



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



Machine Id  
**901008**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

**RECOMMENDATION**

Confirm the source of the lubricant being utilized for top-up/fill.  
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0110652</b>	GFL0035520	GFL0035529
Sample Date		Client Info		<b>28 Feb 2024</b>	14 Feb 2023	15 Feb 2022
Machine Age	hrs	Client Info		<b>13612</b>	11881	9946
Oil Age	hrs	Client Info		<b>600</b>	600	600
Filter Age	hrs	Client Info		<b>600</b>	600	600
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>7</b>	16	8
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	4	2
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	1	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

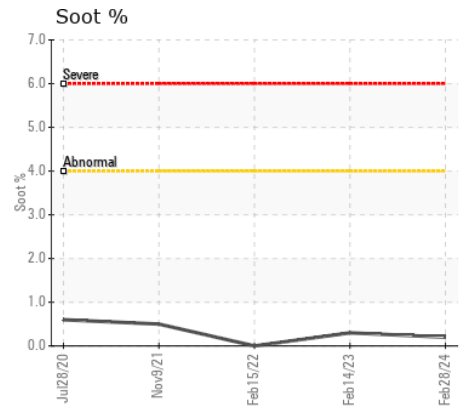
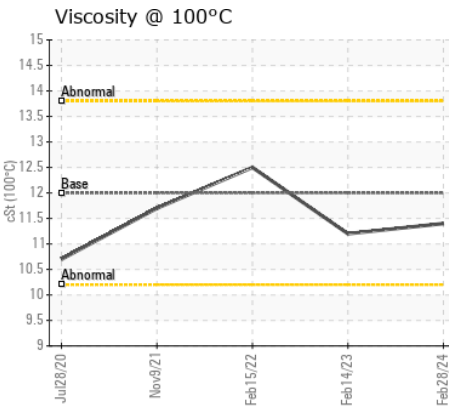
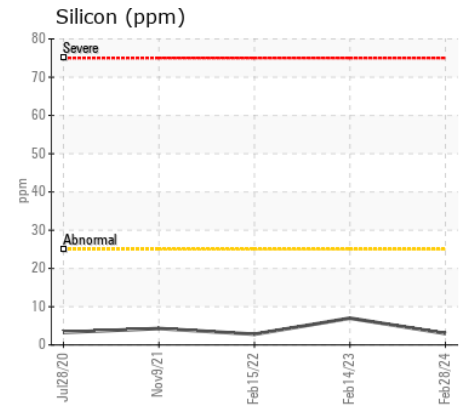
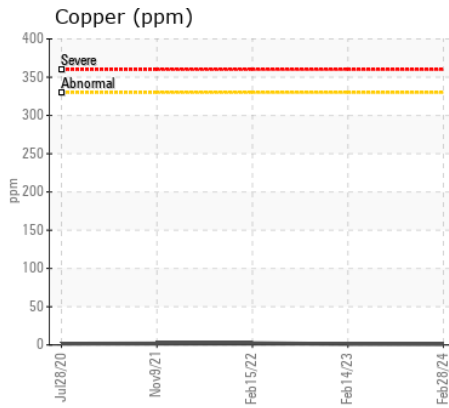
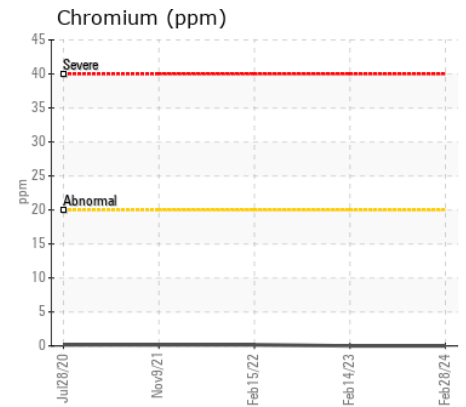
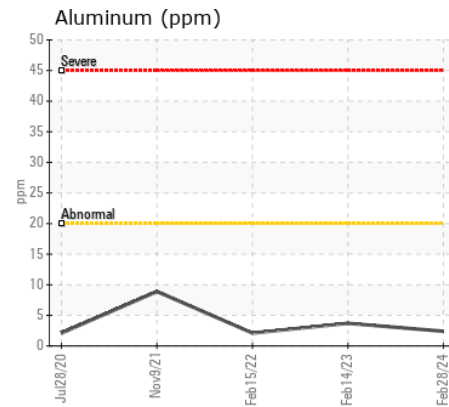
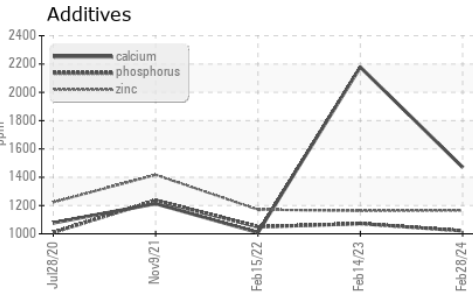
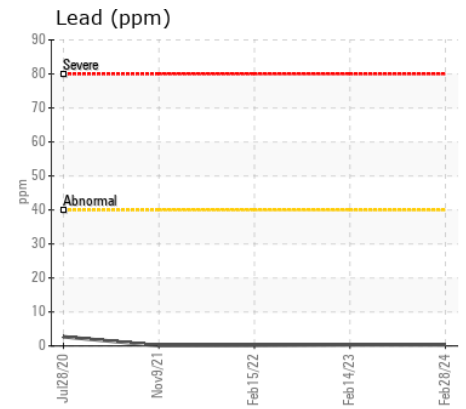
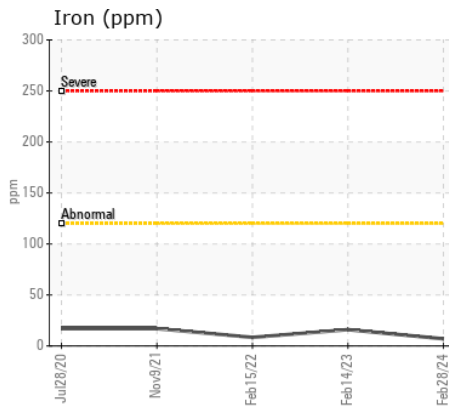
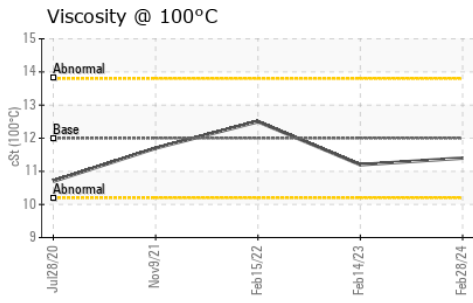
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	7	3
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	7
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	1.3	2.7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>4	<b>0.2</b>	0.3	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.2</b>	10.7	3.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.7</b>	23.7	13.2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

Additive levels indicate the addition of a different brand, or type of oil.  
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	7	6
Boron	ppm	ASTM D5185(m)	2	<b>14</b>	25	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>58</b>	84	58
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>635</b>	49	962
Calcium	ppm	ASTM D5185(m)	1050	<b>1470</b>	2178	1009
Phosphorus	ppm	ASTM D5185(m)	995	<b>1021</b>	1072	1049
Zinc	ppm	ASTM D5185(m)	1180	<b>1165</b>	1162	1171
Sulfur	ppm	ASTM D5185(m)	2600	<b>2810</b>	3085	2535
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.2</b>	15.9	5.8
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.4</b>	▲ 11.2	12.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0110652  
**Lab Number** : 02619162  
**Unique Number** : 5736272  
**Test Package** : MOB 1  
**Received** : 01 Mar 2024  
**Tested** : 01 Mar 2024  
**Diagnosed** : 01 Mar 2024 - Wes Davis

**GFL Environmental - 213 - Kitchener**  
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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.