



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT R11
Component
Diesel Engine
Fluid
10W30 DURON SEMI (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0001217	LP0001105	LP0000590
Sample Date		Client Info		15 Apr 2024	20 Oct 2023	31 Jul 2023
Machine Age	hrs	Client Info		16627	16142	15679
Oil Age	hrs	Client Info		485	400	444
Filter Age	hrs	Client Info		485	400	444
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 D5185m	>100	73	26	13
Chromium	ppm	ASTM D5185m	>20	2	1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	11	3	5
Lead	ppm	ASTM D5185m	>40	3	1	2
Copper	ppm	ASTM D5185m	>330	0	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

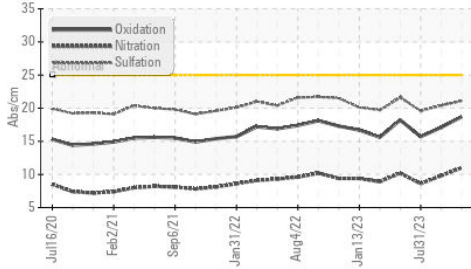
Silicon	ppm	ASTM D5185m	>25	6	5	4
Potassium	ppm	ASTM D5185m	>20	18	11	11
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	11.0	9.8	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	20.4	19.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

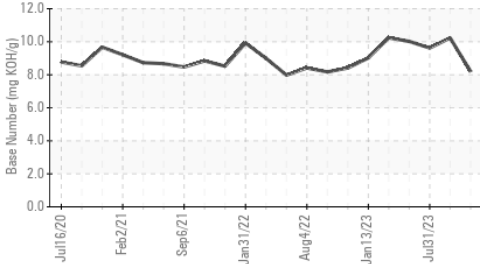
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	0	2
Boron	ppm	ASTM D5185m		12	1	2
Barium	ppm	ASTM D5185m		0	4	0
Molybdenum	ppm	ASTM D5185m		61	61	66
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		923	914	1017
Calcium	ppm	ASTM D5185m		1079	1020	1203
Phosphorus	ppm	ASTM D5185m		1053	1046	1131
Zinc	ppm	ASTM D5185m		1223	1231	1391
Sulfur	ppm	ASTM D5185m		3367	2949	3289
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	17.1	15.7
Base Number (BN)	mg KOH/g	ASTM D2896		8.19	10.23	9.62
Visc @ 100°C	cSt	ASTM D445		10.6	11.2	11.8

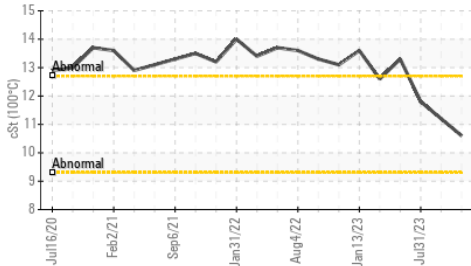
FT-IR (Direct Trend)



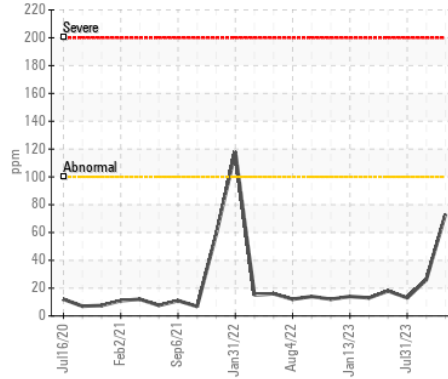
Base Number



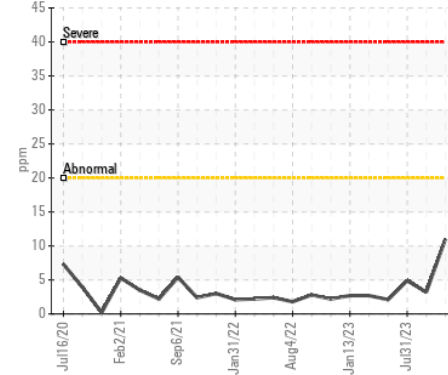
Viscosity @ 100°C



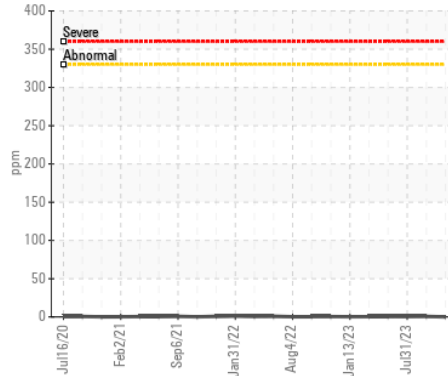
Iron (ppm)



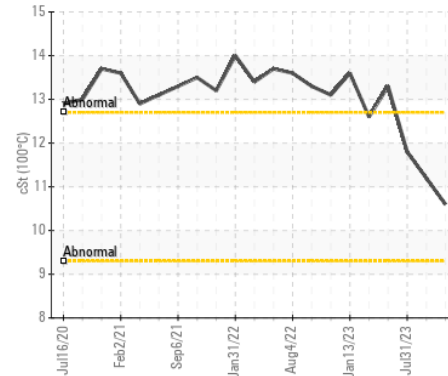
Aluminum (ppm)



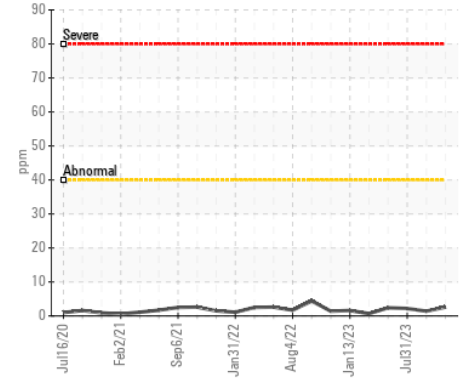
Copper (ppm)



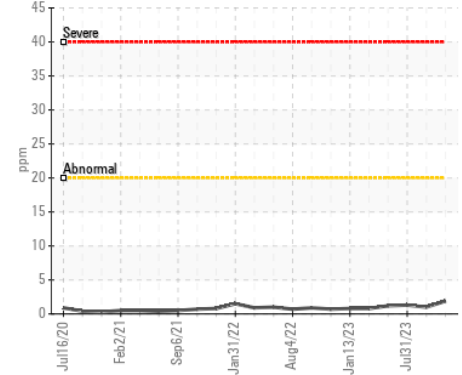
Viscosity @ 100°C



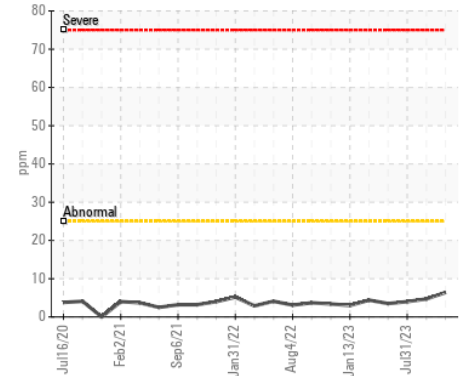
Lead (ppm)



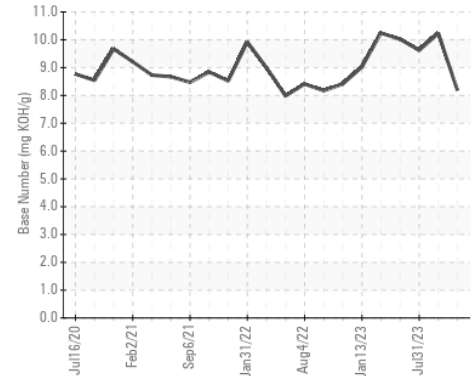
Chromium (ppm)



Silicon (ppm)



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : LP0001217

Lab Number : 06157102

Unique Number : 10992525

Test Package : MOB 2

Received : 22 Apr 2024

Tested : 23 Apr 2024

Diagnosed : 23 Apr 2024 - Wes Davis

SELECT DEMO

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SALEM, NH

US 03079

Contact: STAN DOGIL

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)