CONST

PetroCard™ MORE THAN JUST FUEL.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
TRUCK - URBAN
Machine Id
FREIGHTLINER 71
Component
Diesel Engine
Fluid
SHELL Rotella T5 15W-40 (7 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

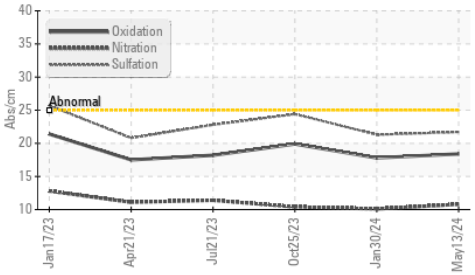
There is no indication of any contamination in the oil.

FLUID CONDITION

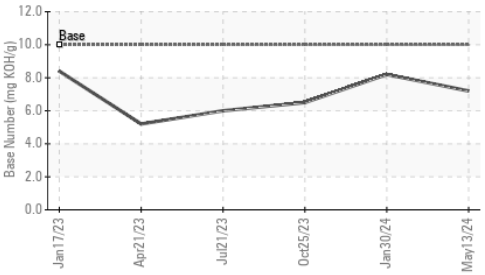
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0003245	PE0003198	PE0001942
Sample Date		Client Info		13 May 2024	30 Jan 2024	25 Oct 2023
Machine Age	hrs	Client Info		9798	9281	5613
Oil Age	hrs	Client Info		517	490	491
Filter Age	hrs	Client Info		517	490	491
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>80	17	14	16
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	7	7	10
Lead	ppm	ASTM D5185m	>30	<1	0	0
Copper	ppm	ASTM D5185m	>150	<1	1	2
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
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	>20	6	5	6
Potassium	ppm	ASTM D5185m	>20	16	14	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	0.7	0.6	0.8
Nitration	Abs/cm	*ASTM D7624	>20	10.8	10.1	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	21.3	24.4
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
Sodium	ppm	ASTM D5185m		3	18	4
Boron	ppm	ASTM D5185m		10	20	162
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		66	70	83
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		874	882	344
Calcium	ppm	ASTM D5185m		1282	1189	1417
Phosphorus	ppm	ASTM D5185m		1091	1097	1045
Zinc	ppm	ASTM D5185m		1288	1308	1228
Sulfur	ppm	ASTM D5185m		3576	3221	3087
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	17.8	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	10	7.2	8.2	6.5
Visc @ 100°C	cSt	ASTM D445	14.9	13.0	13.2	13.6

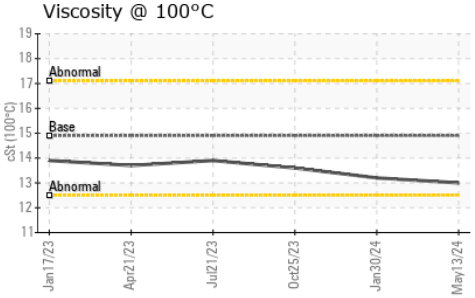
FT-IR (Direct Trend)



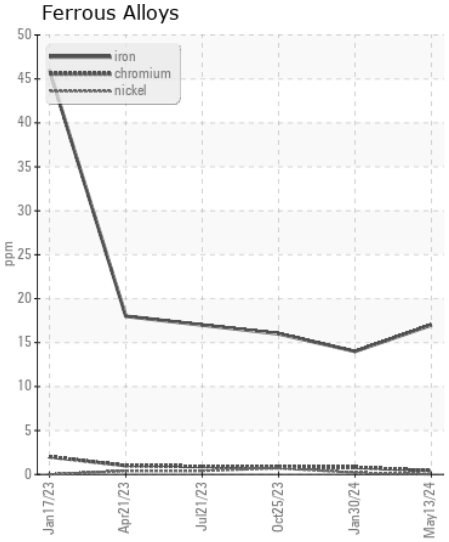
Base Number



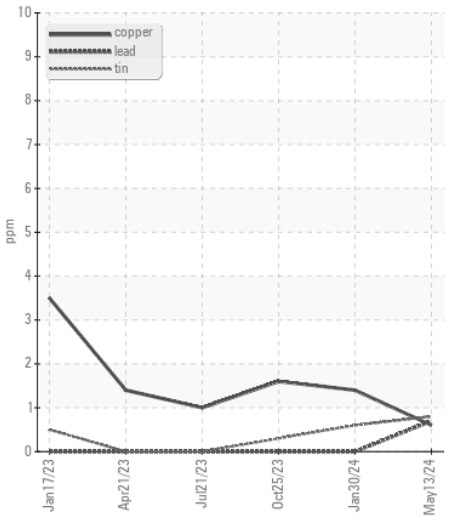
Viscosity @ 100°C



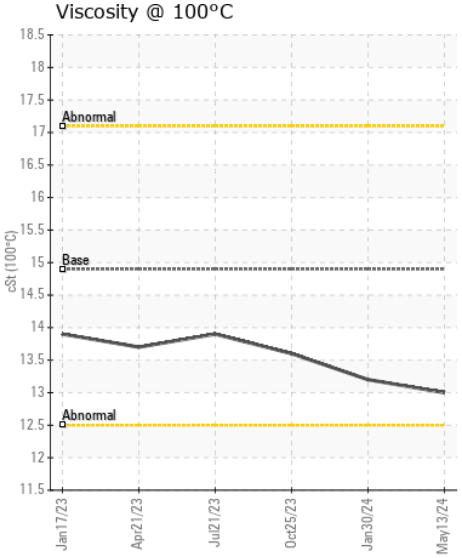
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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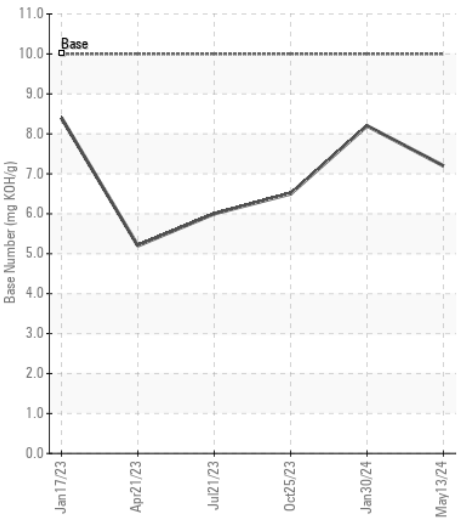

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0003245 **Received** : 21 May 2024
Lab Number : 06187009 **Tested** : 23 May 2024
Unique Number : 11043761 **Diagnosed** : 23 May 2024 - Sean Felton
Test Package : CONST (Additional Tests: FT-IR, ICP, KV100, SCREEN, TBN)

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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