



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

Machine Id  
**71**  
 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>PC0078274</b>	PC0071678	PC0071650
Sample Date		Client Info		<b>19 Mar 2024</b>	01 Dec 2023	15 Jun 2023
Machine Age	kms	Client Info		<b>25439</b>	18926	12036
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	ABNORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>200	<b>17</b>	27	22
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	5	1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>2</b>	4	1
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	1	1
Copper	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

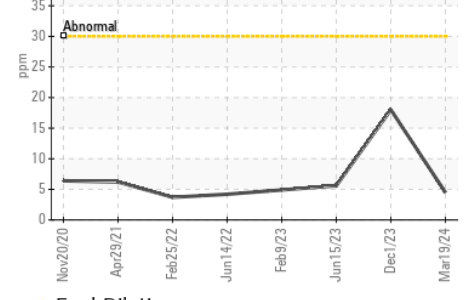
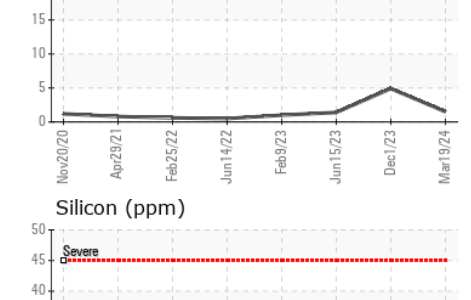
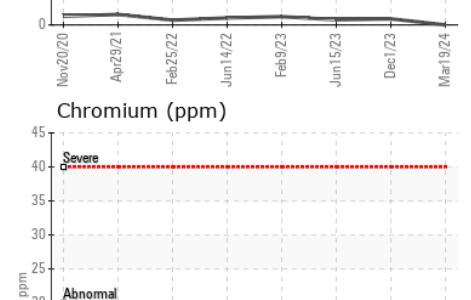
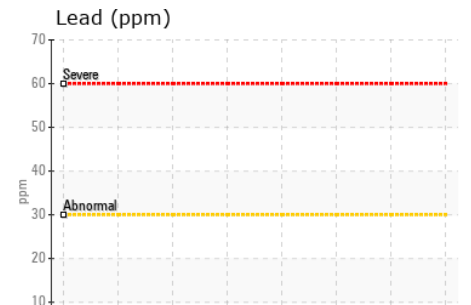
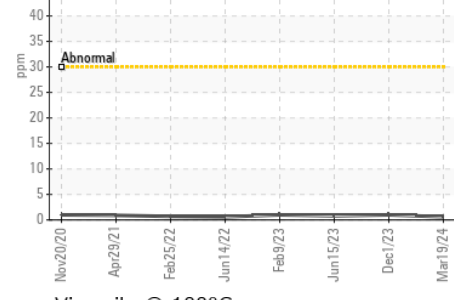
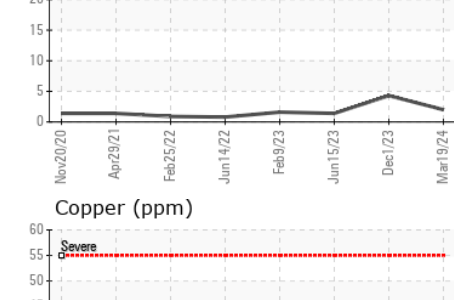
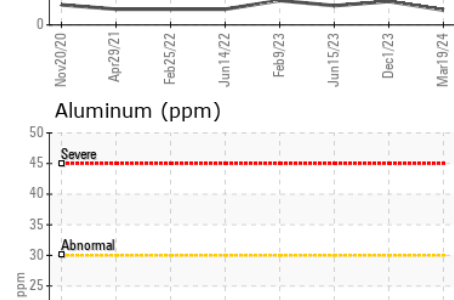
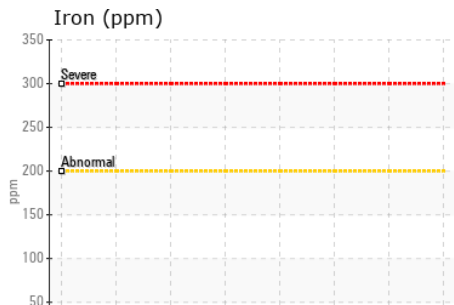
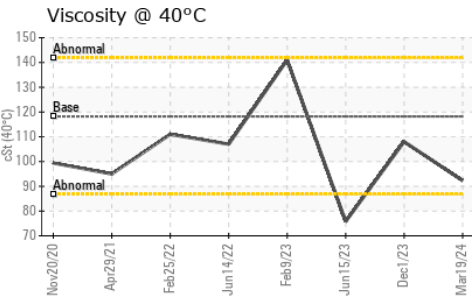
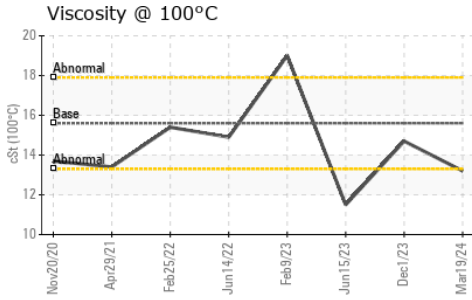
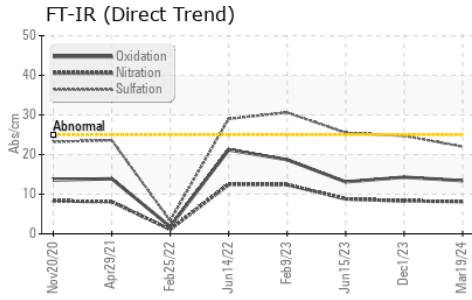
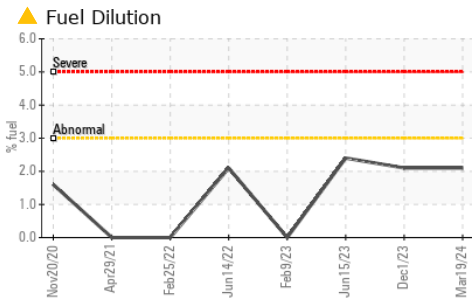
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>30	<b>4</b>	18	6
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	<1
Fuel	%	ASTM D7593*	>3.0	<b>▲ 2.1</b>	▲ 2.1	▲ 2.4
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>2.6</b>	▲ 3.4	▲ 4
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.1</b>	8.3	8.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.0</b>	24.7	25.5
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>	4	2
Boron	ppm	ASTM D5185(m)	0	<b>8</b>	2	1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>60</b>	58	54
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>936</b>	953	942
Calcium	ppm	ASTM D5185(m)	1070	<b>1059</b>	1049	1005
Phosphorus	ppm	ASTM D5185(m)	1150	<b>977</b>	980	1016
Zinc	ppm	ASTM D5185(m)	1270	<b>1144</b>	1164	1115
Sulfur	ppm	ASTM D5185(m)	2060	<b>2526</b>	2553	2463
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.4</b>	14.3	13.1
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>92.3</b>	108	▲ 75.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>13.2</b>	14.7	▲ 11.5
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>142</b>	140	144



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078274 **Received** : 11 Apr 2024  
**Lab Number** : 02628097 **Tested** : 12 Apr 2024  
**Unique Number** : 5761229 **Diagnosed** : 12 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, KV40, PercentFuel, VI )  
 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.

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