



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 182391
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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0934377	WC0887348	WC0833503
Sample Date		Client Info		22 May 2024	20 Dec 2023	19 Jul 2023
Machine Age	mls	Client Info		86012	82279	78285
Oil Age	mls	Client Info		3733	0	4107
Filter Age	mls	Client Info		3733	0	4107
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	11	10	11
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	6	8	12
Lead	ppm	ASTM D5185m	>45	2	2	2
Copper	ppm	ASTM D5185m	>85	2	1	<1
Tin	ppm	ASTM D5185m	>4	<1	0	0
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.

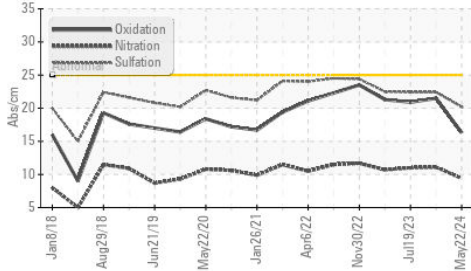
Silicon	ppm	ASTM D5185m	>30	6	6	7
Potassium	ppm	ASTM D5185m	>20	6	11	15
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.4	11.1	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	22.4	22.4
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

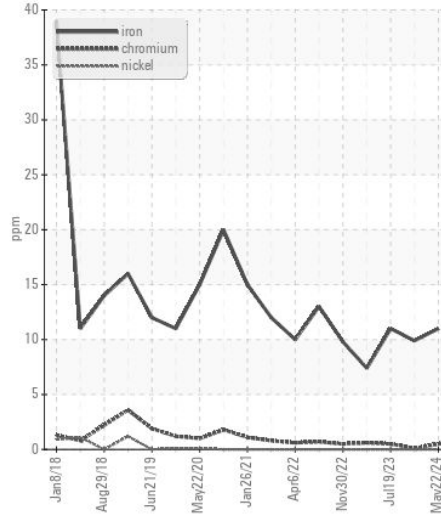
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	4	9	9
Boron	ppm	ASTM D5185m	250	12	28	35
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	44	43	62
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	625	722	801
Calcium	ppm	ASTM D5185m	3000	1286	1207	1418
Phosphorus	ppm	ASTM D5185m	1150	819	623	793
Zinc	ppm	ASTM D5185m	1350	958	830	997
Sulfur	ppm	ASTM D5185m	4250	2835	2090	3029
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	21.5	20.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.1	6.3	6.5
Visc @ 100°C	cSt	ASTM D445	14.4	13.2	14.0	13.6

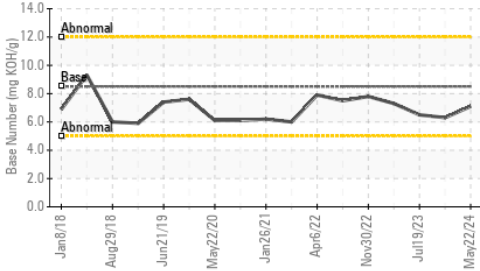
FT-IR (Direct Trend)



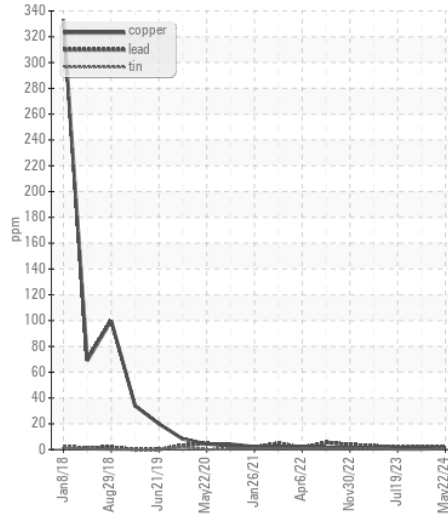
Ferrous Alloys



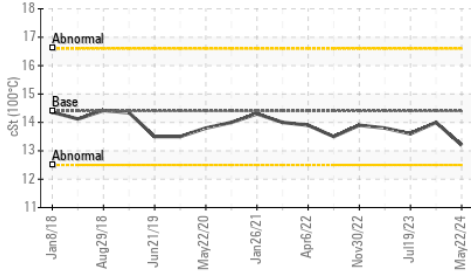
Base Number



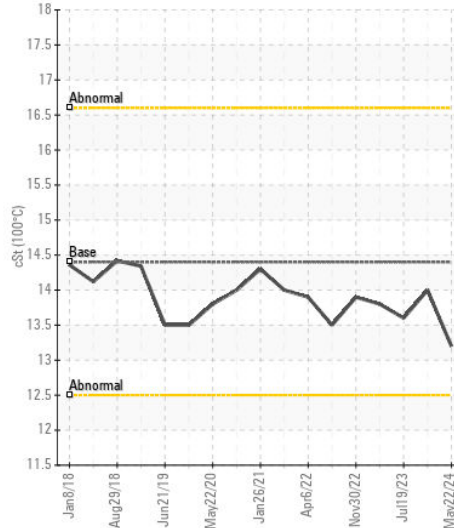
Non-ferrous Metals



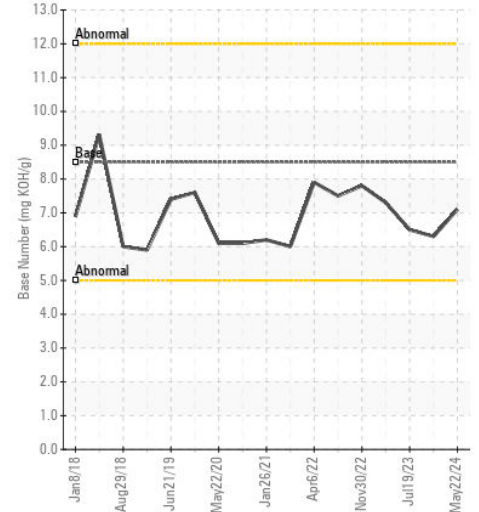
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : WC0934377

Lab Number : 06196112

Unique Number : 11058235

Test Package : FLEET

Received : 30 May 2024

Tested : 31 May 2024

Diagnosed : 31 May 2024 - Wes Davis

CITY OF GREENSBORO

401 PATTON AVE - BUILDING H

GREENSBORO, NC

US 27406

Contact: JERRY GUNTER

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T: x:

F: x:

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)