



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>ABNORMAL</b>



Area  
**GFL216**  
Machine Id  
**401224**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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>GFL0099678</b>	GFL0091736	GFL0089255
Sample Date		Client Info		<b>21 Dec 2023</b>	14 Aug 2023	17 Jul 2023
Machine Age	kms	Client Info		<b>770686</b>	752598	316822
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	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>11</b>	20	18
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	1
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>2</b>	1	1
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	1	3
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	7	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

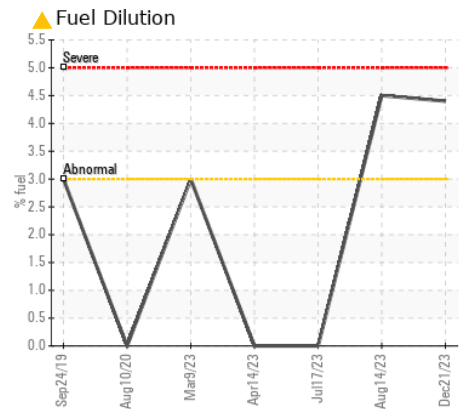
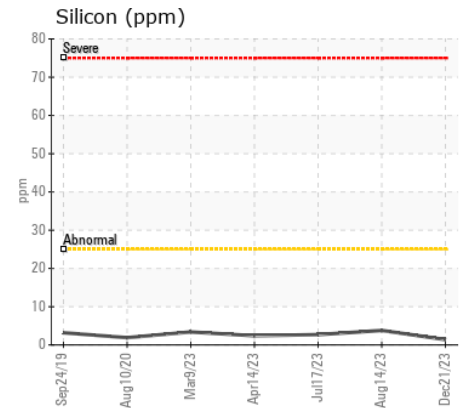
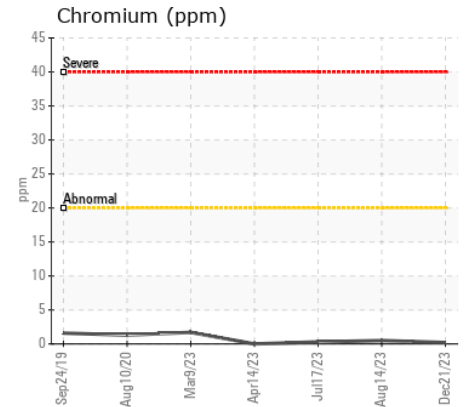
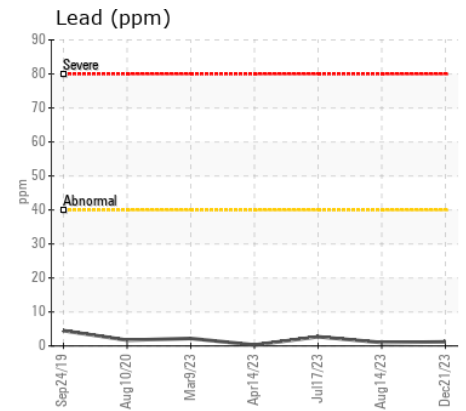
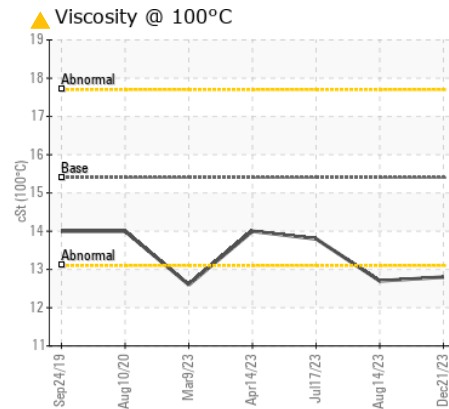
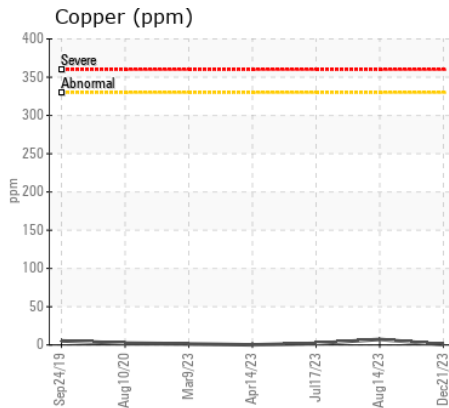
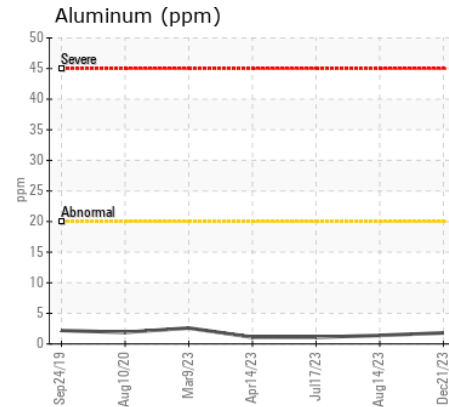
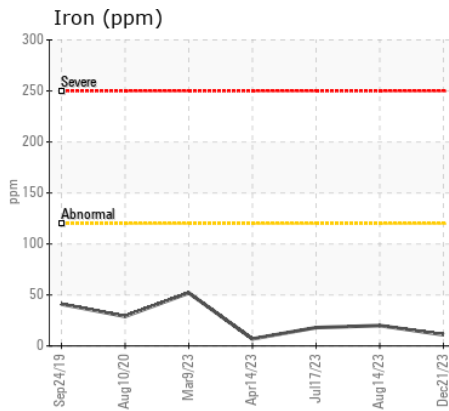
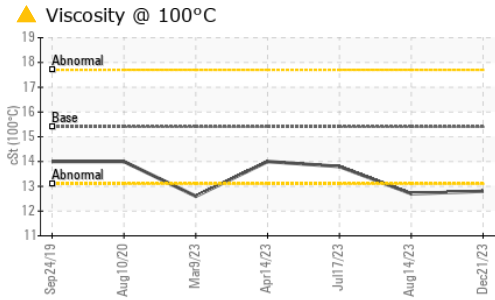
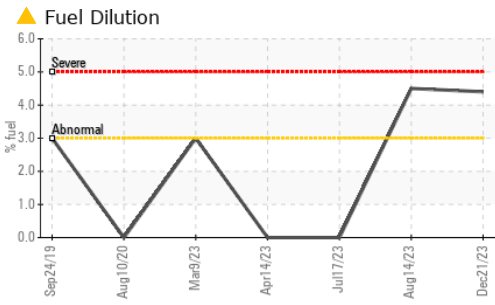
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>1</b>	4	3
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	1	<1
Fuel	%	ASTM D7593*	>3.0	<b>▲ 4.4</b>	▲ 4.5	<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>1.2</b>	1.6	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.8</b>	7.9	8.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.9</b>	21.4	20.9
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		<b>1</b>	3	5
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	5	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>57</b>	57	60
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>907</b>	897	980
Calcium	ppm	ASTM D5185(m)	1070	<b>1018</b>	994	1047
Phosphorus	ppm	ASTM D5185(m)	1150	<b>956</b>	982	1028
Zinc	ppm	ASTM D5185(m)	1270	<b>1110</b>	1110	1212
Sulfur	ppm	ASTM D5185(m)	2060	<b>2576</b>	2335	2231
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.3</b>	14.6	15.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>▲ 12.8</b>	▲ 12.7	13.8



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 252 - GTA Hauling  
**Sample No.** : GFL0099678 **Received** : 04 Jan 2024  
**Lab Number** : 02606471 **Diagnosed** : 05 Jan 2024  
**Unique Number** : 5707557 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

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Contact: Amanda Cipollone  
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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.

T:  
F: