



Machine Id  
**7768**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (40 LTR)**

**RECOMMENDATION**

Check for low coolant level. 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>GFL0125802</b>	GFL0107870	GFL0099455
Sample Date		Client Info		<b>06 Jun 2024</b>	08 Jan 2024	12 Oct 2023
Machine Age	kms	Client Info		<b>187564</b>	181116	177557
Oil Age	kms	Client Info		<b>0</b>	0	0
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>ATTENTION</b>	ATTENTION	ATTENTION

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	<b>21</b>	18	20
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	2	2
Lead	ppm	ASTM D5185(m)	>150	<b>2</b>	3	6
Copper	ppm	ASTM D5185(m)	>90	<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**

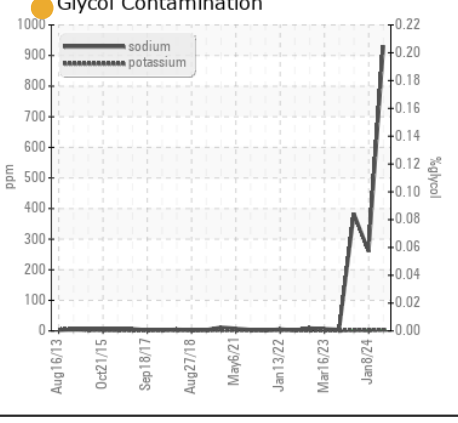
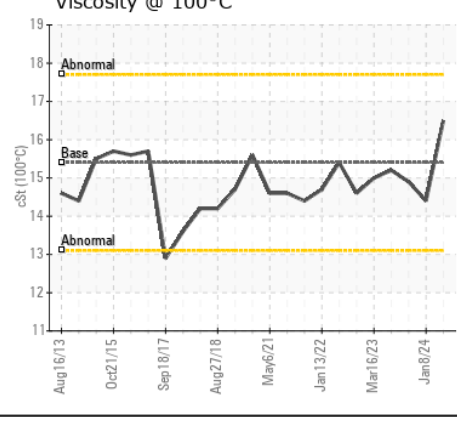
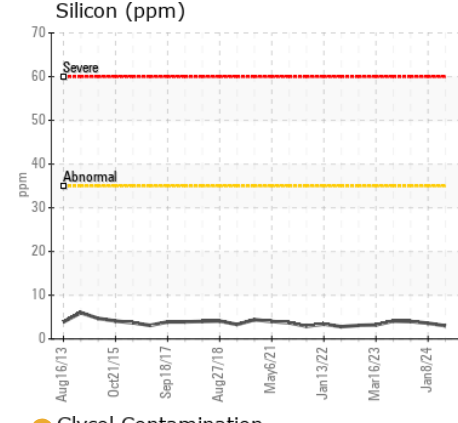
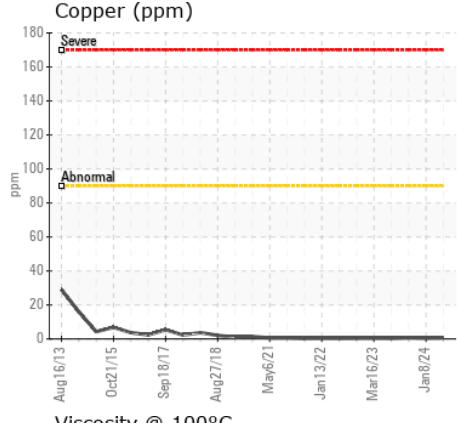
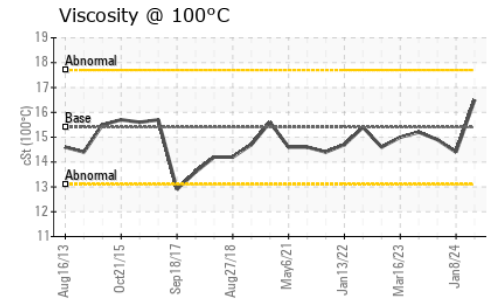
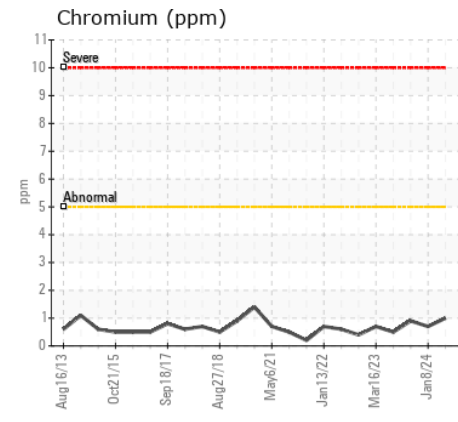
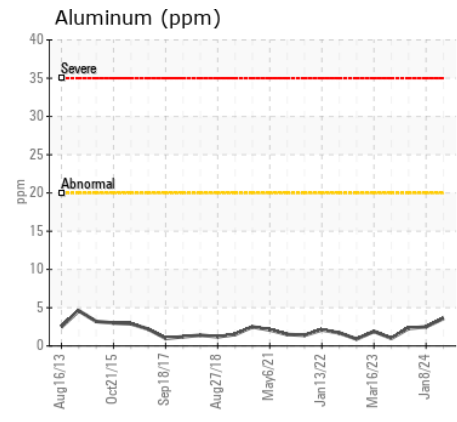
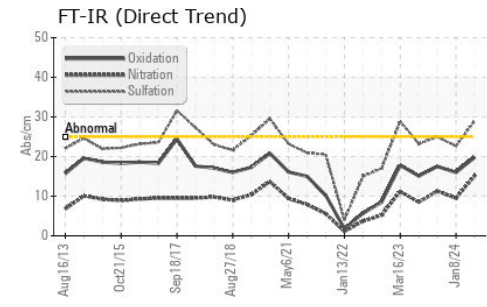
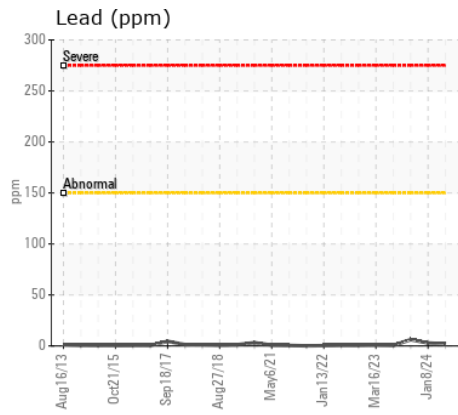
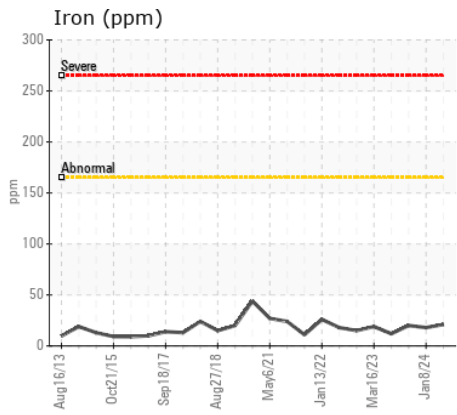
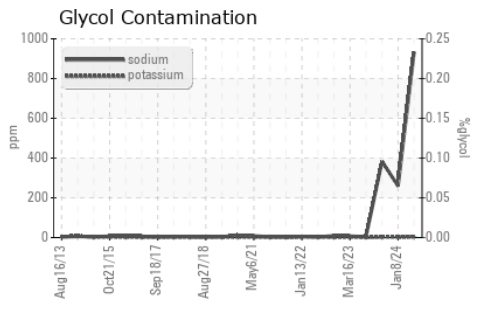
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	<b>3</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	2	3
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	%	ASTM D7922*		<b>0.0</b>	0.0	0.0
Soot %	%	ASTM D7844*	>7.5	<b>3.7</b>	1.4	2.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>15.2</b>	9.5	11.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>29.0</b>	22.6	25.0
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 (see recommendation).

Sodium	ppm	ASTM D5185(m)		<b>932</b>	260	383
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>61</b>	59	61
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>922</b>	956	978
Calcium	ppm	ASTM D5185(m)	1070	<b>1029</b>	1082	1080
Phosphorus	ppm	ASTM D5185(m)	1150	<b>893</b>	1025	1014
Zinc	ppm	ASTM D5185(m)	1270	<b>1146</b>	1179	1219
Sulfur	ppm	ASTM D5185(m)	2060	<b>2495</b>	2656	2520
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.8</b>	16.0	17.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>16.5</b>	14.4	14.9



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0125802 **Received** : 10 Jun 2024  
**Lab Number** : 02640653 **Tested** : 11 Jun 2024  
**Unique Number** : 5789815 **Diagnosed** : 11 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**GFL Environmental - 225 - COT(D2)**  
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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.