



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 162411
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (44 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0934387	WC0869785	WC0833502
Sample Date		Client Info		17 Apr 2024	15 Nov 2023	19 Jul 2023
Machine Age	mls	Client Info		94612	90850	86920
Oil Age	mls	Client Info		3762	3930	3857
Filter Age	mls	Client Info		3762	3930	3857
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	15	11	9
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	2
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>150	<1	<1	0
Copper	ppm	ASTM D5185m	>90	5	9	<1
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	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.

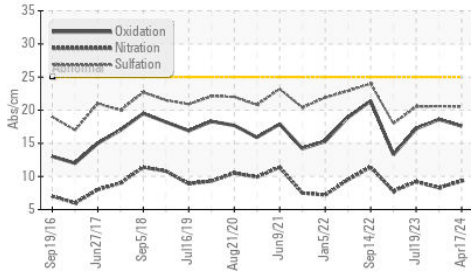
Silicon	ppm	ASTM D5185m	>35	12	15	27
Potassium	ppm	ASTM D5185m	>20	4	1	<1
Fuel	%	ASTM D3524	>3.0	<1.0	0.1	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	0.4	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.3	8.3	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	20.6	20.5
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

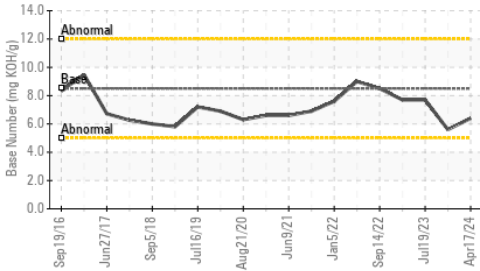
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	5	5	8
Boron	ppm	ASTM D5185m	250	40	44	47
Barium	ppm	ASTM D5185m	10	<1	0	0
Molybdenum	ppm	ASTM D5185m	100	56	52	64
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	466	526	625
Calcium	ppm	ASTM D5185m	3000	1376	1053	1606
Phosphorus	ppm	ASTM D5185m	1150	751	659	855
Zinc	ppm	ASTM D5185m	1350	919	748	1053
Sulfur	ppm	ASTM D5185m	4250	2724	2124	3343
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	18.6	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.4	5.6	7.7
Visc @ 100°C	cSt	ASTM D445	14.4	12.4	11.2	13.4

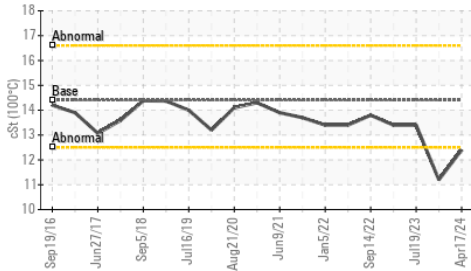
FT-IR (Direct Trend)



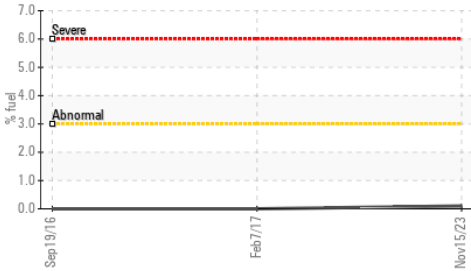
Base Number



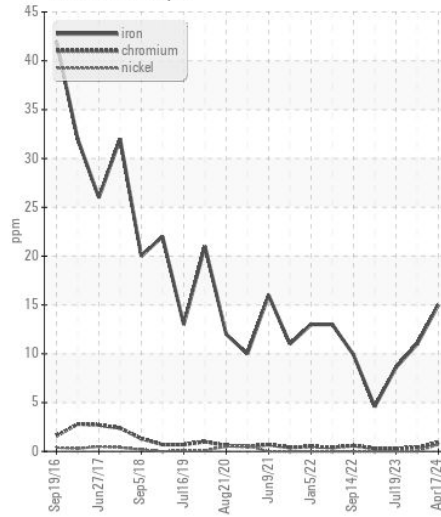
Viscosity @ 100°C



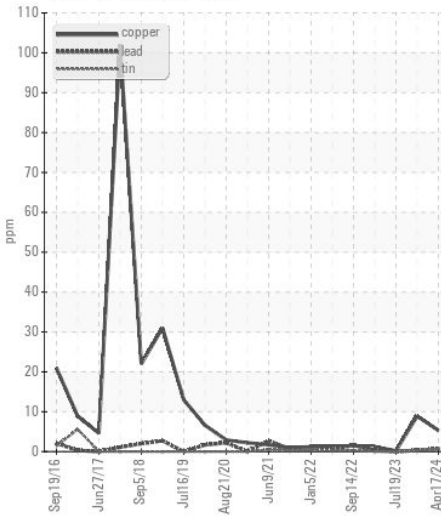
Fuel Dilution



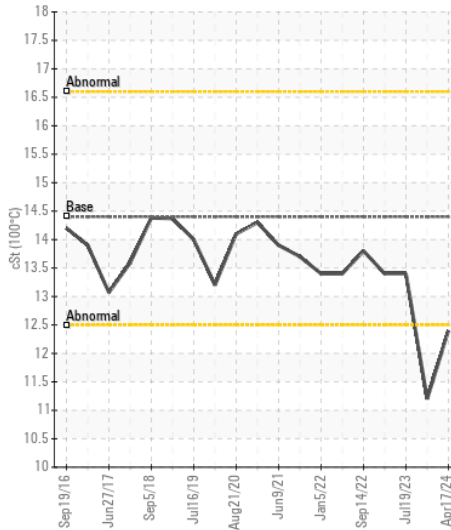
Ferrous Alloys



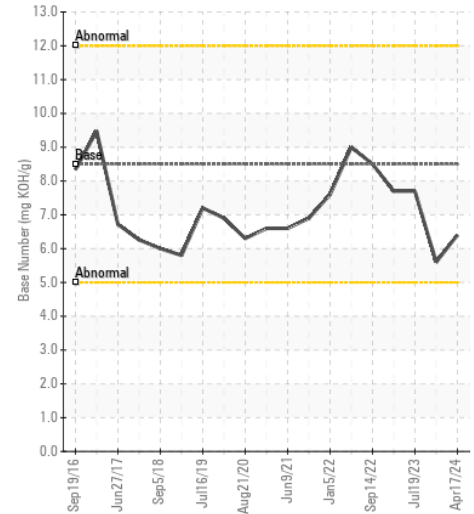
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934387 **Received** : 22 Apr 2024
Lab Number : 06156618 **Tested** : 24 Apr 2024
Unique Number : 10992041 **Diagnosed** : 24 Apr 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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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