



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

Machine Id  
**8242**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

The oil change at the time of sampling has been noted. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0102659</b>	GFL0028676	GFL0020209
Sample Date		Client Info		<b>21 Feb 2024</b>	21 Oct 2021	22 Apr 2021
Machine Age	hrs	Client Info		<b>16886</b>	466	143
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	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>ABNORMAL</b>	ABNORMAL	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>61</b>	52	104
Chromium	ppm	ASTM D5185(m)	>20	<b>4</b>	4	6
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	1	2
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	3	4
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	3	6
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	7	30
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	<1

**CONTAMINATION**

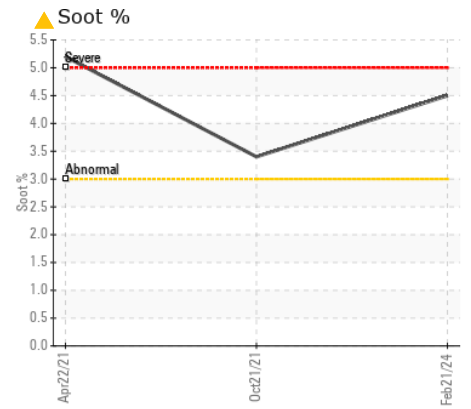
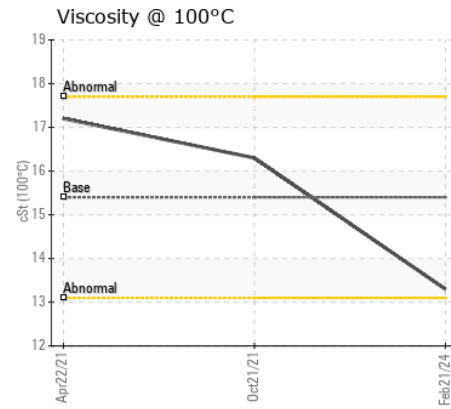
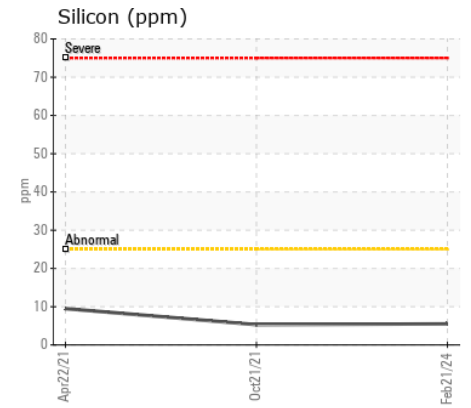
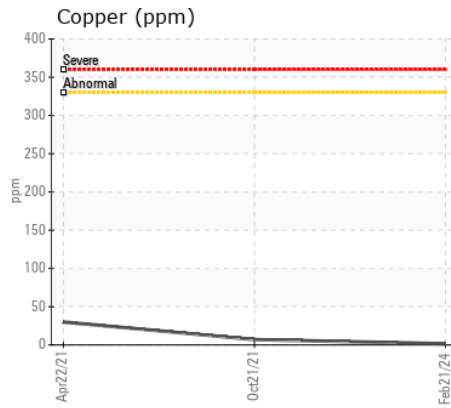
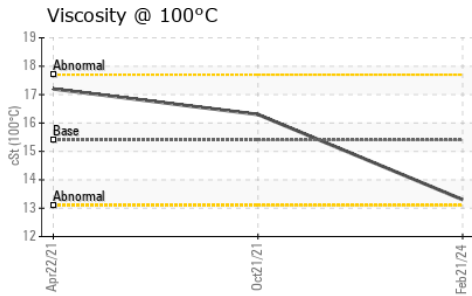
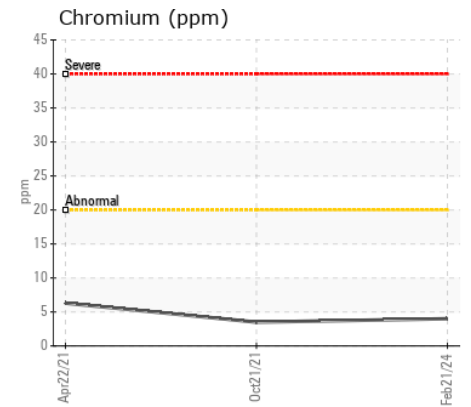
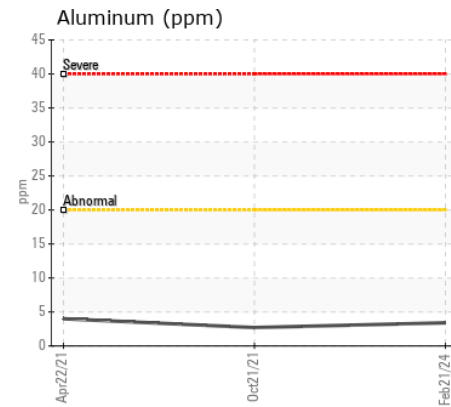
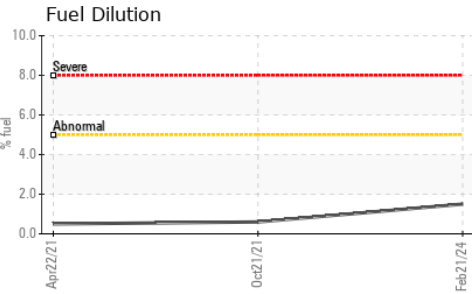
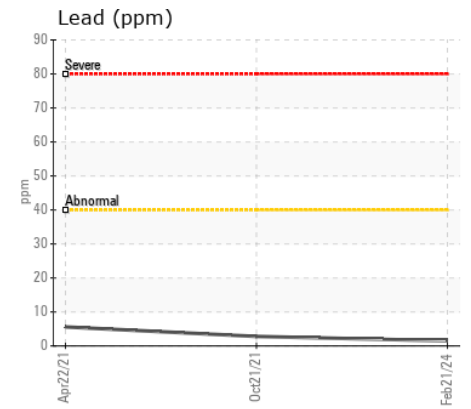
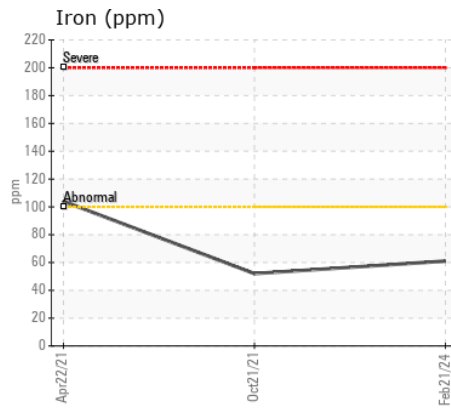
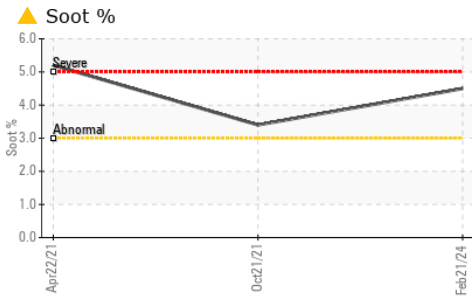
Light fuel dilution occurring. Light concentration of carbon/soot present in the oil. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	5	10
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Fuel	%	ASTM D7593*	>5	<b>1.5</b>	0.6	0.5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>4.5</b>	3.4	5.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>15.6</b>	15.0	17.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>31.8</b>	30.5	36.3
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>5</b>	6	7
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>60</b>	60	61
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185(m)	1010	<b>958</b>	1002	1009
Calcium	ppm	ASTM D5185(m)	1070	<b>1069</b>	1088	1152
Phosphorus	ppm	ASTM D5185(m)	1150	<b>975</b>	1023	987
Zinc	ppm	ASTM D5185(m)	1270	<b>1162</b>	1247	1312
Sulfur	ppm	ASTM D5185(m)	2060	<b>2442</b>	2354	2230
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>24.3</b>	26.1	28.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.3</b>	16.3	17.2



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0102659  
**Lab Number** : 02617615  
**Unique Number** : 5734725  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

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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.