



Machine Id  
**701065**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (32 LTR)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0113283</b>	GFL0061106	GFL0074290
Sample Date		Client Info		<b>21 Feb 2024</b>	02 Oct 2023	06 Jul 2023
Machine Age	hrs	Client Info		<b>15924</b>	14801	14221
Oil Age	hrs	Client Info		<b>577</b>	580	417
Filter Age	hrs	Client Info		<b>577</b>	580	417
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)	>120	<b>21</b>	4	3
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>1</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	1	1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</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

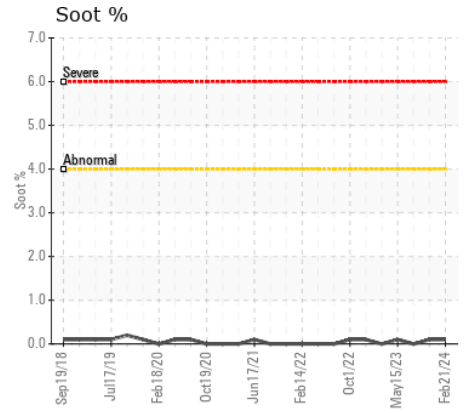
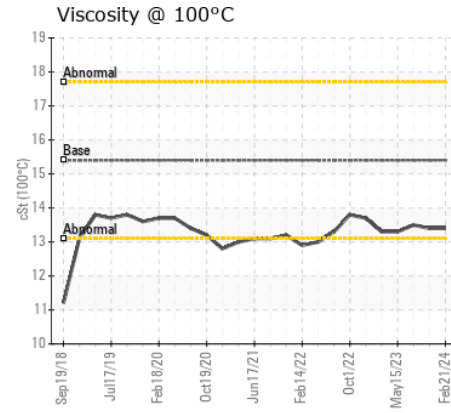
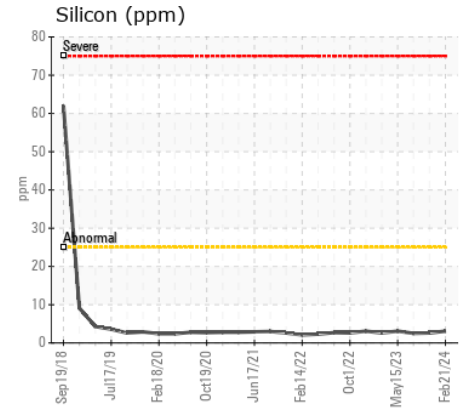
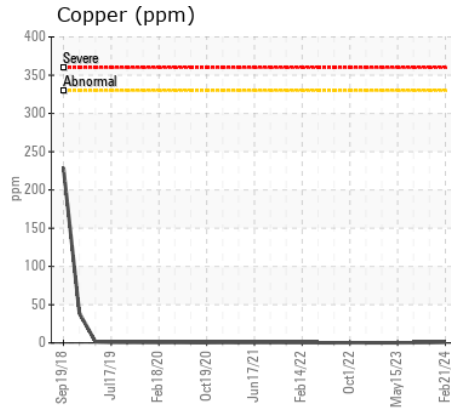
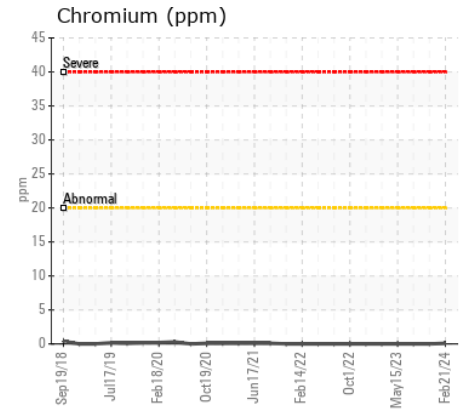
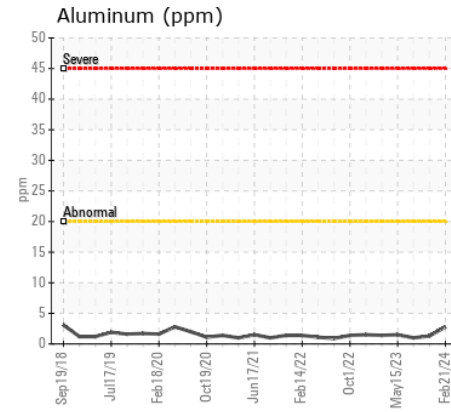
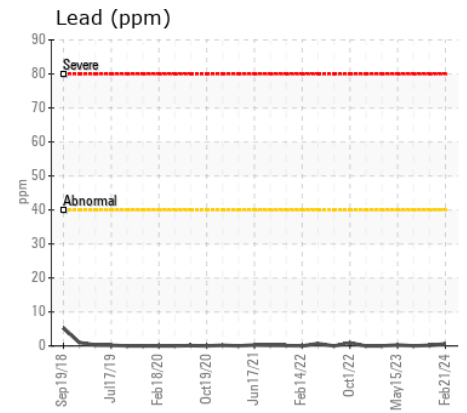
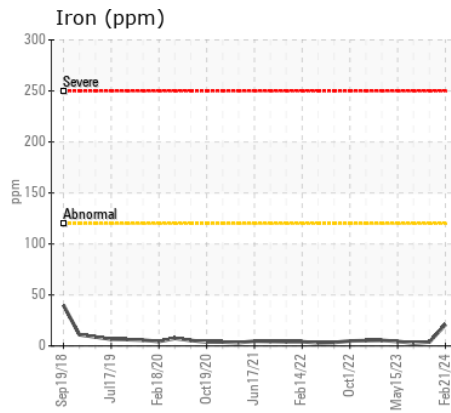
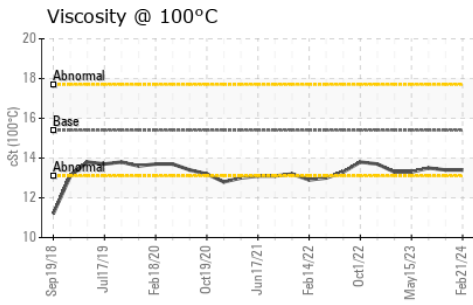
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>6</b>	3	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*	>4	<b>0.1</b>	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.3</b>	8.2	7.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.8</b>	19.1	18.4
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</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>2</b>	3	4
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	4	4
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>58</b>	58	58
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>941</b>	933	953
Calcium	ppm	ASTM D5185(m)	1070	<b>1042</b>	1032	1029
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1005</b>	960	1072
Zinc	ppm	ASTM D5185(m)	1270	<b>1160</b>	1172	1158
Sulfur	ppm	ASTM D5185(m)	2060	<b>2686</b>	2475	2547
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.1</b>	15.6	15.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.4</b>	13.4	13.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0113283 **Received** : 26 Feb 2024  
**Lab Number** : 02617988 **Tested** : 26 Feb 2024  
**Unique Number** : 5735098 **Diagnosed** : 26 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

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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.