

Machine Id
KENWORTH 152
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (44 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0083424	PC0075175	PC0069219
Sample Date		Client Info		07 Jun 2024	22 Jul 2023	24 Jan 2023
Machine Age	kms	Client Info		95268	63279	34364
Oil Age	kms	Client Info		31989	28915	34364
Filter Age	kms	Client Info		31989	28915	34364
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	30	29	65
Chromium	ppm	ASTM D5185(m)	>20	2	2	4
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	17	12	35
Lead	ppm	ASTM D5185(m)	>40	2	3	6
Copper	ppm	ASTM D5185(m)	>330	2	7	44
Tin	ppm	ASTM D5185(m)	>15	<1	1	4
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

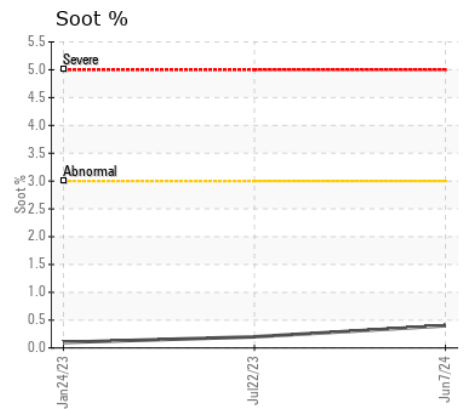
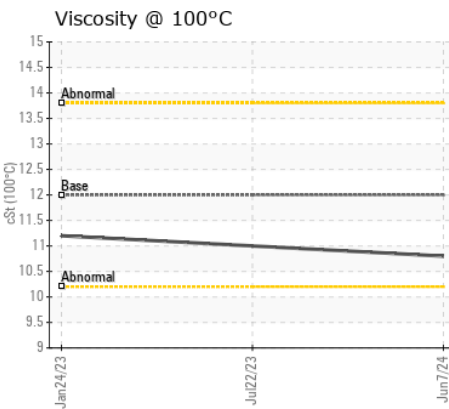
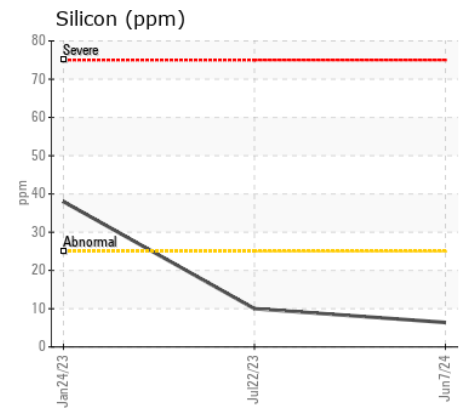
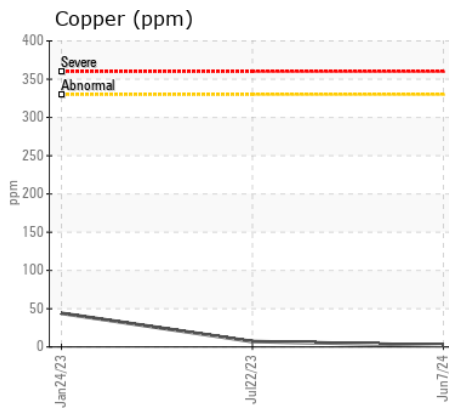
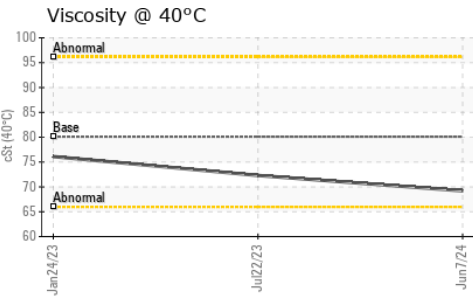
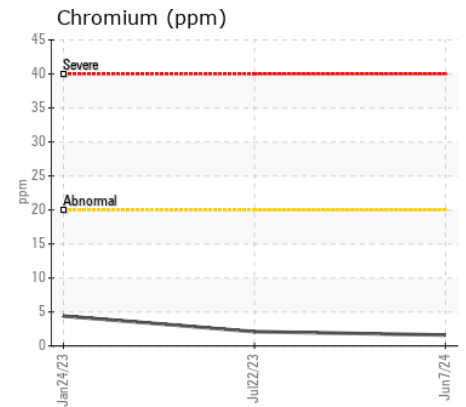
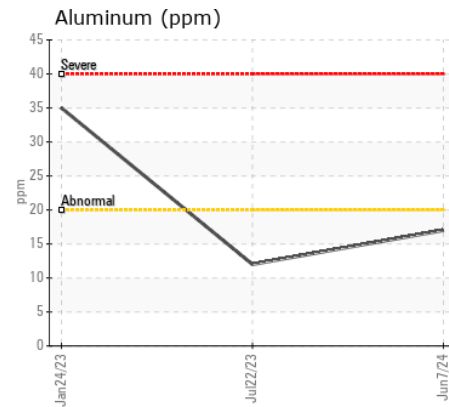
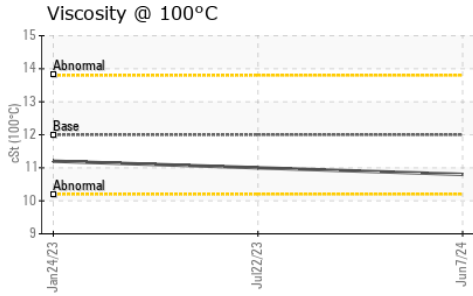
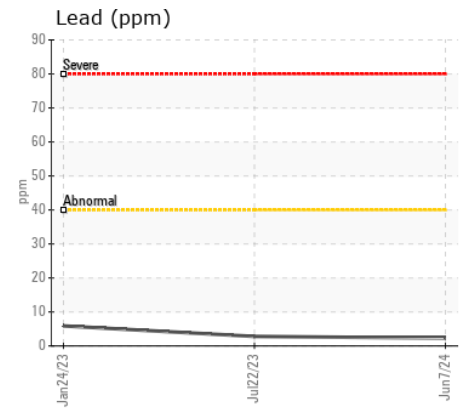
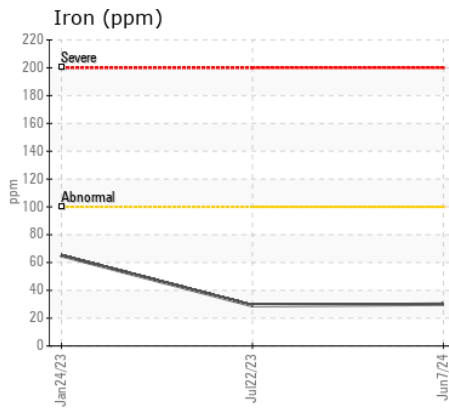
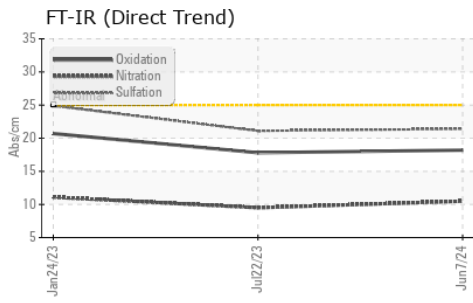
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	10	38
Potassium	ppm	ASTM D5185(m)	>20	45	29	82
Fuel		WC Method	>5	<1.0	<1.0	1.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.4	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	10.5	9.5	11.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.4	21.1	24.9
Silt	scalar	Visual*	NONE	VLITE	NONE	---
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	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		4	6	6
Boron	ppm	ASTM D5185(m)	2	2	4	38
Barium	ppm	ASTM D5185(m)	0	<1	<1	5
Molybdenum	ppm	ASTM D5185(m)	50	57	57	8
Manganese	ppm	ASTM D5185(m)	0	<1	1	7
Magnesium	ppm	ASTM D5185(m)	950	928	974	623
Calcium	ppm	ASTM D5185(m)	1050	1006	1044	1469
Phosphorus	ppm	ASTM D5185(m)	995	977	1043	739
Zinc	ppm	ASTM D5185(m)	1180	1158	1162	816
Sulfur	ppm	ASTM D5185(m)	2600	2410	2472	2380
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.2	17.8	20.7
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	69.2	72.3	76.1
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	10.8	11.0	11.2
Viscosity Index (VI)	Scale	ASTM D2270*	144	145	142	137



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0083424 **Received** : 24 Jun 2024
Lab Number : 02643708 **Tested** : 24 Jun 2024
Unique Number : 5801247 **Diagnosed** : 24 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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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.