OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 162337
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (44 QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

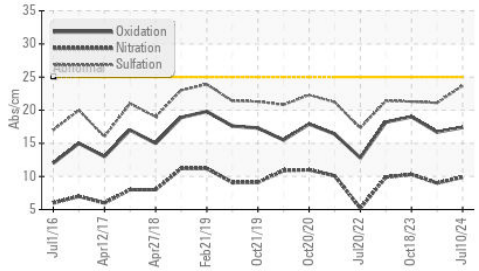
There is no indication of any contamination in the oil.

FLUID CONDITION

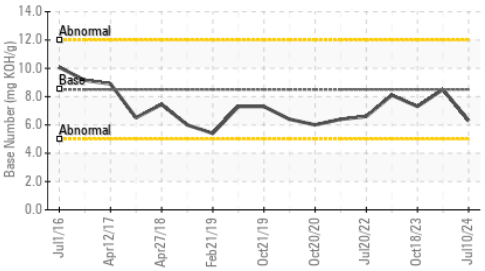
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0956994	WC0934390	WC0869778
Sample Date		Client Info		10 Jul 2024	08 May 2024	18 Oct 2023
Machine Age	mls	Client Info		31463	113382	105498
Oil Age	mls	Client Info		4699	4117	3798
Filter Age	mls	Client Info		4699	4117	3798
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>110	25	17	25
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	2	3
Lead	ppm	ASTM D5185m	>45	0	<1	1
Copper	ppm	ASTM D5185m	>85	2	1	1
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>30	5	10	22
Potassium	ppm	ASTM D5185m	>20	4	0	7
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	1.5	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.9	9.0	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	21.1	21.3
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
Sodium	ppm	ASTM D5185m	>158	3	2	7
Boron	ppm	ASTM D5185m	250	13	23	31
Barium	ppm	ASTM D5185m	10	0	0	<1
Molybdenum	ppm	ASTM D5185m	100	54	69	50
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	762	906	738
Calcium	ppm	ASTM D5185m	3000	1106	1313	1153
Phosphorus	ppm	ASTM D5185m	1150	871	1050	713
Zinc	ppm	ASTM D5185m	1350	1044	1254	877
Sulfur	ppm	ASTM D5185m	4250	2834	3593	2180
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	16.7	19.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.3	8.5	7.3
Visc @ 100°C	cSt	ASTM D445	14.4	13.4	13.8	14.0

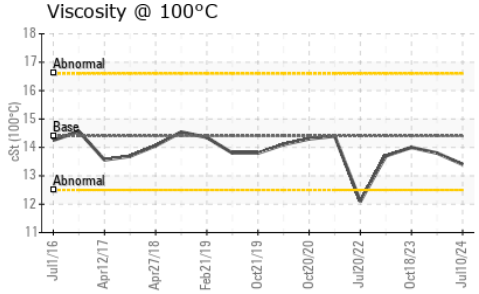
FT-IR (Direct Trend)



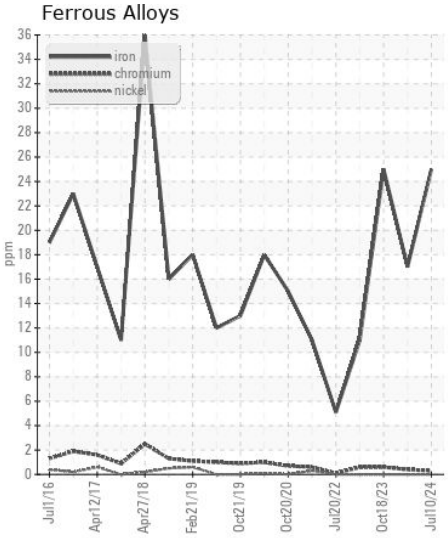
Base Number



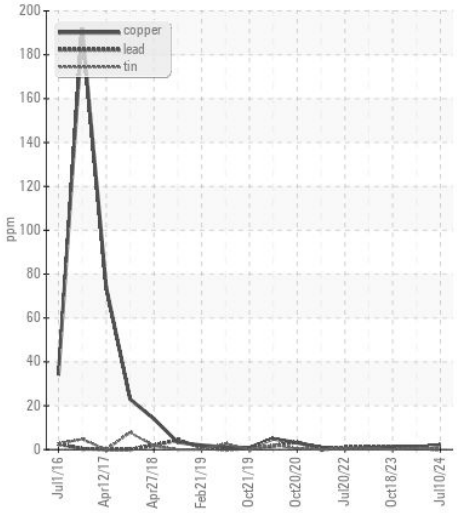
Viscosity @ 100°C



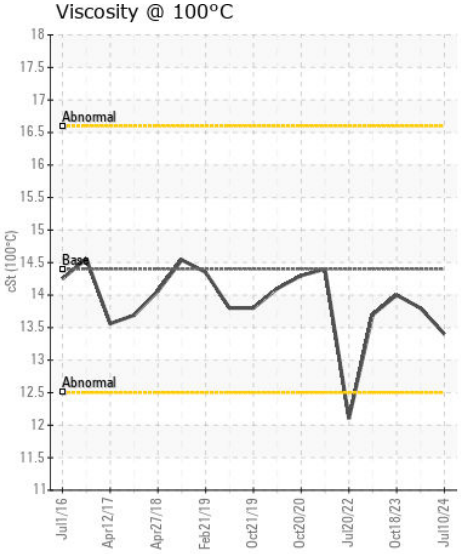
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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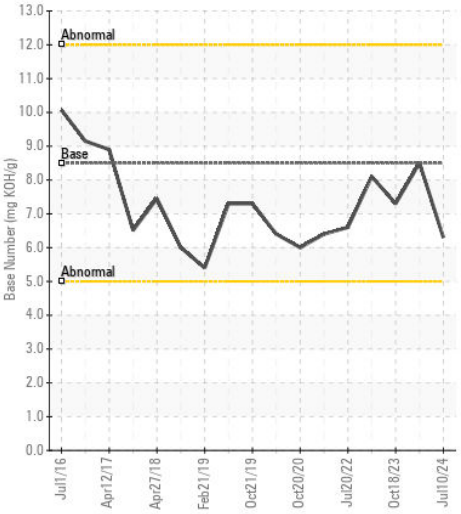

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0956994
Lab Number : 06239659
Unique Number : 11128493
Test Package : FLEET

Received : 17 Jul 2024
Tested : 18 Jul 2024
Diagnosed : 18 Jul 2024 - Wes Davis

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)

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