



Machine Id  
**4512**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0038125</b>	GFL0059408	GFL0059398
Sample Date		Client Info		<b>12 Feb 2024</b>	28 Apr 2023	14 Apr 2023
Machine Age	hrs	Client Info		<b>13925</b>	12958	12898
Oil Age	hrs	Client Info		<b>200</b>	200	600
Filter Age	hrs	Client Info		<b>200</b>	200	600
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)	>165	<b>15</b>	6	20
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	<1	2
Lead	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185(m)	>90	<b>2</b>	<1	1
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

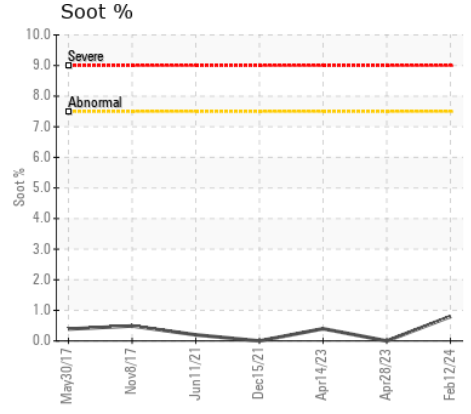
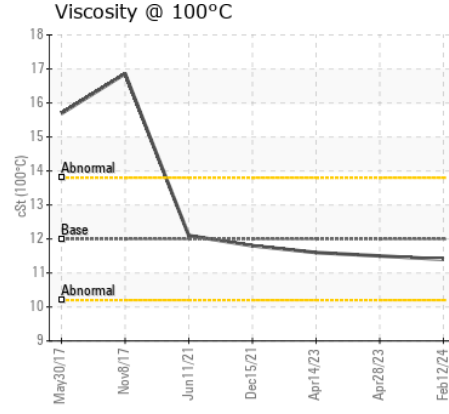
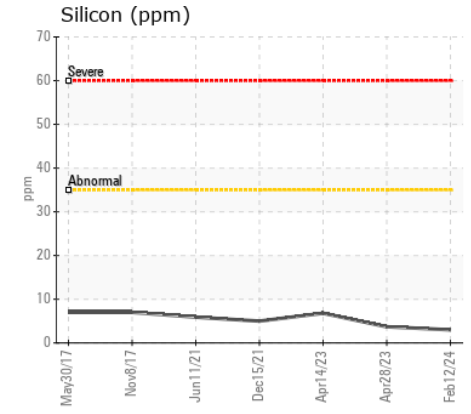
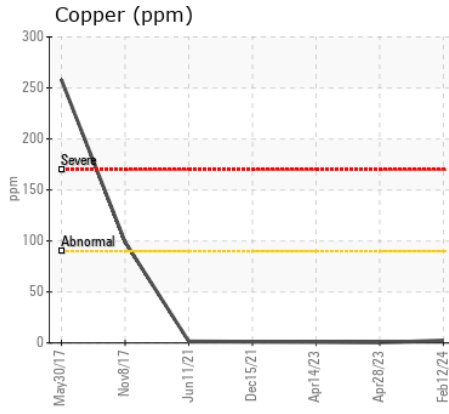
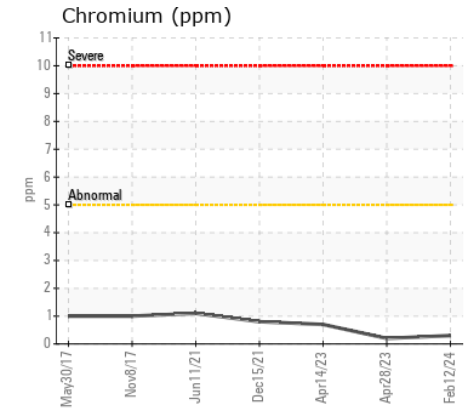
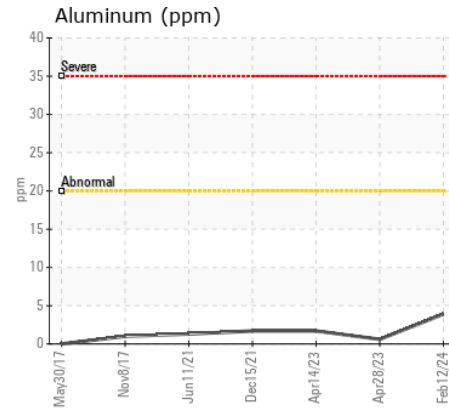
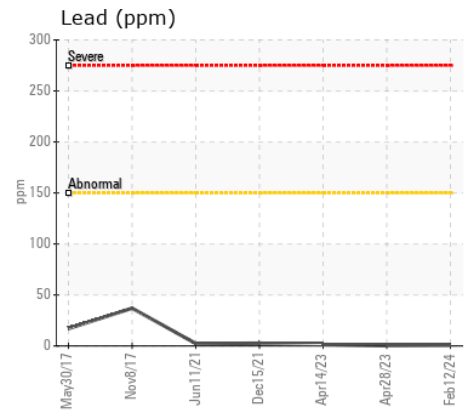
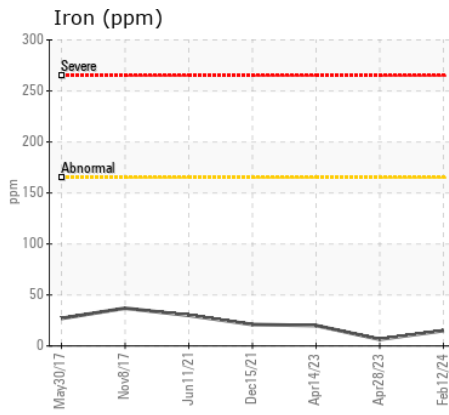
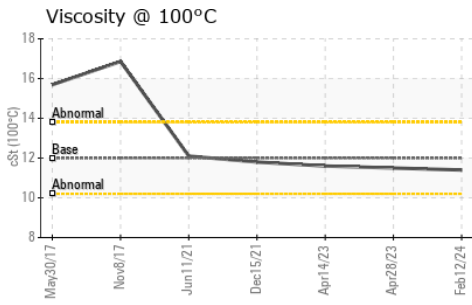
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	<b>3</b>	4	7
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>7.5	<b>0.8</b>	0	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.3</b>	7.1	11.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.8</b>	20.4	22.8
Emulsified Water	scalar	Visual*	>0.2	<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>3</b>	2	5
Boron	ppm	ASTM D5185(m)	2	<b>1</b>	2	1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>60</b>	60	65
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>983</b>	1000	1045
Calcium	ppm	ASTM D5185(m)	1050	<b>1055</b>	1042	1193
Phosphorus	ppm	ASTM D5185(m)	995	<b>1022</b>	1068	1136
Zinc	ppm	ASTM D5185(m)	1180	<b>1190</b>	1223	1293
Sulfur	ppm	ASTM D5185(m)	2600	<b>2595</b>	2619	2614
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.0</b>	15.3	20.9
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.4</b>	11.5	11.6



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0038125  
**Lab Number** : 02619134  
**Unique Number** : 5736244  
**Test Package** : MOB 1  
**Received** : 01 Mar 2024  
**Tested** : 01 Mar 2024  
**Diagnosed** : 01 Mar 2024 - Wes Davis

**GFL Environmental - 555 - Slave Lake**  
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 Slave Lake, AB  
 CA T0G 2A0  
 Contact: William Barker  
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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.