



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

Machine Id  
**8284**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**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>GFL0100323</b>	GFL0064999	GFL0050051
Sample Date		Client Info		<b>10 Jan 2024</b>	09 Jan 2023	15 Aug 2022
Machine Age	hrs	Client Info		<b>19561</b>	0	18044
Oil Age	hrs	Client Info		<b>478</b>	0	541
Filter Age	hrs	Client Info		<b>478</b>	0	541
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>22</b>	73	62
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	4	3
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	1	1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

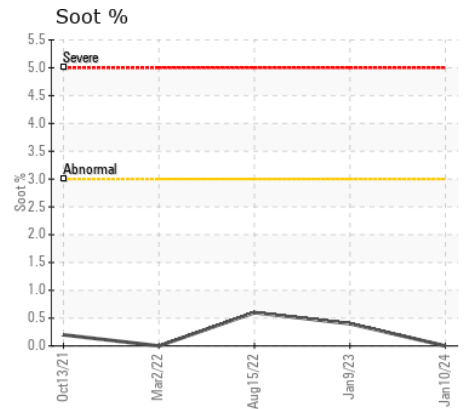
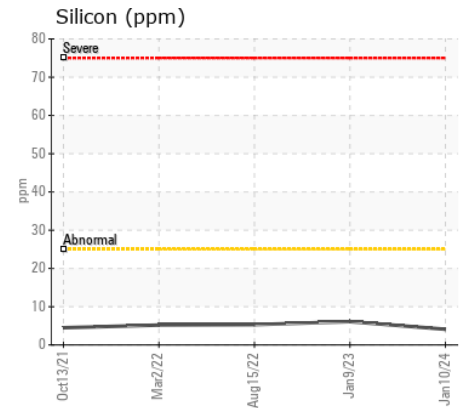
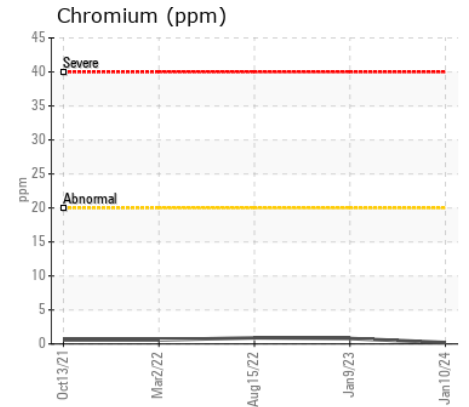
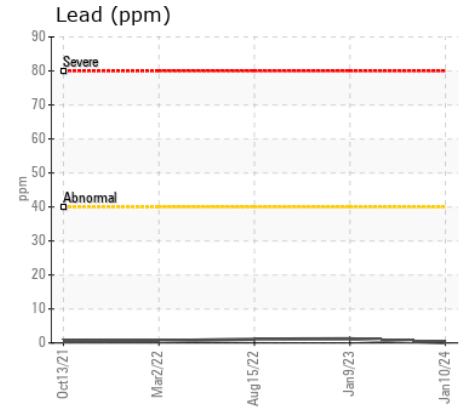
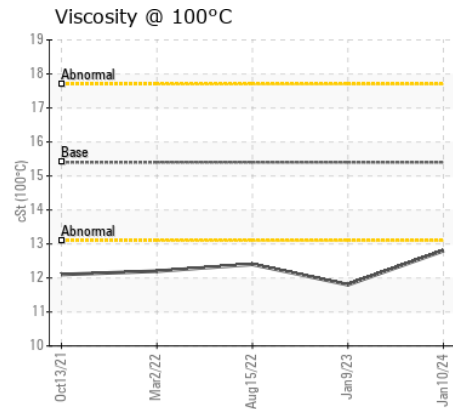
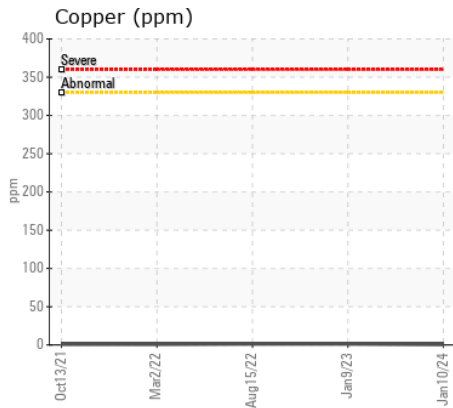
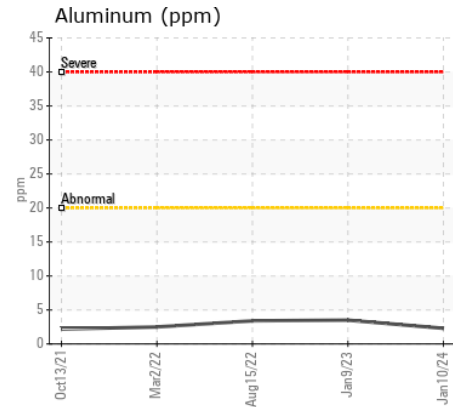
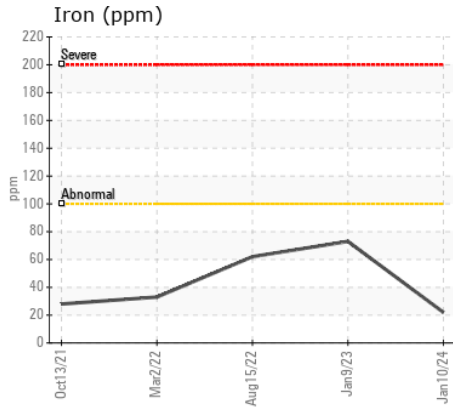
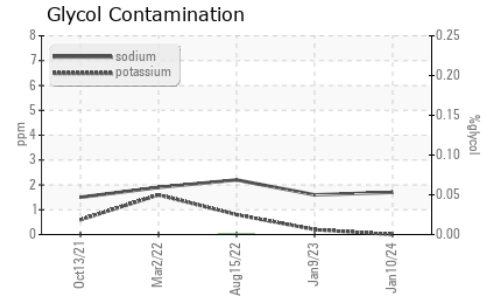
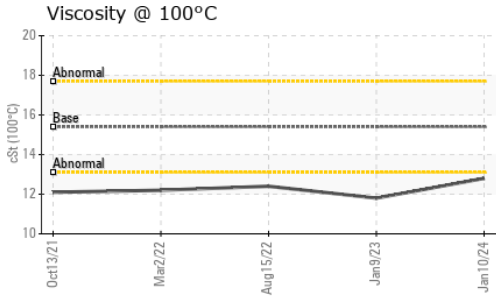
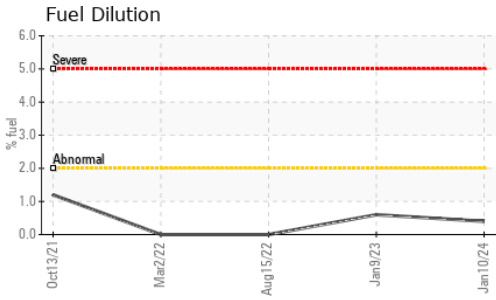
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	5
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Fuel	%	ASTM D7593*	>2.0	<b>0.4</b>	0.6	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	ASTM D7922*		<b>NEG</b>	NEG	0.0
Soot %	%	ASTM D7844*	>3	<b>0</b>	0.4	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.1</b>	6.8	6.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.4</b>	21.1	20.3
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	.2%

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	2
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	2	4
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	59	63
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>959</b>	938	1012
Calcium	ppm	ASTM D5185(m)	1070	<b>1053</b>	1087	1167
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1020</b>	1043	1089
Zinc	ppm	ASTM D5185(m)	1270	<b>1159</b>	1180	1262
Sulfur	ppm	ASTM D5185(m)	2060	<b>2700</b>	2478	2644
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.4</b>	15.3	14.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>12.8</b>	▲ 11.8	12.4



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 556 - Whitecourt**  
**Sample No.** : GFL0100323 **Received** : 12 Jan 2024  
**Lab Number** : 02608358 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 5709444 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FUELDILUTION, Glycol, PercentFuel )

4138 - 42 Street,  
 Whitecourt, AB  
 CA T7S 1P1  
 Contact: Kash Wagoner  
 kwagoner@gflenv.com  
 T: (780)778-4888  
 F: (780)778-8707

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.