



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

Machine Id  
**KENWORTH 18-41**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON UHP 5W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0083263</b>	PC0066980	PC0060056
Sample Date		Client Info		<b>19 Apr 2024</b>	16 Jul 2023	26 Feb 2023
Machine Age	kms	Client Info		<b>9041</b>	228801	7144
Oil Age	kms	Client Info		<b>600</b>	0	600
Filter Age	kms	Client Info		<b>600</b>	0	600
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>165	<b>11</b>	13	21
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	2	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
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)	>20	<b>2</b>	4	9
Lead	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185(m)	>90	<b>&lt;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

**CONTAMINATION**

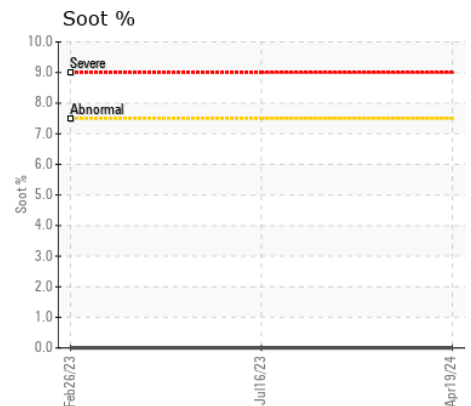
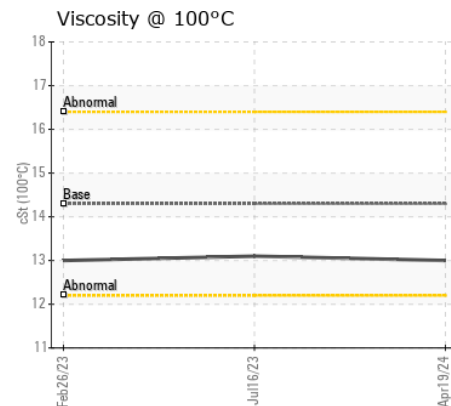
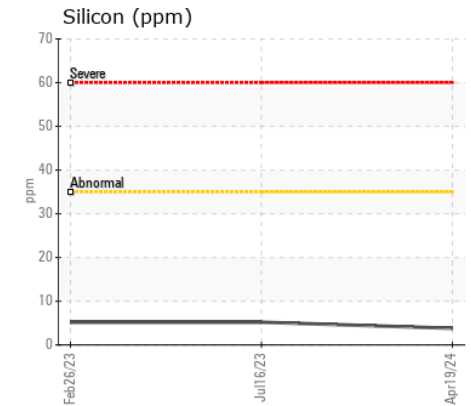
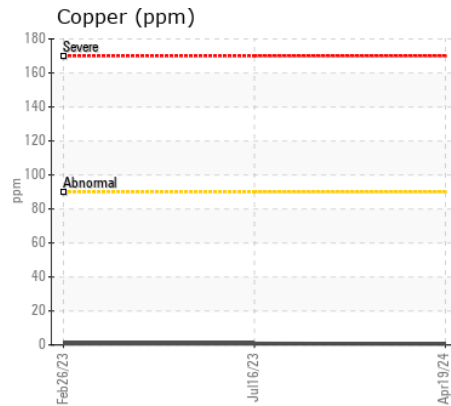
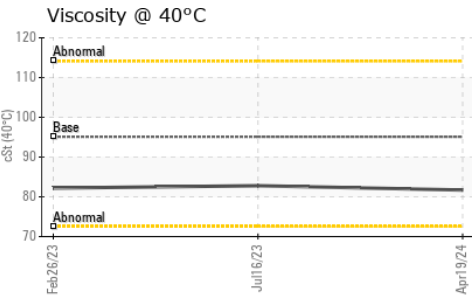
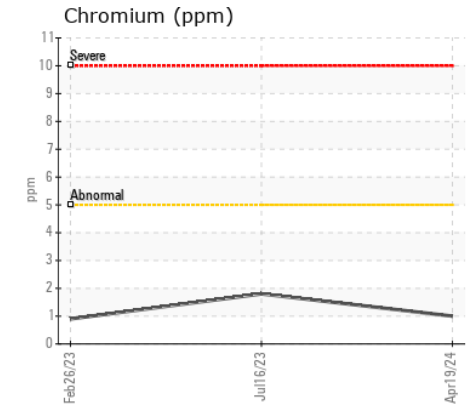
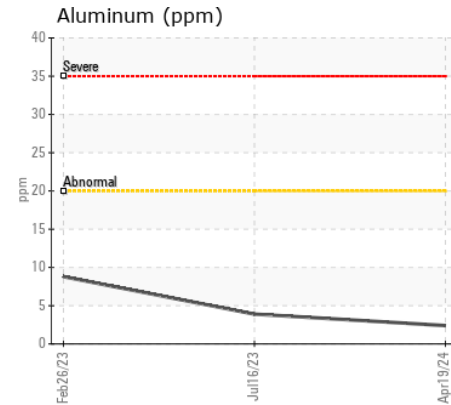
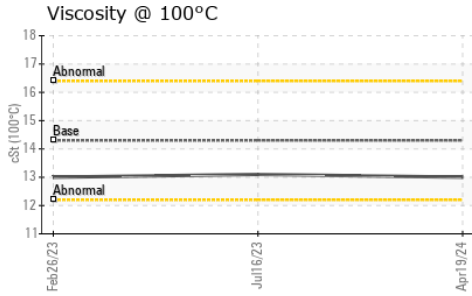
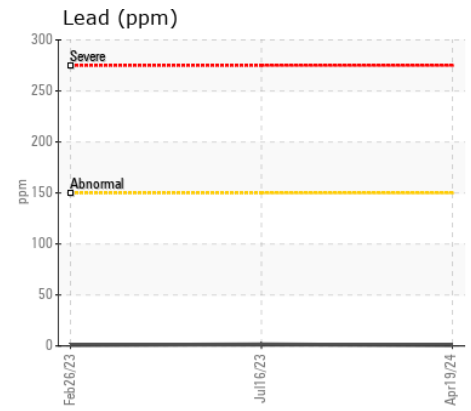
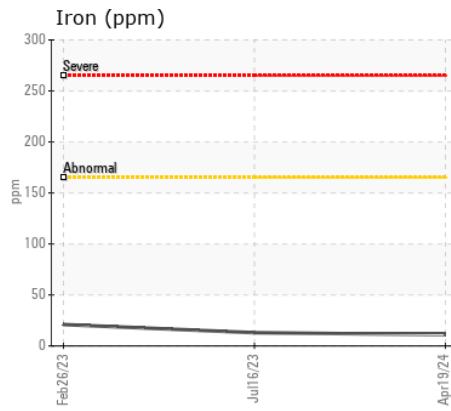
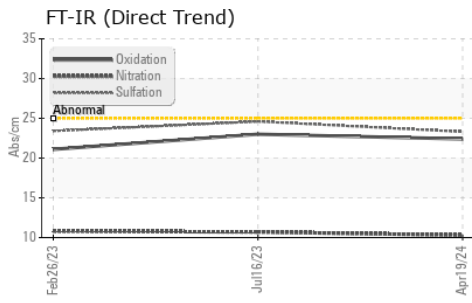
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	<b>4</b>	5	5
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	4	15
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>7.5	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.3</b>	10.7	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.3</b>	24.6	23.4
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>4</b>	5	7
Boron	ppm	ASTM D5185(m)	65	<b>36</b>	28	37
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	65	<b>58</b>	58	59
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	<b>1140</b>	1153	1157
Calcium	ppm	ASTM D5185(m)	820	<b>882</b>	852	882
Phosphorus	ppm	ASTM D5185(m)	1160	<b>969</b>	1090	1101
Zinc	ppm	ASTM D5185(m)	1260	<b>1199</b>	1238	1252
Sulfur	ppm	ASTM D5185(m)	3000	<b>2518</b>	2609	2827
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.4</b>	23.0	21.1
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	<b>81.7</b>	82.8	82.2
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	<b>13.0</b>	13.1	13.0
Viscosity Index (VI)	Scale	ASTM D2270*	169	<b>159</b>	159	158



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0083263 **Received** : 24 Apr 2024  
**Lab Number** : 02631088 **Tested** : 24 Apr 2024  
**Unique Number** : 5772241 **Diagnosed** : 24 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

**B & A PETROLEUM**  
 2004 SOUTH SERVICE ROAD WEST, BOX 1583  
 SWIFT CURRENT, SK  
 CA S9H 5J5  
 Contact: DARRYL MEYER  
 dmeyer@bapetroleumltd.com  
 T: (306)773-8890  
 F: (306)773-8443

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.