



Machine Id  
**801026**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (22 LTR)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0117886</b>	GFL0111740	GFL0107160
Sample Date		Client Info		<b>02 Apr 2024</b>	19 Mar 2024	27 Dec 2023
Machine Age	hrs	Client Info		<b>153620</b>	14252	13693
Oil Age	hrs	Client Info		<b>0</b>	600	0
Filter Age	hrs	Client Info		<b>0</b>	600	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Changed
Sample Status				<b>MARGINAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	<b>8</b>	28	34
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185(m)	>2	<b>0</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>2</b>	5	9
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
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

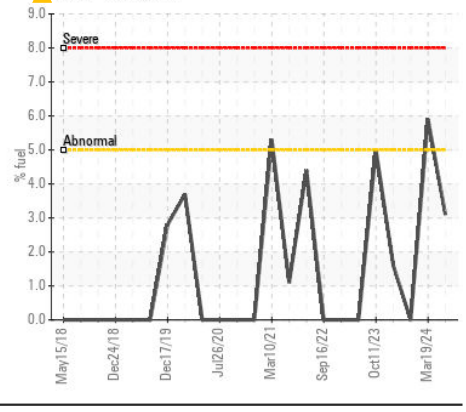
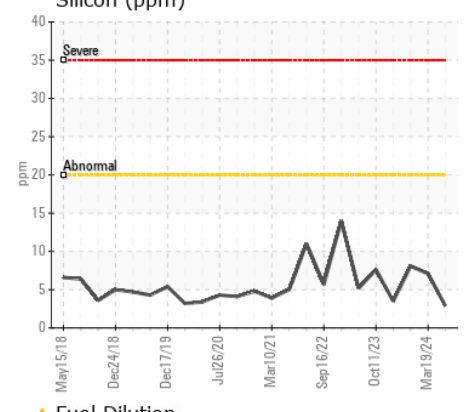
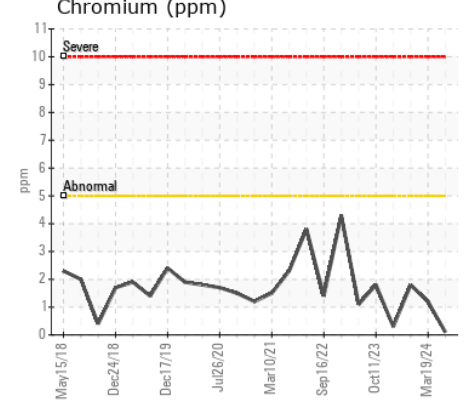
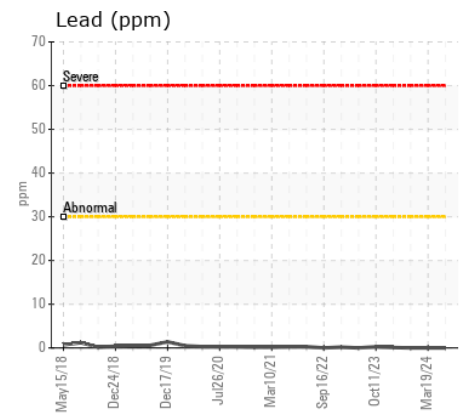
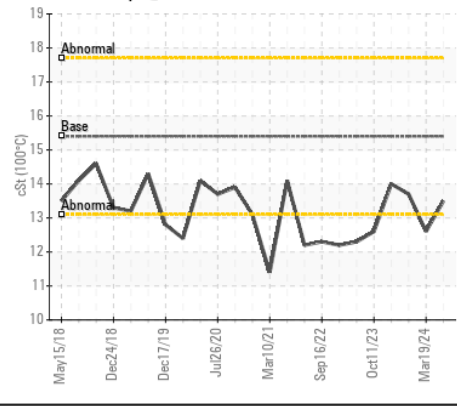
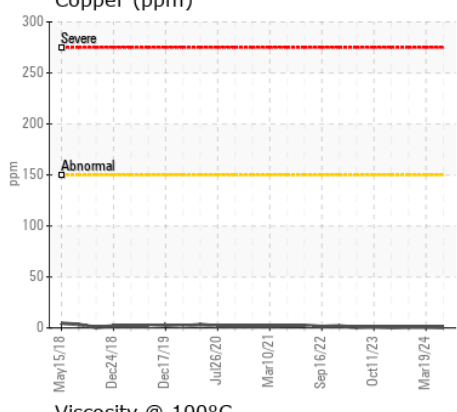
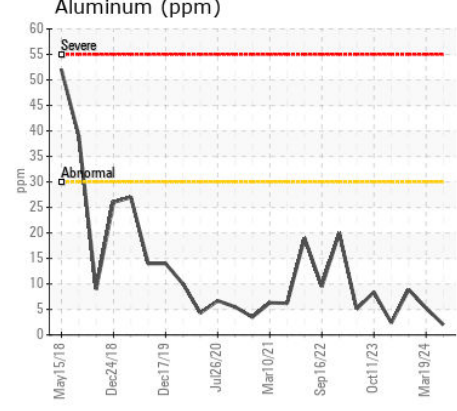
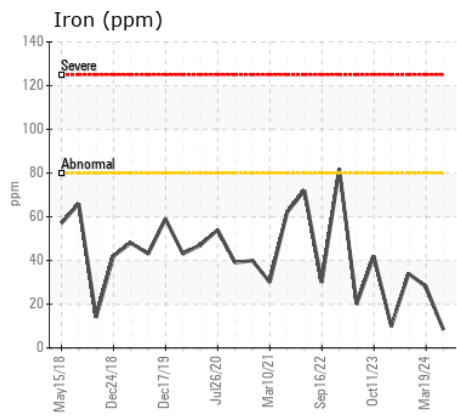
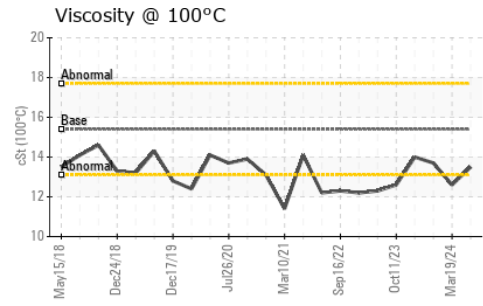
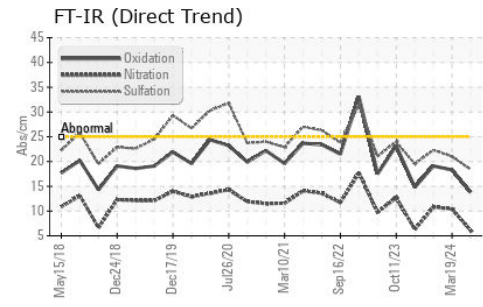
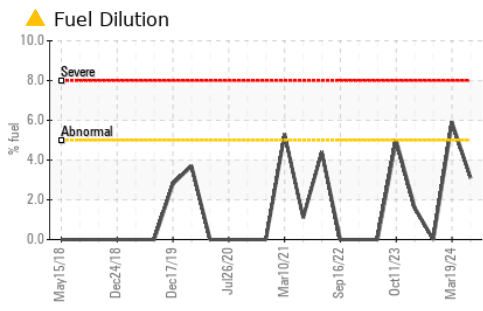
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>3</b>	7	8
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	5	0
Fuel	%	ASTM D7593*	>5	<b>▲ 3.1</b>	▲ 5.9	<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</b>	0.4	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.1</b>	10.4	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.4</b>	21.0	22.3
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*	>0.2	<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>	8	7
Boron	ppm	ASTM D5185(m)	0	<b>8</b>	9	33
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>55</b>	60	64
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>896</b>	919	837
Calcium	ppm	ASTM D5185(m)	1070	<b>1015</b>	1051	1141
Phosphorus	ppm	ASTM D5185(m)	1150	<b>957</b>	959	992
Zinc	ppm	ASTM D5185(m)	1270	<b>1123</b>	1159	1172
Sulfur	ppm	ASTM D5185(m)	2060	<b>2461</b>	2360	2604
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.8</b>	18.3	19.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.5</b>	▲ 12.6	13.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0117886 **Received** : 04 Apr 2024  
**Lab Number** : 02626520 **Tested** : 05 Apr 2024  
**Unique Number** : 5759652 **Diagnosed** : 05 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel, Visual )

**GFL Environmental - 217 - Aurora**  
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 F: (905)713-2445

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.