

Machine Id  
**KENWORTH 120**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (44 LTR)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0083441</b>	PC0081927	PC0071659
Sample Date		Client Info		<b>23 Apr 2024</b>	18 Oct 2023	09 Jun 2023
Machine Age	kms	Client Info		<b>495084</b>	454486	418498
Oil Age	kms	Client Info		<b>40598</b>	35988	34180
Filter Age	kms	Client Info		<b>40598</b>	35988	34180
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	MARGINAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	<b>60</b>	50	43
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	2	2
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	4	4
Lead	ppm	ASTM D5185(m)	>150	<b>15</b>	14	6
Copper	ppm	ASTM D5185(m)	>90	<b>1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

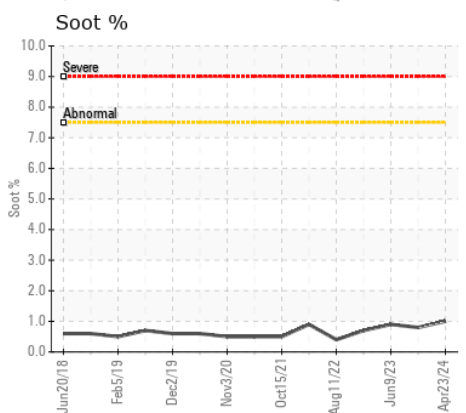
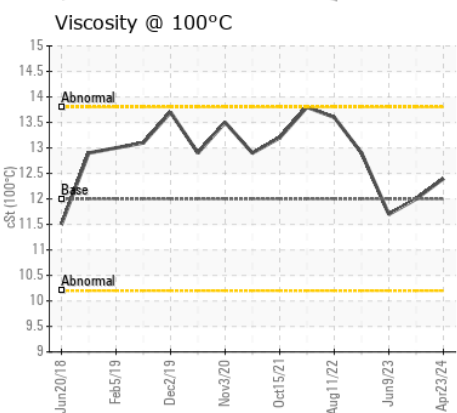
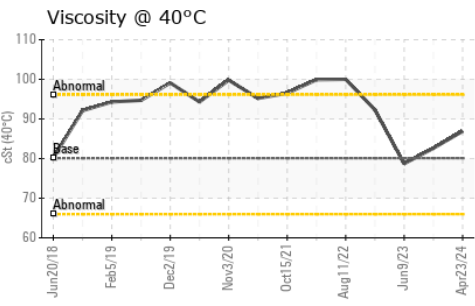
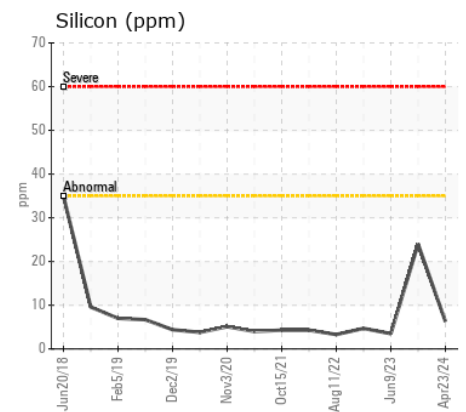
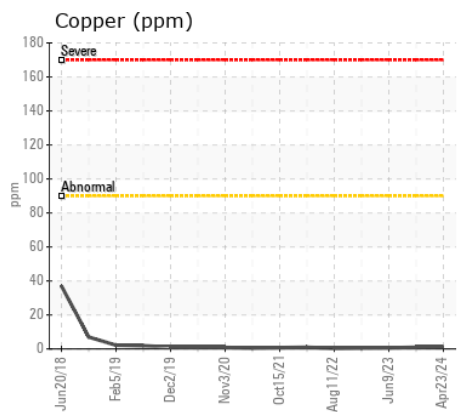
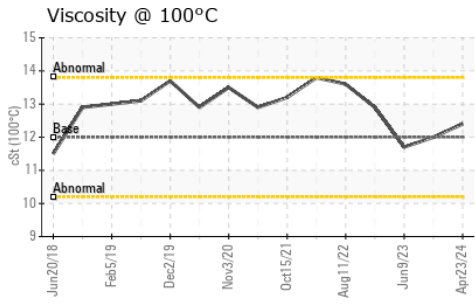
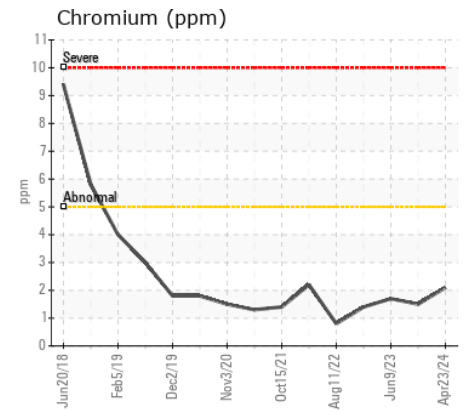
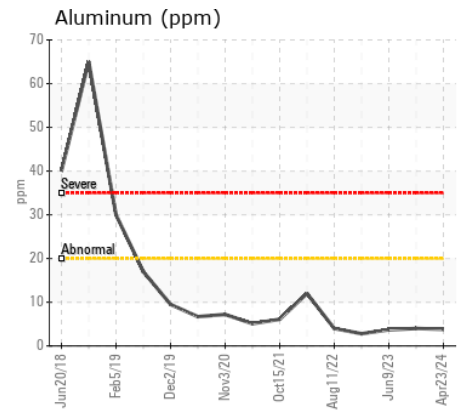
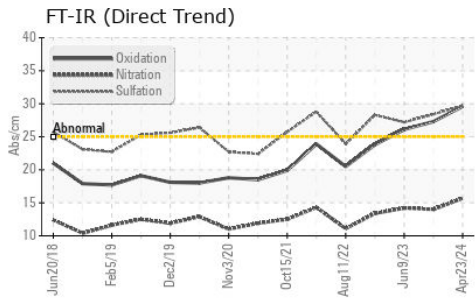
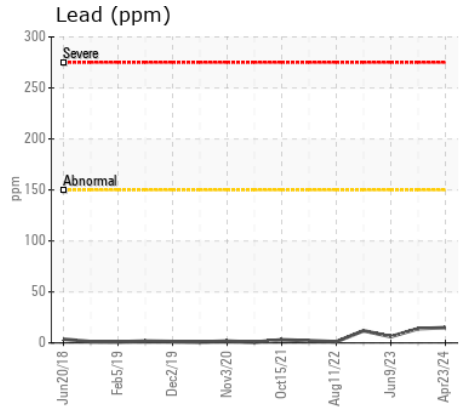
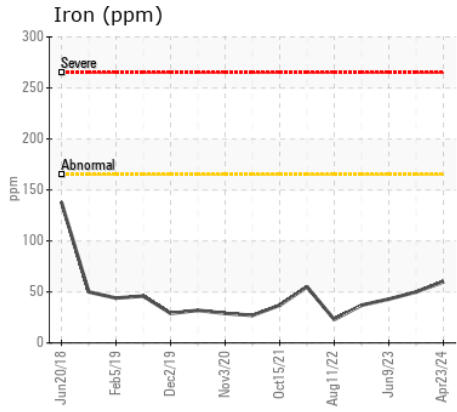
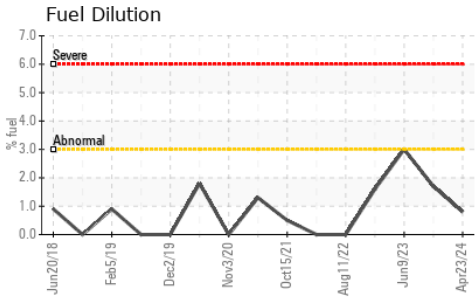
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	<b>6</b>	24	4
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	4	4
Fuel	%	ASTM D7593*	>3.0	<b>0.8</b>	▲ 1.7	▲ 3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>7.5	<b>1</b>	0.8	0.9
Nitration	Abs/cm	ASTM D7624*	>20	<b>15.7</b>	14.0	14.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>29.7</b>	28.4	27.2
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>	5	4
Boron	ppm	ASTM D5185(m)	2	<b>4</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>66</b>	67	62
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>1077</b>	1053	1004
Calcium	ppm	ASTM D5185(m)	1050	<b>1181</b>	1168	1161
Phosphorus	ppm	ASTM D5185(m)	995	<b>1121</b>	1066	1140
Zinc	ppm	ASTM D5185(m)	1180	<b>1326</b>	1342	1286
Sulfur	ppm	ASTM D5185(m)	2600	<b>2500</b>	2569	2591
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>29.6</b>	27.3	26.1
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	<b>86.9</b>	82.6	78.7
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>12.4</b>	12.0	11.7
Viscosity Index (VI)	Scale	ASTM D2270*	144	<b>138</b>	139	141



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ROSS TOWING & TRANSPORTATION SERVICES INC**  
**Sample No.** : PC0083441 **Received** : 15 May 2024 **995 POND MILLS RD**  
**Lab Number** : 02635486 **Tested** : 16 May 2024 **LONDON, ON**  
**Unique Number** : 5776639 **Diagnosed** : 16 May 2024 - Kevin Marson **CA N6N 1C3**  
**Test Package** : MOB 1 ( Additional Tests: FUELDILUTION, KV40, PercentFuel, VI, Visual ) **Contact: Dave Ross**  
*To discuss this sample report, contact Customer Service at 1-800-268-2131.* **chris@rosstowing.ca**  
*Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.* **T: (519)685-1212**  
*Validity of results and interpretation are based on the sample and information as supplied.* **F: (519)668-5790**