

Machine Id
PETERBILT 49

Component
Diesel Engine

Fluid
PETRO CANADA DURON SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0073152	PC0054022	---
Sample Date	Client Info			08 Mar 2023	04 Feb 2023	---
Machine Age	kms	Client Info		134749	84661	---
Oil Age	kms	Client Info		50088	62967	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<1.0	0.6	---
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	58	61	---
Chromium	ppm	ASTM D5185(m)	>20	3	2	---
Nickel	ppm	ASTM D5185(m)	>2	<1	1	---
Titanium	ppm	ASTM D5185(m)	>2	<1	<1	---
Silver	ppm	ASTM D5185(m)	>2	<1	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	63	67	---
Lead	ppm	ASTM D5185(m)	>40	1	1	---
Copper	ppm	ASTM D5185(m)	>330	5	10	---
Tin	ppm	ASTM D5185(m)	>15	<1	2	---
Antimony	ppm	ASTM D5185(m)		0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

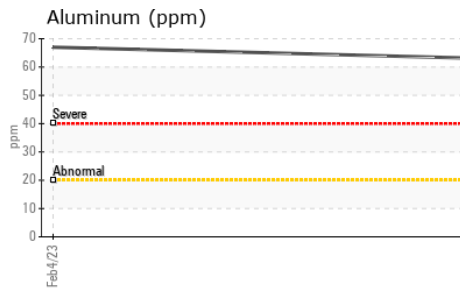
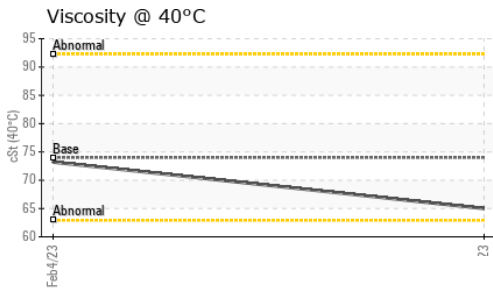
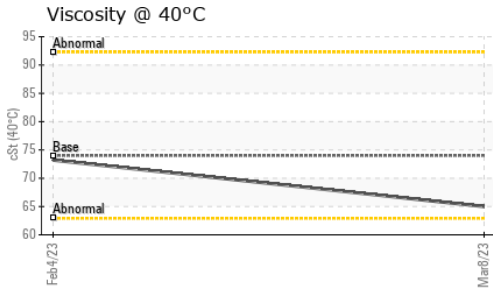
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	1	9	13	---
Barium	ppm	ASTM D5185(m)	1	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	1	54	27	---
Manganese	ppm	ASTM D5185(m)	1	1	2	---
Magnesium	ppm	ASTM D5185(m)	10	738	121	---
Calcium	ppm	ASTM D5185(m)	2942	1426	2332	---
Phosphorus	ppm	ASTM D5185(m)	1102	1030	954	---
Zinc	ppm	ASTM D5185(m)	1351	1186	1068	---
Sulfur	ppm	ASTM D5185(m)	3903	2651	2932	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	9	13	---
Sodium	ppm	ASTM D5185(m)		3	3	---
Potassium	ppm	ASTM D5185(m)	>20	155	178	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0.5	0.2	---
Nitration	Abs/cm	ASTM D7624*	>20	9.7	9.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.9	21.8	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.3	13.1	---

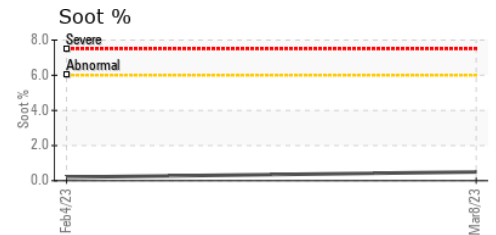
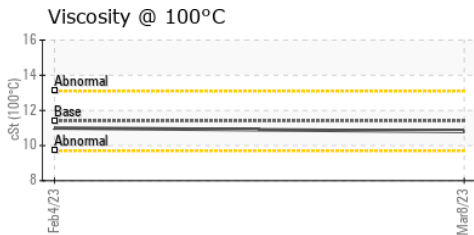
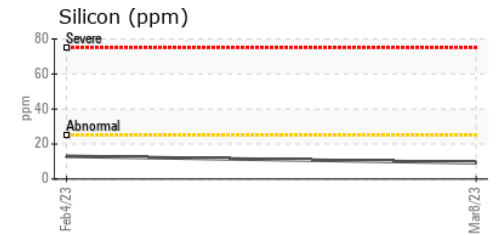
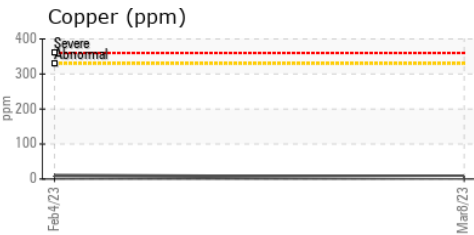
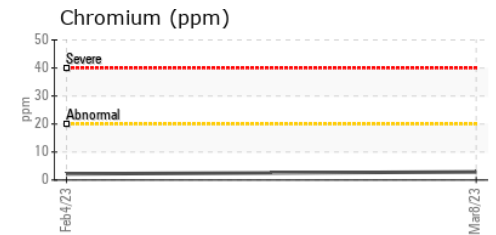
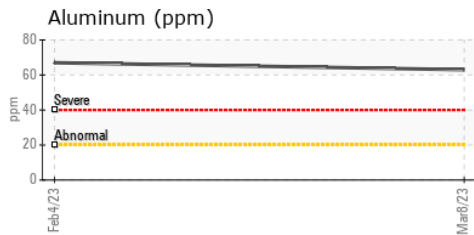
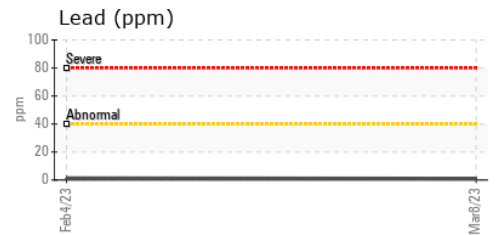
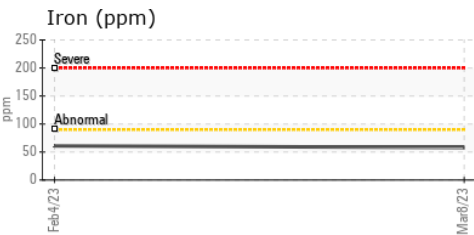
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	74.0	65.0	73.2
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	10.8	11.0
Viscosity Index (VI)	Scale	ASTM D2270*	146	157	140

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0073152 **Received** : 31 Jul 2023
Lab Number : 02573156 **Diagnosed** : 31 Jul 2023
Unique Number : 5618207 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

JEB TRANSPORT
 27 WESTVIEW BLVD
 TABER, AB
 CA T1G 0C2
 Contact: Brad Gannelseter
 brad@jebtransport.ca
 T: 894-7874
 F:

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.