



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 138
 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		PC0081959	PC0075196	PC0069222
Sample Date		Client Info		30 Nov 2023	08 Jul 2023	09 Jan 2023
Machine Age	kms	Client Info		302387	267877	235865
Oil Age	kms	Client Info		34510	32012	32935
Filter Age	kms	Client Info		34510	32012	32935
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	28	32	20
Chromium	ppm	ASTM D5185(m)	>20	1	1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	4	5	4
Lead	ppm	ASTM D5185(m)	>40	2	2	1
Copper	ppm	ASTM D5185(m)	>330	<1	1	<1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

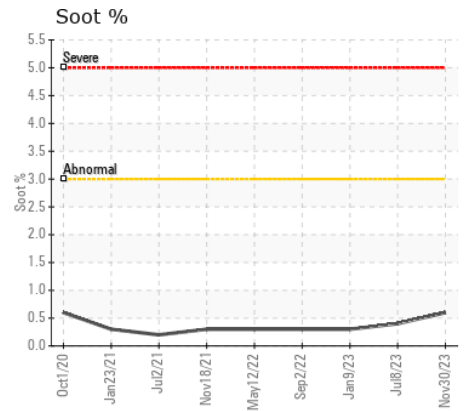
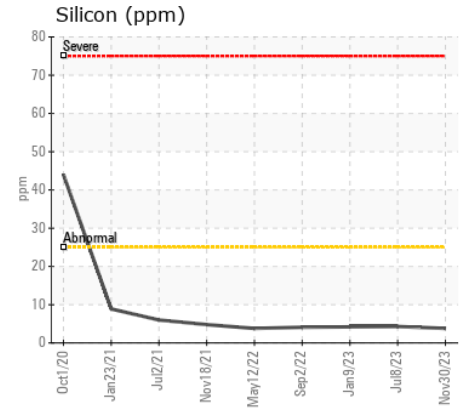
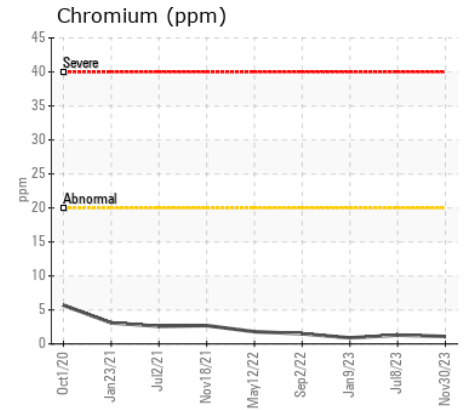
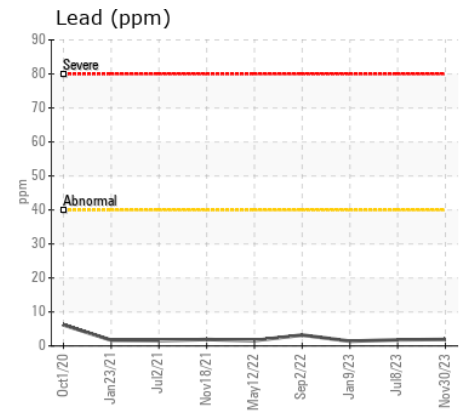
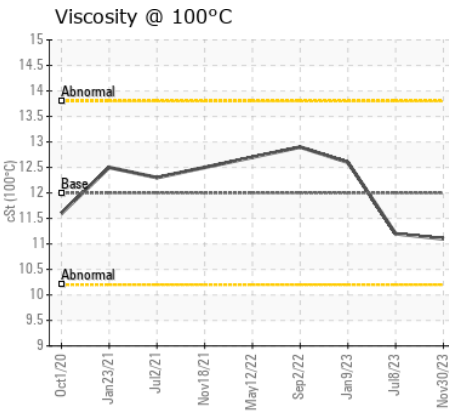
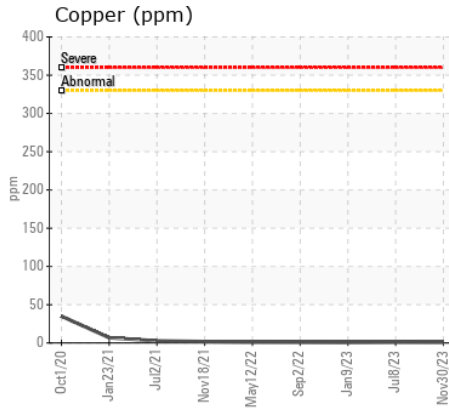
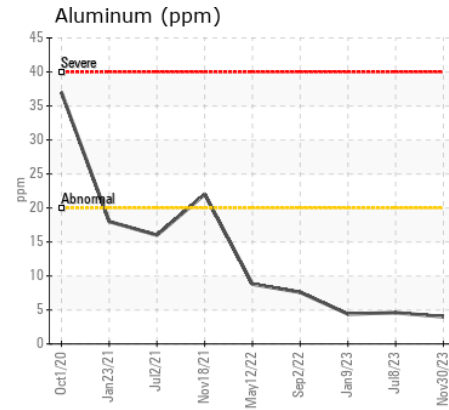
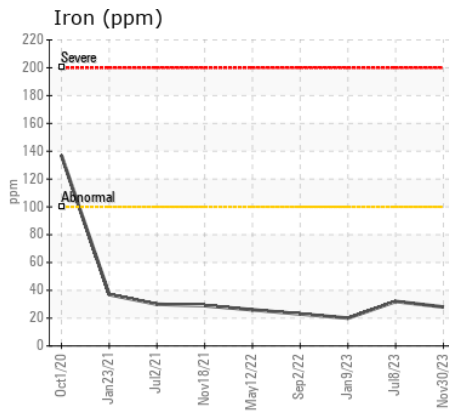
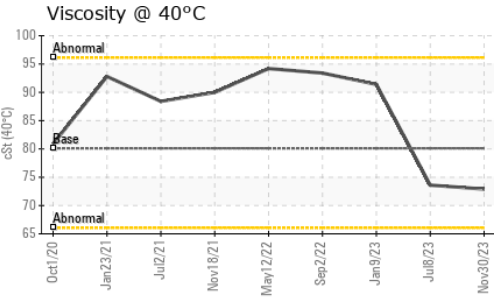
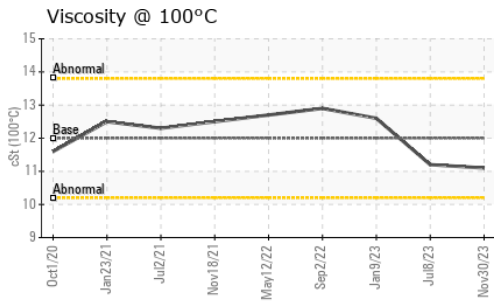
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	6	9	10
Fuel		WC Method	>5	<1.0	<1.0	0.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.6	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	11.6	10.7	10.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.4	21.9	22.1
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)		2	4	4
Boron	ppm	ASTM D5185(m)	2	<1	2	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	60	60	58
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	982	997	929
Calcium	ppm	ASTM D5185(m)	1050	1086	1041	1057
Phosphorus	ppm	ASTM D5185(m)	995	1029	1056	1010
Zinc	ppm	ASTM D5185(m)	1180	1233	1214	1161
Sulfur	ppm	ASTM D5185(m)	2600	2656	2533	2542
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.9	18.6	16.9
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	72.9	73.6	91.4
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.1	11.2	12.6
Viscosity Index (VI)	Scale	ASTM D2270*	144	142	143	133



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 ROSS TOWING & TRANSPORTATION SERVICES INC
Sample No. : PC0081959 **Received** : 04 Jan 2024
Lab Number : 02606439 **Diagnosed** : 05 Jan 2024
Unique Number : 5707525 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

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.