

Machine Id  
**75**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

**RECOMMENDATION**

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0083574</b>	PC0071673	PC0071658
Sample Date		Client Info		<b>14 May 2024</b>	12 Dec 2023	19 May 2023
Machine Age	kms	Client Info		<b>52249</b>	44802	37234
Oil Age	kms	Client Info		<b>8000</b>	8000	8000
Filter Age	kms	Client Info		<b>8000</b>	8000	8000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>MARGINAL</b>	ABNORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>200	<b>7</b>	10	12
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	1	2
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	2	2
Copper	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

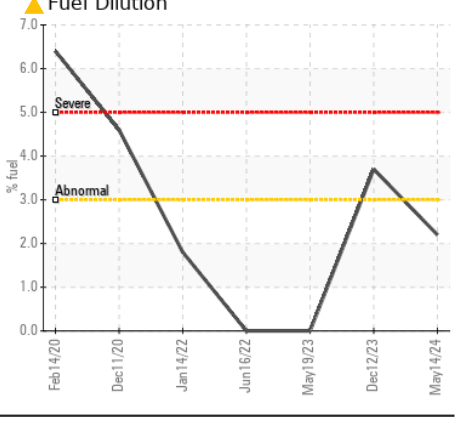
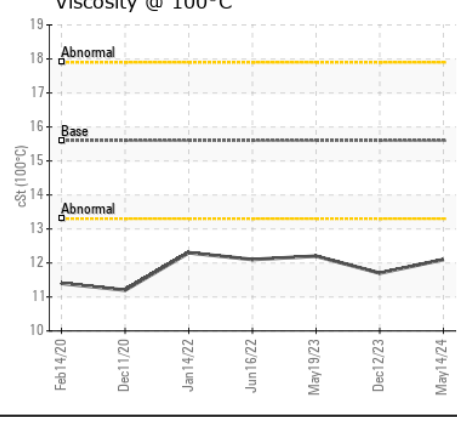
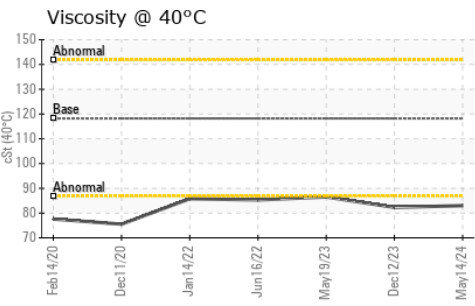
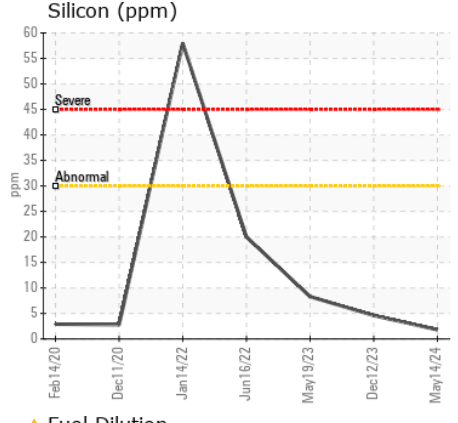
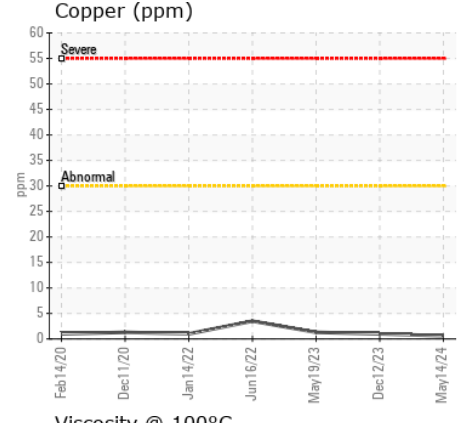
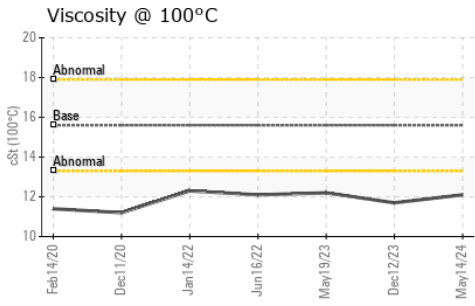
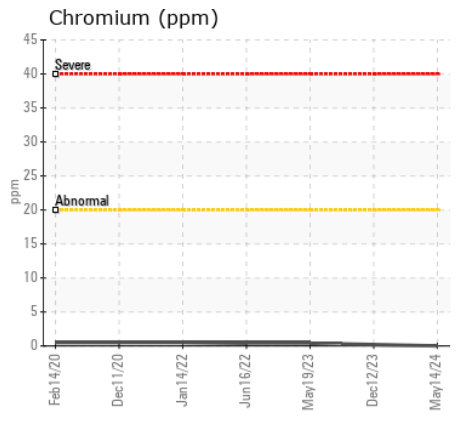
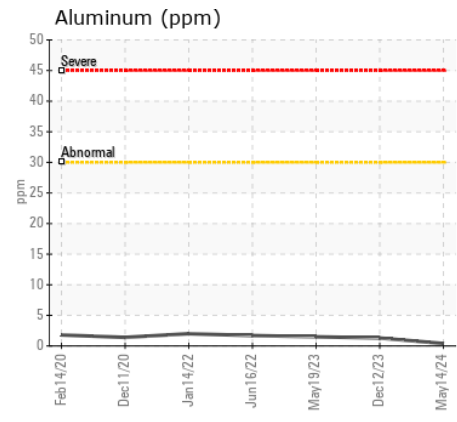
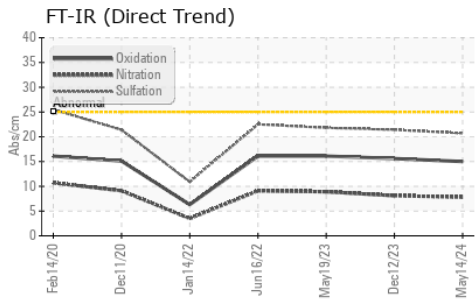
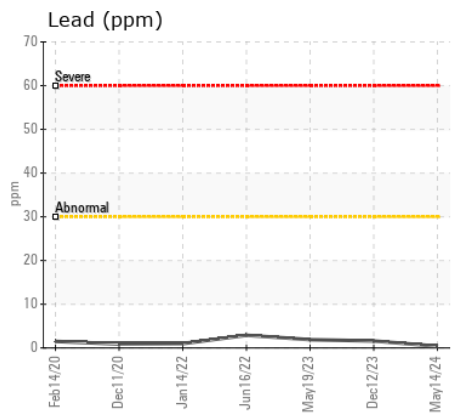
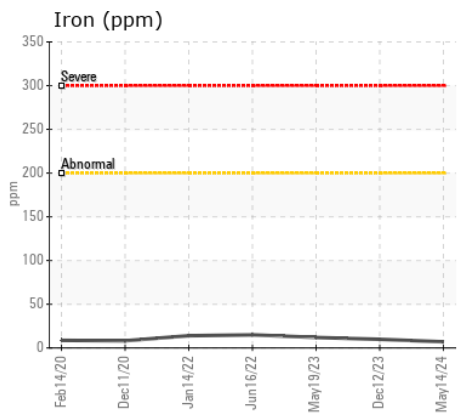
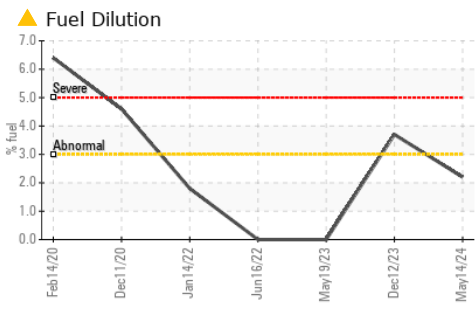
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>30	<b>2</b>	5	8
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Fuel	%	ASTM D7593*	>3.0	<b>▲ 2.2</b>	▲ 3.7	<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>0.9</b>	1.3	1.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.8</b>	8.1	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.7</b>	21.4	21.8
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>2</b>	2	2
Boron	ppm	ASTM D5185(m)	0	<b>14</b>	5	6
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	62	62
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>919</b>	954	932
Calcium	ppm	ASTM D5185(m)	1070	<b>1087</b>	1117	1205
Phosphorus	ppm	ASTM D5185(m)	1150	<b>978</b>	1037	1141
Zinc	ppm	ASTM D5185(m)	1270	<b>1145</b>	1218	1225
Sulfur	ppm	ASTM D5185(m)	2060	<b>2579</b>	2692	2801
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.0</b>	15.6	16.1
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>83.0</b>	82.3	86.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>12.1</b>	11.7	12.2
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>140</b>	134	135



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0083574 **Received** : 28 May 2024  
**Lab Number** : 02637915 **Tested** : 29 May 2024  
**Unique Number** : 5787077 **Diagnosed** : 29 May 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, PercentFuel, VI )

**BEAVER BUS LINES**  
 339, ACHIBAULD ST  
 WINNIPEG, MB  
 CA R2J 0W6  
 Contact: Roger Roman  
 roger@beaverbus.com  
 T: (204)989-7033  
 F: (204)237-2645

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.