



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**1203**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (24 LTR)**

**RECOMMENDATION**

The oil change at the time of sampling has been noted. No other corrective action is recommended at this time. ( Customer Sample Comment: Oil interval over by 1430km )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0081598</b>	PC0077859	PC0031538
Sample Date		Client Info		<b>15 Feb 2024</b>	29 Nov 2023	14 Sep 2023
Machine Age	kms	Client Info		<b>675250</b>	661820	647861
Oil Age	kms	Client Info		<b>13430</b>	13959	12521
Filter Age	kms	Client Info		<b>13430</b>	13959	12521
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	SEVERE	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>69</b>	73	89
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	3	4
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	3	4
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>4</b>	5	6
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

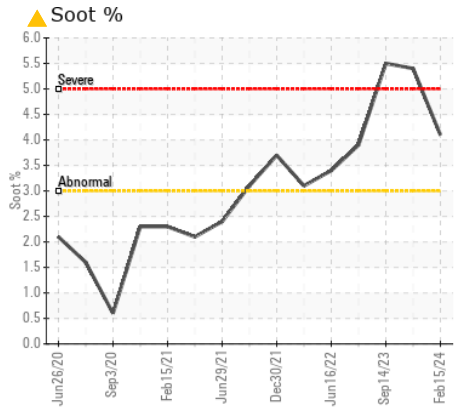
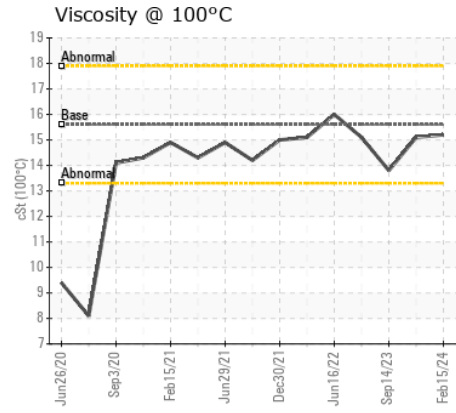
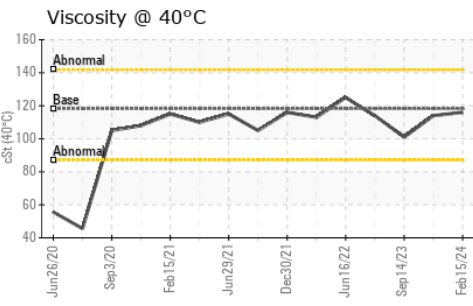
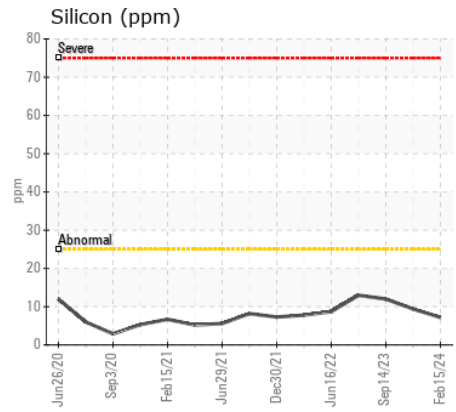
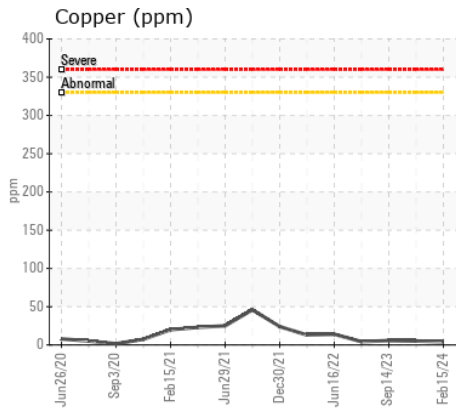
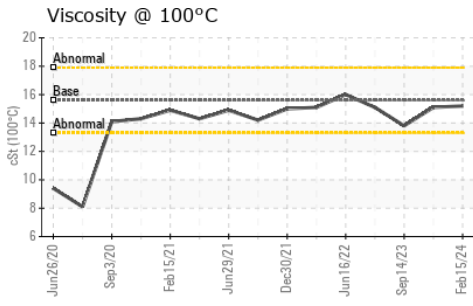
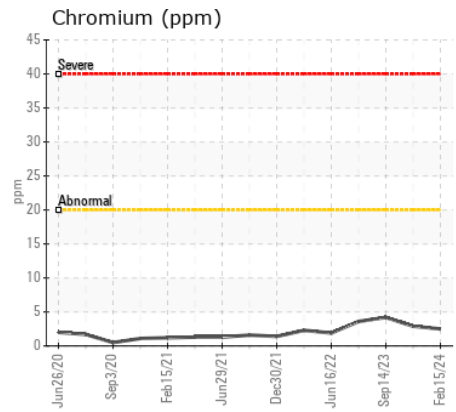
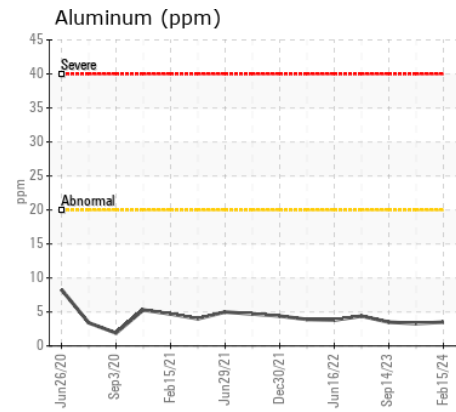
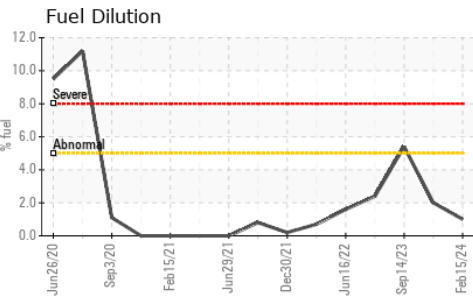
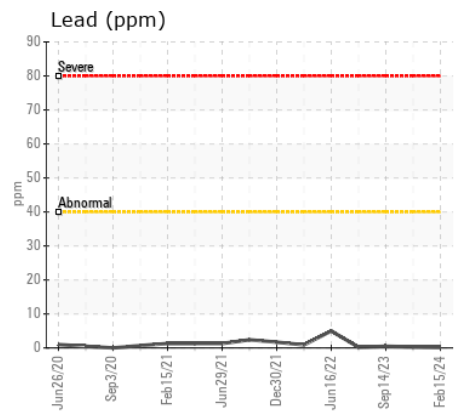
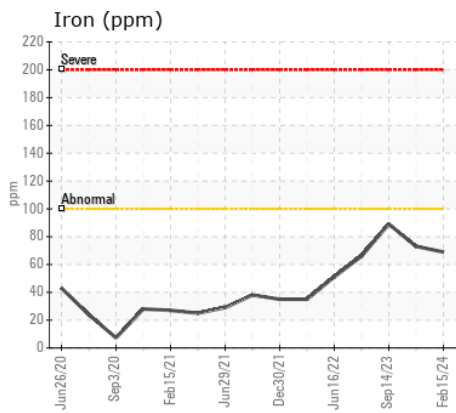
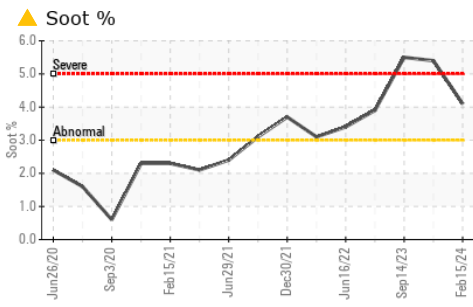
Light fuel dilution occurring. Light concentration of carbon/soot present in the oil. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	9	12
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	2
Fuel	%	ASTM D7593*	>5	<b>1</b>	▲ 2	▲ 5.4
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	▲ <b>4.1</b>	◆ 5.4	◆ 5.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>14.7</b>	16.3	15.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>30.4</b>	35.4	35.5
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>43</b>	47	12
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	6	9
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>67</b>	66	57
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185(m)	1010	<b>1067</b>	1053	893
Calcium	ppm	ASTM D5185(m)	1070	<b>1230</b>	1282	1319
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1108</b>	1110	1009
Zinc	ppm	ASTM D5185(m)	1270	<b>1299</b>	1355	1265
Sulfur	ppm	ASTM D5185(m)	2060	<b>2635</b>	2535	2388
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.5</b>	20.8	20.2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>116</b>	114	101
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>15.2</b>	15.1	13.8
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>136</b>	137	137



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0081598  
**Lab Number** : 02617585  
**Unique Number** : 5734695  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, KV40, PercentFuel, VI, Visual )  
**Received** : 23 Feb 2024  
**Tested** : 26 Feb 2024  
**Diagnosed** : 26 Feb 2024 - Kevin Marson  
 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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