppm	ASTM D5185(m)	780	<b>869</b>	823	675
Zinc	ppm	ASTM D5185(m)	870	<b>1115</b>	1045	811
Sulfur	ppm	ASTM D5185(m)	2040	<b>2190</b>	2134	2347
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>24.4</b>	20.5	15.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	<b>15.1</b>	15.1	14.3



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0094421  
**Lab Number** : 02629918  
**Unique Number** : 5763050  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**Received** : 18 Apr 2024  
**Tested** : 18 Apr 2024  
**Diagnosed** : 18 Apr 2024 - Wes Davis

**GFL Environmental - 222 - Sandhill**  
 SANDHILL DISPOSAL & RECYCLING DIVIS, 19 COMMERCE ROAD  
 ORANGEVILLE, ON  
 CA L9W 3X5  
 Contact: GLENN COOK  
 gcook@gflenv.com  
 T: (519)940-4167  
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.