OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
PETERBILT 957-1322
Component
1 Diesel Engine
Fluid
MOBIL 15W40 (46 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

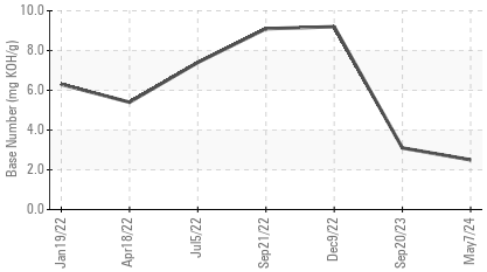
There is no indication of any contamination in the oil.

FLUID CONDITION

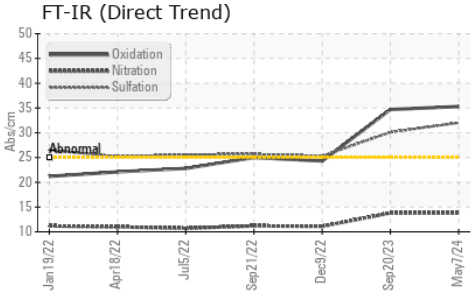
The BN level is low.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0011786	RPL0011650	RPL0003834
Sample Date		Client Info		07 May 2024	20 Sep 2023	09 Dec 2022
Machine Age	mls	Client Info		382143	351008	308436
Oil Age	mls	Client Info		31135	42572	16194
Filter Age	mls	Client Info		31135	42572	16194
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>165	53	77	19
Chromium	ppm	ASTM D5185m	>5	2	3	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	1
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	7	3
Lead	ppm	ASTM D5185m	>150	15	15	<1
Copper	ppm	ASTM D5185m	>90	1	3	<1
Tin	ppm	ASTM D5185m	>5	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>35	8	11	7
Potassium	ppm	ASTM D5185m	>20	4	9	5
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	0.5	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	13.8	13.8	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	32.0	30.1	25.3
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	>118	3	4	3
Boron	ppm	ASTM D5185m		35	47	45
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		111	134	56
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		648	874	542
Calcium	ppm	ASTM D5185m		1564	2205	1648
Phosphorus	ppm	ASTM D5185m		831	1135	735
Zinc	ppm	ASTM D5185m		990	1383	947
Sulfur	ppm	ASTM D5185m		3485	4247	2966
Oxidation	Abs/.1mm	*ASTM D7414	>25	35.3	34.7	24.3
Base Number (BN)	mg KOH/g	ASTM D2896		▲ 2.5	▲ 3.1	9.2
Visc @ 100°C	cSt	ASTM D445		13.1	13.9	12.8

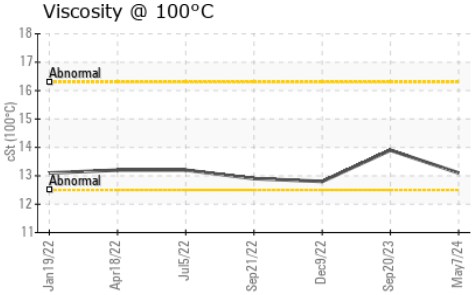
Base Number



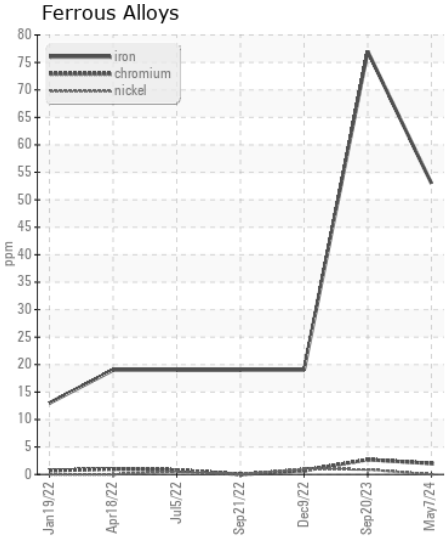
FT-IR (Direct Trend)



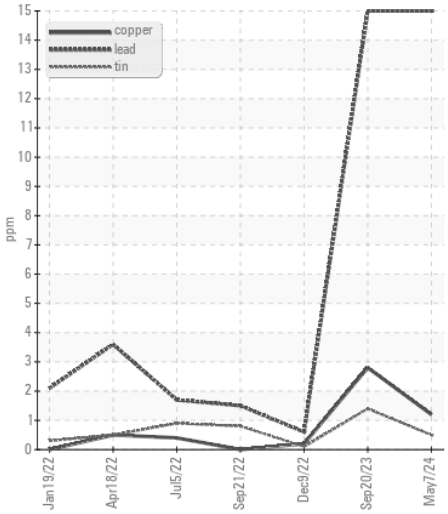
Viscosity @ 100°C



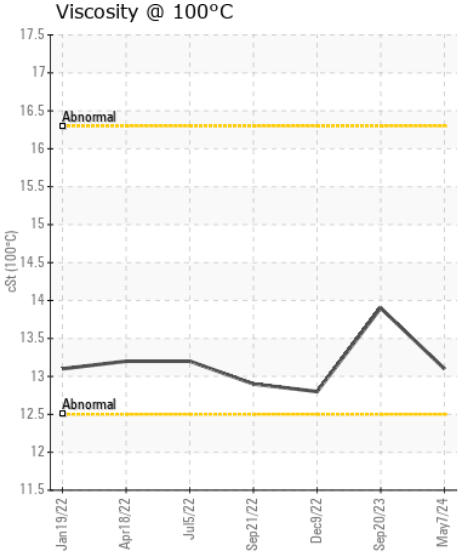
Ferrous Alloys



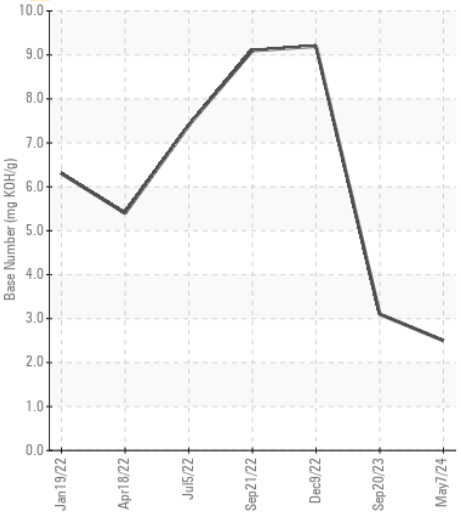
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0011786
Lab Number : 06176905
Unique Number : 11022958
Test Package : FLEET

Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 14 May 2024 - Sean Felton

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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