



Machine Id  
**701027**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (22 LTR)**

### RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0117919</b>	GFL0107138	GFL0107147
Sample Date		Client Info		<b>27 Mar 2024</b>	18 Jan 2024	15 Jan 2024
Machine Age	hrs	Client Info		<b>11833</b>	186902	11377
Oil Age	hrs	Client Info		<b>600</b>	0	0
Filter Age	hrs	Client Info		<b>600</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	<b>23</b>	11	58
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	4
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<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	10
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

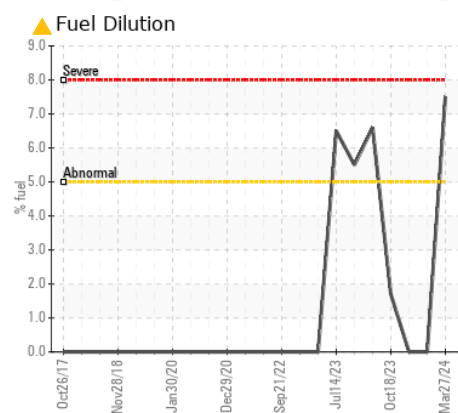
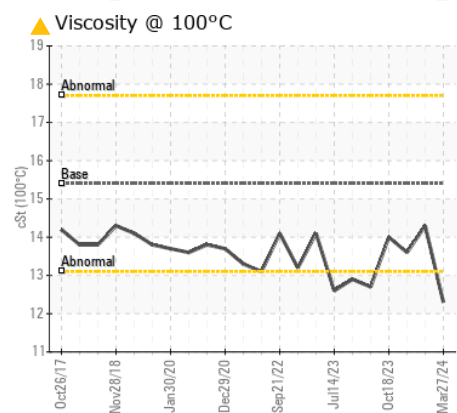
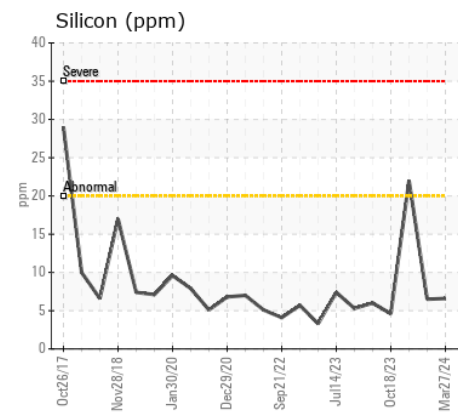
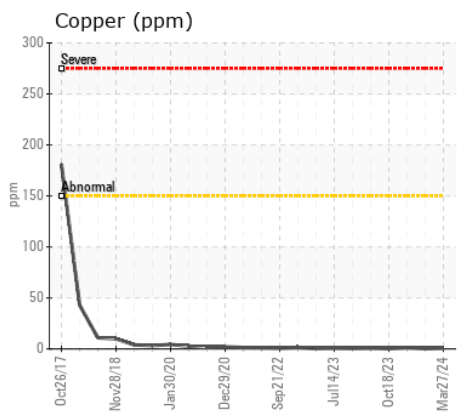
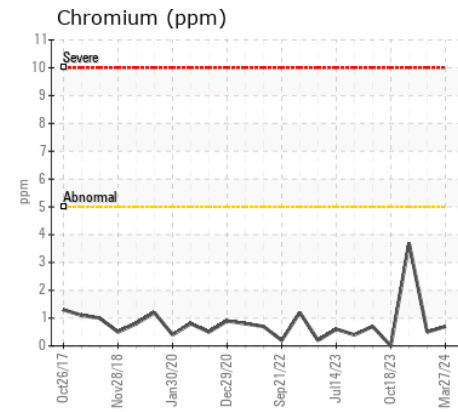
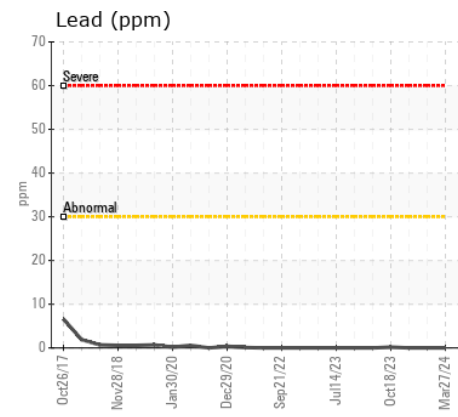
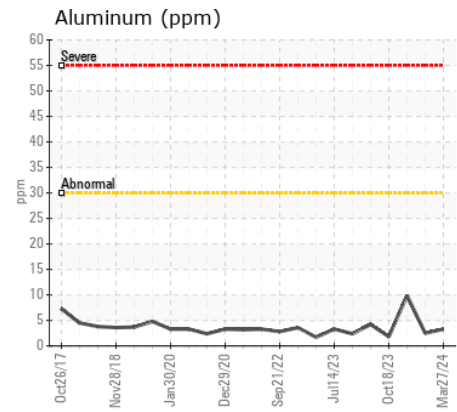
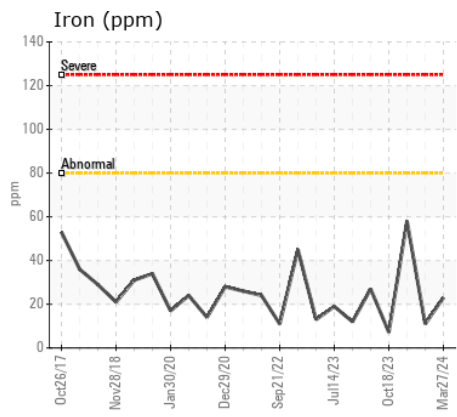
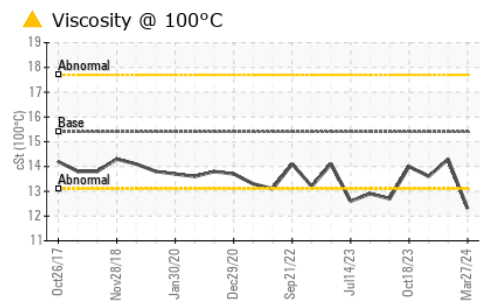
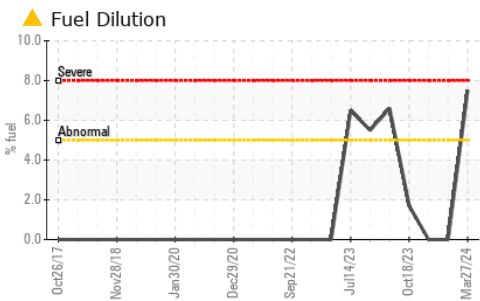
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>7</b>	6	▲ 22
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	2	9
Fuel	%	ASTM D7593*	>5	▲ <b>7.5</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	0.0
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.3</b>	6.1	13.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.8</b>	18.9	25.9
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		<b>33</b>	7	31
Boron	ppm	ASTM D5185(m)	0	<b>8</b>	14	28
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>56</b>	57	60
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>871</b>	901	811
Calcium	ppm	ASTM D5185(m)	1070	<b>962</b>	1017	1079
Phosphorus	ppm	ASTM D5185(m)	1150	<b>887</b>	965	926
Zinc	ppm	ASTM D5185(m)	1270	<b>1083</b>	1121	1111
Sulfur	ppm	ASTM D5185(m)	2060	<b>2203</b>	2673	2436
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.4</b>	14.8	26.2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ <b>12.3</b>	14.3	13.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0117919 **Received** : 02 Apr 2024  
**Lab Number** : 02625977 **Tested** : 03 Apr 2024  
**Unique Number** : 5759109 **Diagnosed** : 03 Apr 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**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.