



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 8574902
Component
Diesel Engine
Fluid
MOBIL 15W40 (45 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0015912	RPL0009515	RPL0006316
Sample Date		Client Info		21 May 2024	10 Apr 2023	03 Jan 2023
Machine Age	mls	Client Info		0	16984	16984
Oil Age	mls	Client Info		0	23898	16984
Filter Age	mls	Client Info		0	23898	16984
Oil Changed		Client Info		N/A	Not Changd	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	36	17	53
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>20	27	20	34
Lead	ppm	ASTM D5185m	>40	<1	1	<1
Copper	ppm	ASTM D5185m	>330	3	4	25
Tin	ppm	ASTM D5185m	>15	0	2	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

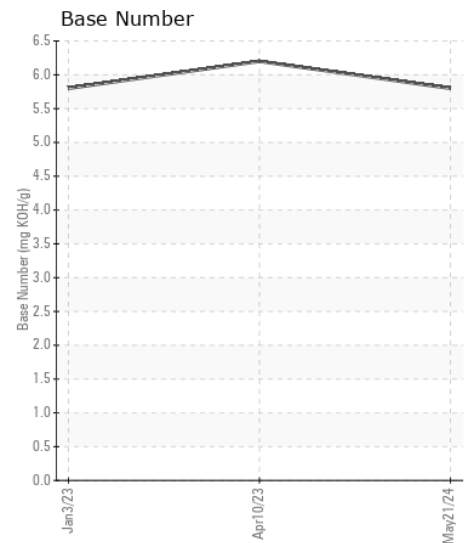
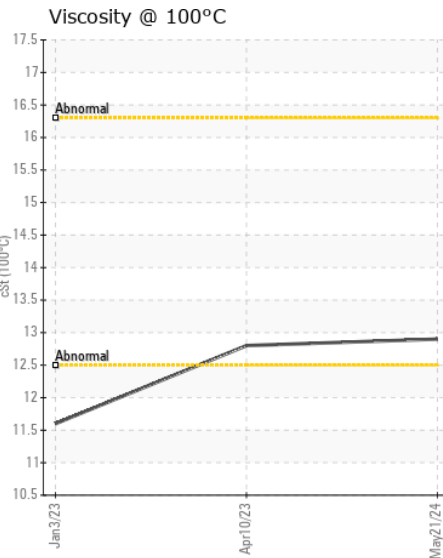
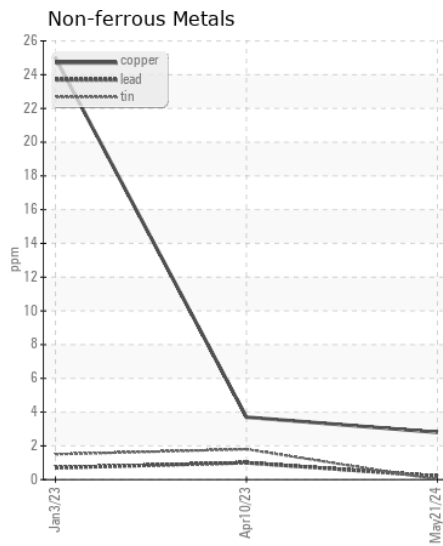
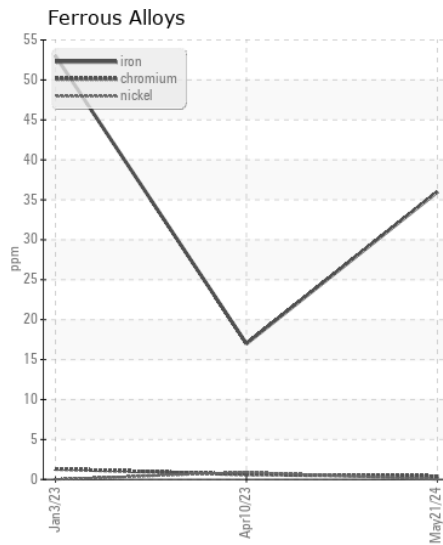
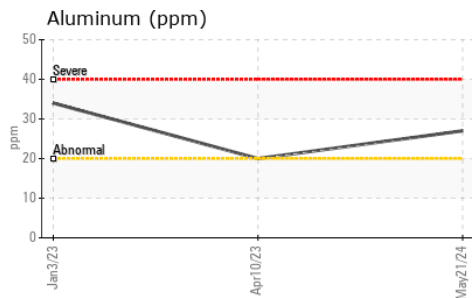
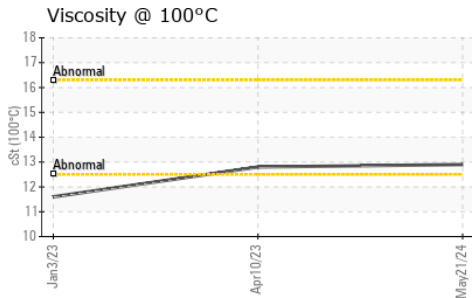
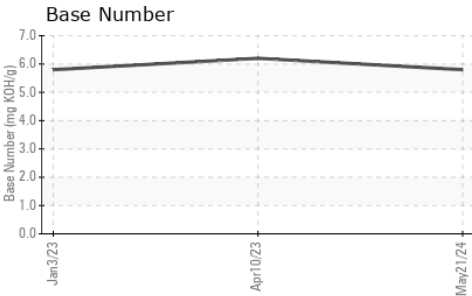
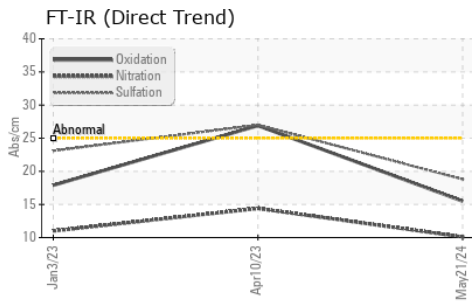
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	8	17
Potassium	ppm	ASTM D5185m	>20	69	50	127
Fuel		WC Method	>5	<1.0	<1.0	0.5
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	10.1	14.4	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	27.0	23.1
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	>118	1	1	<1
Boron	ppm	ASTM D5185m		81	77	29
Barium	ppm	ASTM D5185m		0	0	4
Molybdenum	ppm	ASTM D5185m		127	109	15
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m		741	676	662
Calcium	ppm	ASTM D5185m		1370	1224	1419
Phosphorus	ppm	ASTM D5185m		805	750	689
Zinc	ppm	ASTM D5185m		959	889	842
Sulfur	ppm	ASTM D5185m		3733	3868	2885
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	26.9	17.9
Base Number (BN)	mg KOH/g	ASTM D2896		5.8	6.2	5.8
Visc @ 100°C	cSt	ASTM D445		12.9	12.8	11.6



Certificate L2367

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

Sample No. : RPL0015912

Lab Number : 06187491

Unique Number : 11044243

Test Package : FLEET

Received : 22 May 2024

Tested : 23 May 2024

Diagnosed : 23 May 2024 - Wes Davis

RTL PACLEASE - 7004 - Austin

1205 Smith Road

Austin, TX

US 78721

Contact: David Johnson

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F:

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)