



Machine Id  
**0756**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON HP 15W40 (24 LTR)**

**RECOMMENDATION**

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0082801</b>	PC0082789	PC0077855
Sample Date		Client Info		<b>29 May 2024</b>	14 Mar 2024	01 Dec 2023
Machine Age	kms	Client Info		<b>1048345</b>	1034128	1020510
Oil Age	kms	Client Info		<b>14060</b>	13492	15075
Filter Age	kms	Client Info		<b>14060</b>	13492	15075
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ATTENTION	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>27</b>	44	27
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	4	1
Lead	ppm	ASTM D5185(m)	>40	<b>8</b>	6	8
Copper	ppm	ASTM D5185(m)	>330	<b>5</b>	14	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

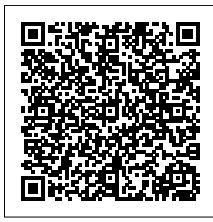
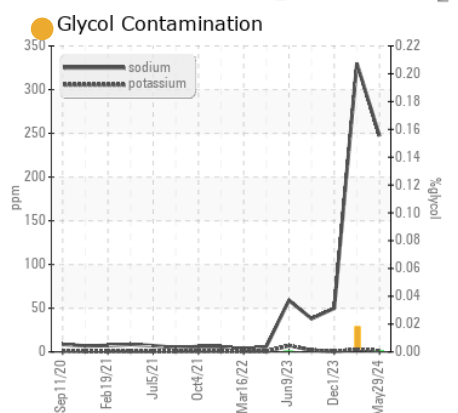
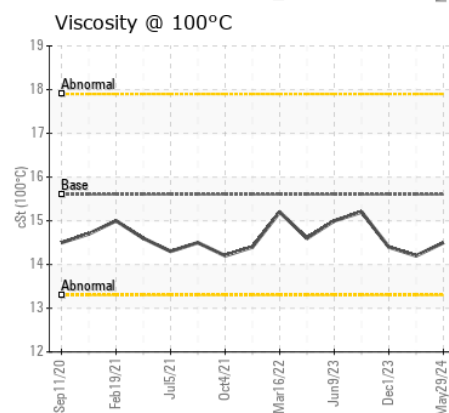
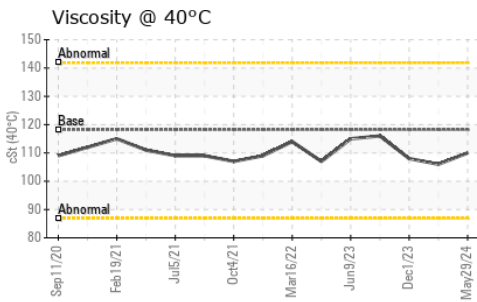
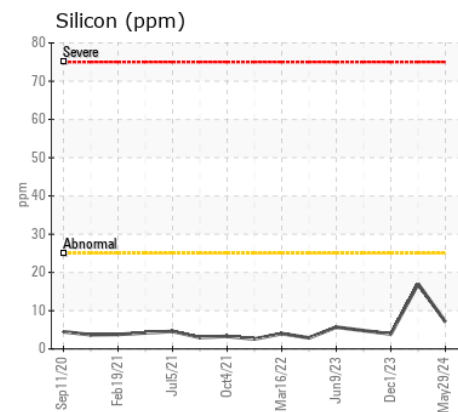
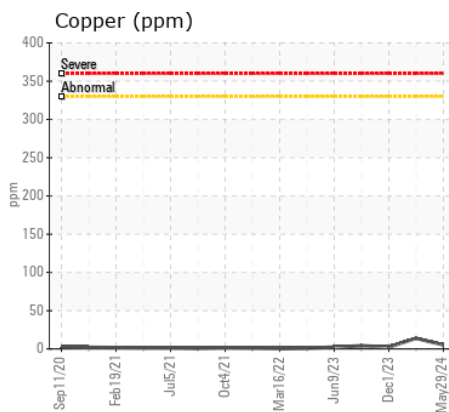
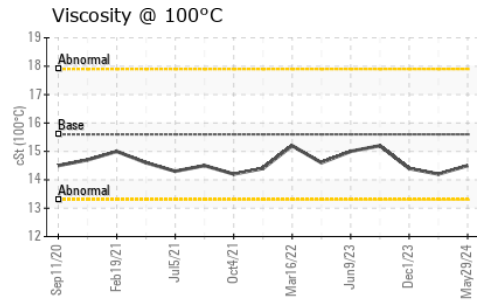
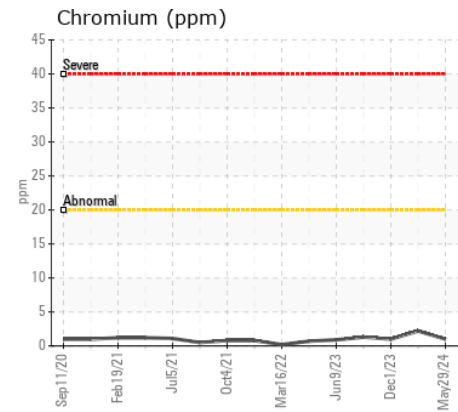
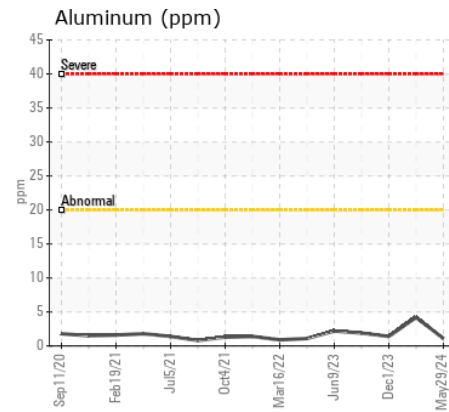
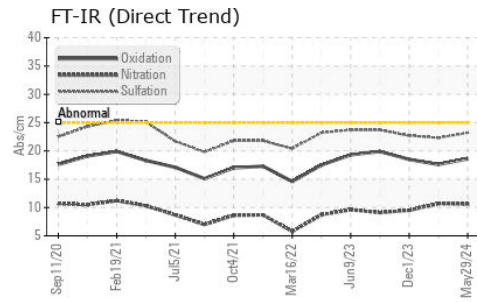
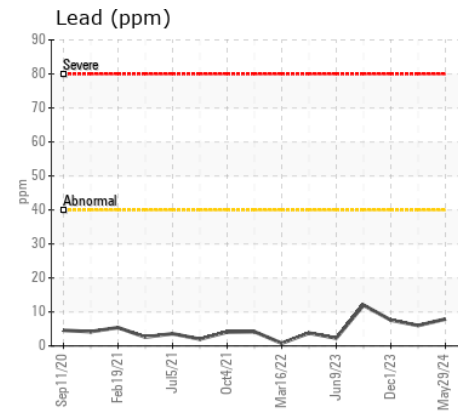
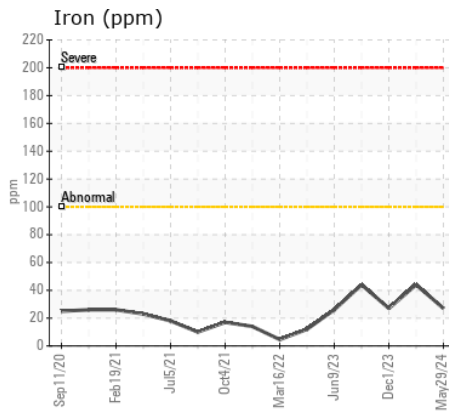
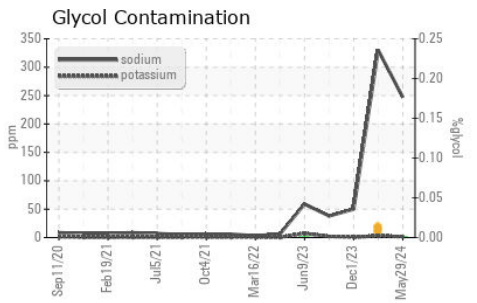
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	17	4
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	3	<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	%	ASTM D7922*		<b>0.0</b>	▲ 0.018	NEG
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0.4	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.6</b>	10.7	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.2</b>	22.3	22.7
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 (see recommendation).

Sodium	ppm	ASTM D5185(m)		● <b>247</b>	● 330	50
Boron	ppm	ASTM D5185(m)	0	<b>11</b>	15	7
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>72</b>	73	67
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>1059</b>	1032	1071
Calcium	ppm	ASTM D5185(m)	1070	<b>1148</b>	1157	1261
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1121</b>	1044	1110
Zinc	ppm	ASTM D5185(m)	1270	<b>1312</b>	1265	1363
Sulfur	ppm	ASTM D5185(m)	2060	<b>2514</b>	2492	2662
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.6</b>	17.6	18.5
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>110</b>	106	108
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>14.5</b>	14.2	14.4
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>134</b>	136	136



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0082801 **Received** : 05 Jun 2024  
**Lab Number** : 02639825 **Tested** : 05 Jun 2024  
**Unique Number** : 5788987 **Diagnosed** : 06 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol, KV40, 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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