



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 162452
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		WC0756856	WC0887351	WC0827123
Sample Date		Client Info		10 Apr 2024	20 Dec 2023	15 Jun 2023
Machine Age	mls	Client Info		111792	107852	104104
Oil Age	mls	Client Info		3934	0	3902
Filter Age	mls	Client Info		3934	0	3902
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	>165	17	19	14
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	5
Lead	ppm	ASTM D5185m	>150	<1	<1	<1
Copper	ppm	ASTM D5185m	>90	2	8	<1
Tin	ppm	ASTM D5185m	>5	<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.

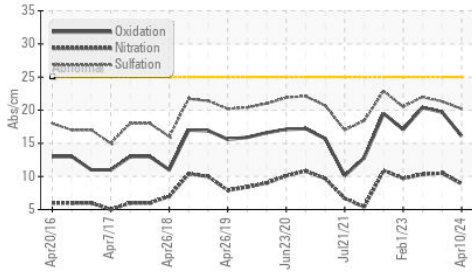
Silicon	ppm	ASTM D5185m	>35	7	10	11
Potassium	ppm	ASTM D5185m	>20	3	0	2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	0.4	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.9	10.5	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	21.3	22.0
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

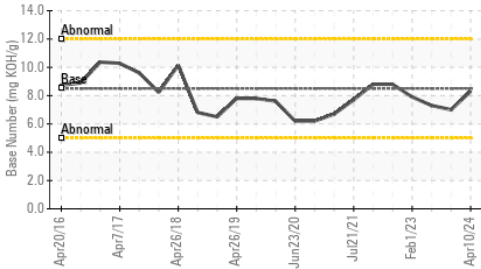
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	3	5	5
Boron	ppm	ASTM D5185m	250	18	33	34
Barium	ppm	ASTM D5185m	10	0	0	4
Molybdenum	ppm	ASTM D5185m	100	56	42	48
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	450	887	695	662
Calcium	ppm	ASTM D5185m	3000	1342	1180	1111
Phosphorus	ppm	ASTM D5185m	1150	1035	618	640
Zinc	ppm	ASTM D5185m	1350	1222	795	803
Sulfur	ppm	ASTM D5185m	4250	3534	1997	2405
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	19.7	20.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.3	7.0	7.3
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	13.5	13.8

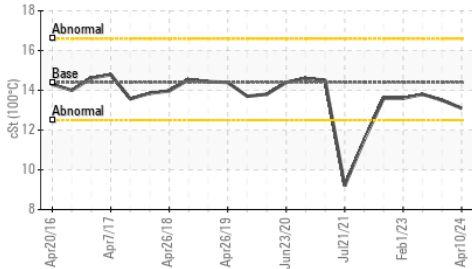
FT-IR (Direct Trend)



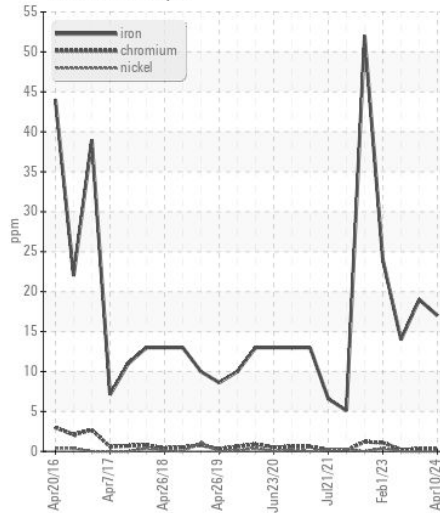
Base Number



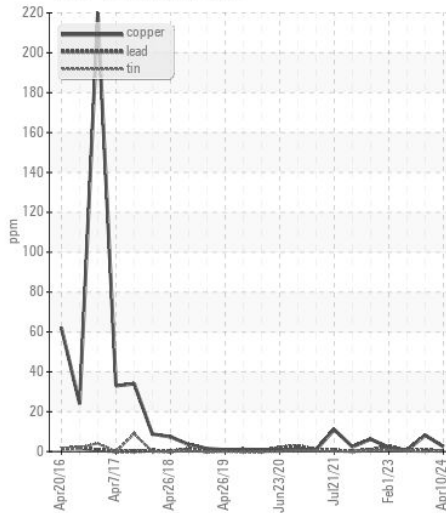
Viscosity @ 100°C



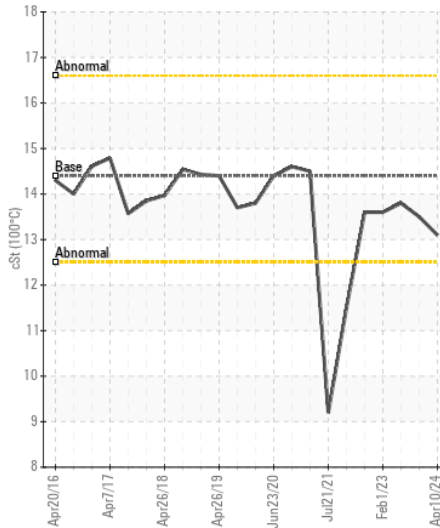
Ferrous Alloys



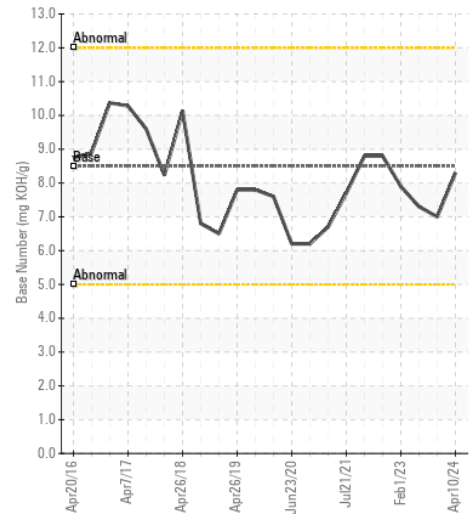
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : WC0756856

Lab Number : 06150059

Unique Number : 10980137

Test Package : FLEET

Received : 16 Apr 2024

Tested : 17 Apr 2024

Diagnosed : 17 Apr 2024 - Wes Davis

CITY OF GREENSBORO

401 PATTON AVE - BUILDING H

GREENSBORO, NC

US 27406

Contact: JERRY GUNTER

jerry.gunter@greensboro-nc.gov

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)