



Machine Id  
**801031**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (19 LTR)**

### 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>GFL0122327</b>	GFL0117876	GFL0111722
Sample Date		Client Info		<b>28 Jun 2024</b>	23 May 2024	14 Mar 2024
Machine Age	kms	Client Info		<b>88443</b>	88443	13803
Oil Age	kms	Client Info		<b>0</b>	600	600
Filter Age	kms	Client Info		<b>0</b>	0	0
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>80	<b>13</b>	26	36
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>3</b>	2	3
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

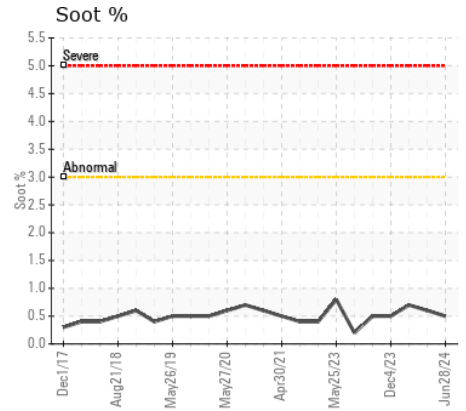
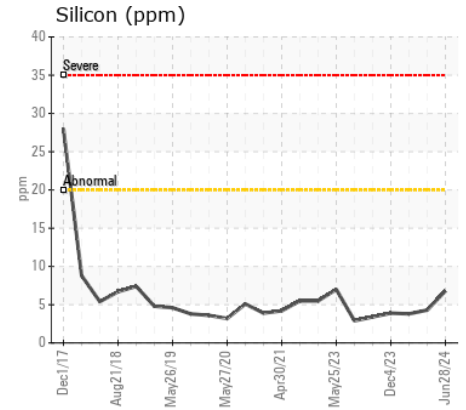
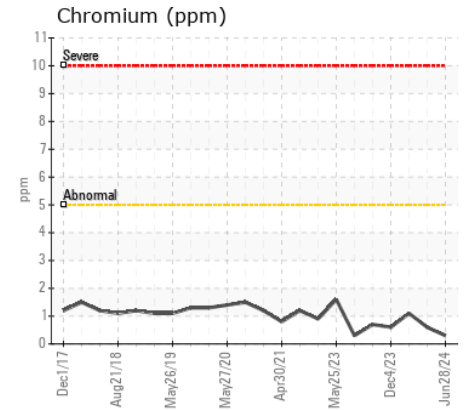
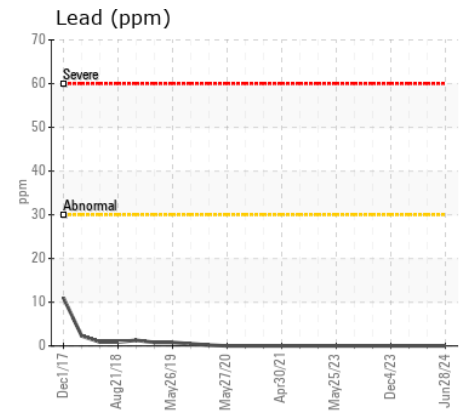
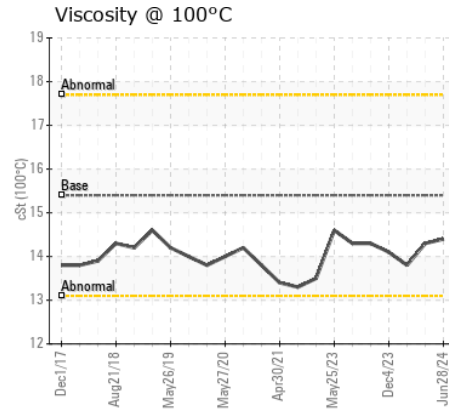
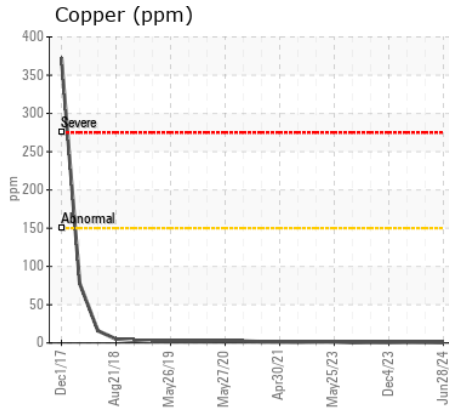
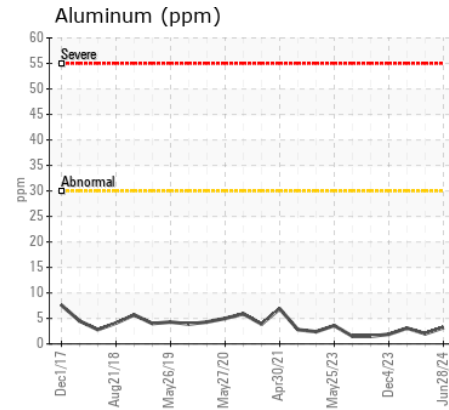
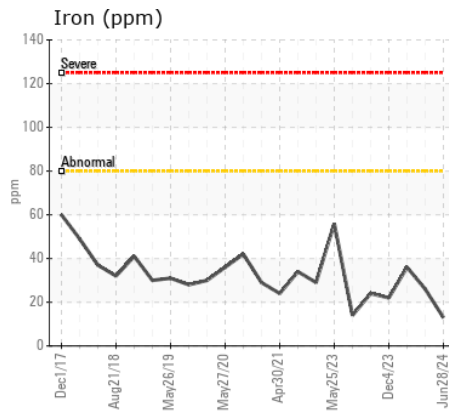
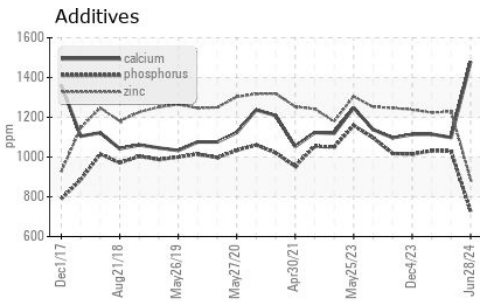
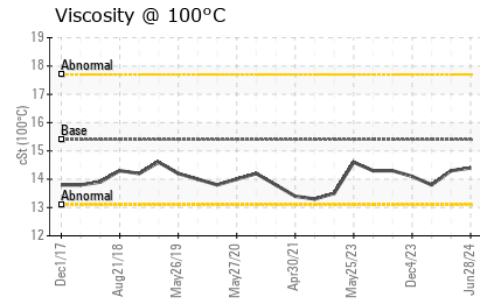
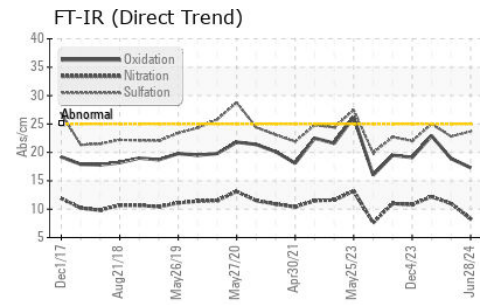
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>7</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	3
Fuel		WC Method	>5	<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*	>3	<b>0.5</b>	0.6	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.3</b>	11.0	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.7</b>	22.8	25.0
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>6</b>	9	10
Boron	ppm	ASTM D5185(m)	0	<b>196</b>	6	10
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>113</b>	61	64
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>722</b>	976	972
Calcium	ppm	ASTM D5185(m)	1070	<b>1478</b>	1098	1115
Phosphorus	ppm	ASTM D5185(m)	1150	<b>728</b>	1029	1032
Zinc	ppm	ASTM D5185(m)	1270	<b>889</b>	1229	1224
Sulfur	ppm	ASTM D5185(m)	2060	<b>2063</b>	2411	2528
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.3</b>	18.9	22.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.4</b>	14.3	13.8



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0122327  
**Lab Number** : 02645202  
**Unique Number** : 5802741  
**Test Package** : MOB 1

**Received** : 03 Jul 2024  
**Tested** : 03 Jul 2024  
**Diagnosed** : 03 Jul 2024 - Kevin Marson

**GFL Environmental - 217 - Aurora**  
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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.