



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

Machine Id  
**8189**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0064983</b>	GFL0064969	GFL0050070
Sample Date		Client Info		<b>03 Jan 2024</b>	13 Feb 2023	07 Sep 2022
Machine Age	hrs	Client Info		<b>1669</b>	1141	1141
Oil Age	hrs	Client Info		<b>370</b>	158	128
Filter Age	hrs	Client Info		<b>370</b>	158	128
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)	>80	<b>42</b>	12	9
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>2</b>	1	<1
Lead	ppm	ASTM D5185(m)	>30	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>150	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

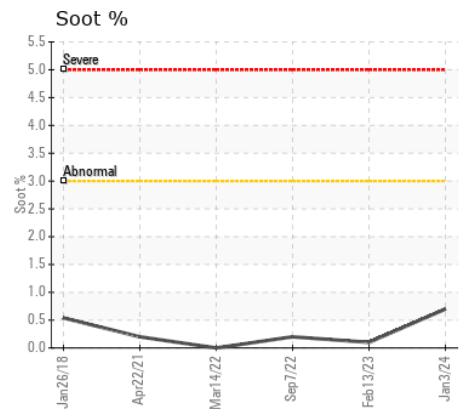
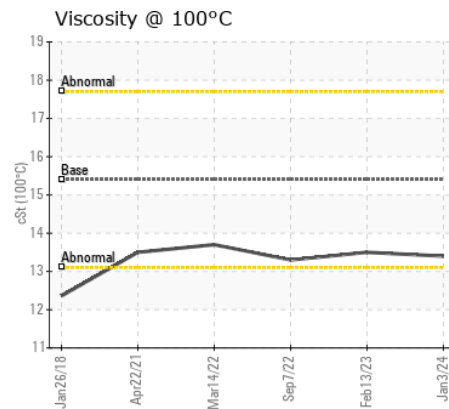
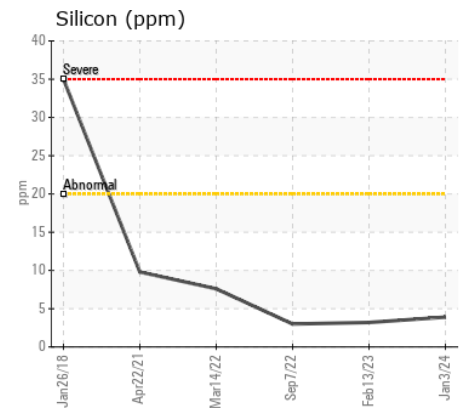
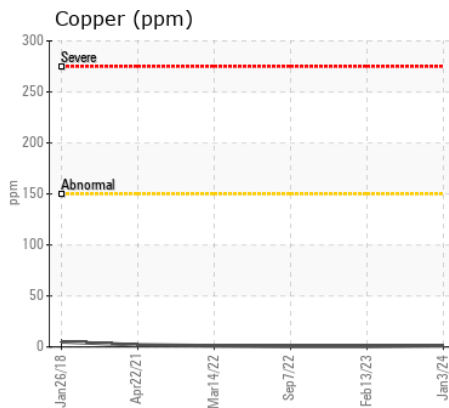
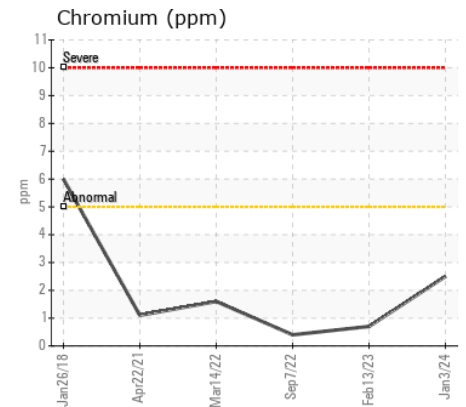
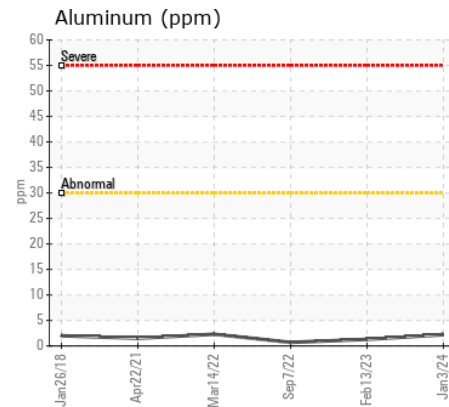
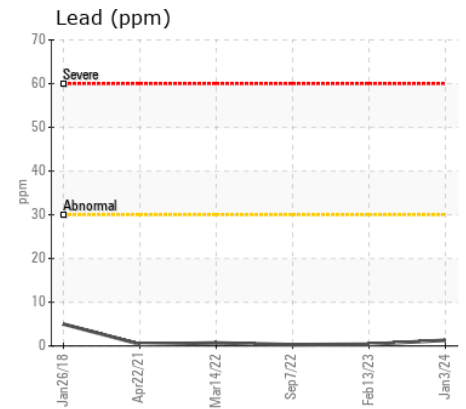
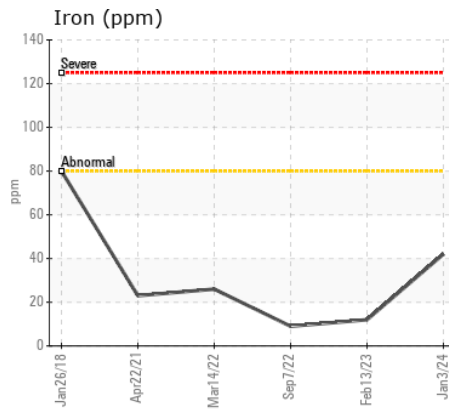
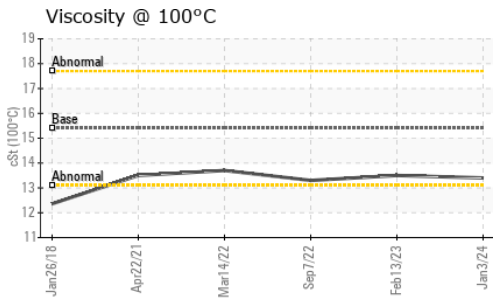
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>4</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	0	<1
Fuel		WC Method	>5	<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*	>3	<b>0.7</b>	0.1	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.2</b>	6.1	5.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.7</b>	19.9	19.1
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>	2	2
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	3	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>57</b>	59	55
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>935</b>	966	905
Calcium	ppm	ASTM D5185(m)	1070	<b>1070</b>	1108	1022
Phosphorus	ppm	ASTM D5185(m)	1150	<b>977</b>	1106	1052
Zinc	ppm	ASTM D5185(m)	1270	<b>1156</b>	1195	1117
Sulfur	ppm	ASTM D5185(m)	2060	<b>2734</b>	2678	2568
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.0</b>	13.8	13.2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.4</b>	13.5	13.3



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 556 - Whitecourt  
**Sample No.** : GFL0064983 **Received** : 05 Jan 2024  
**Lab Number** : 02606696 **Diagnosed** : 05 Jan 2024  
**Unique Number** : 5707782 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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.

Contact: Kash Wagoner  
 kwagoner@gflenv.com  
 T: (780)778-4888  
 F: (780)778-8707