



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**PETERBILT 9571381**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL 15W40 (44 QTS)**

## RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0019837</b>	RPL0003957	RPL0003774
Sample Date		Client Info		<b>21 Jun 2024</b>	24 Apr 2023	19 Sep 2022
Machine Age	mls	Client Info		<b>267958</b>	208993	179565
Oil Age	mls	Client Info		<b>32664</b>	29428	27347
Filter Age	mls	Client Info		<b>11507</b>	29428	27347
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	<b>51</b>	38	13
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>10</b>	13	10
Lead	ppm	ASTM D5185m	>150	<b>5</b>	9	3
Copper	ppm	ASTM D5185m	>90	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

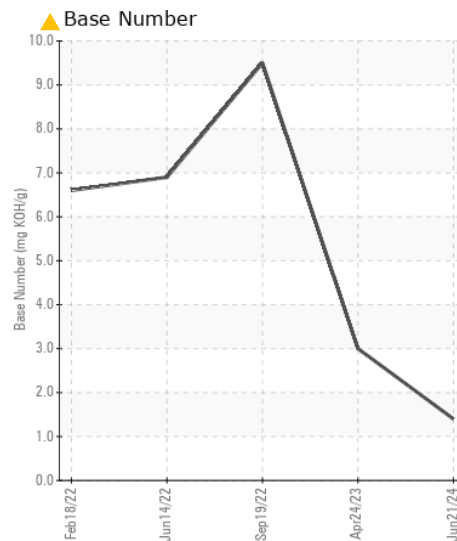
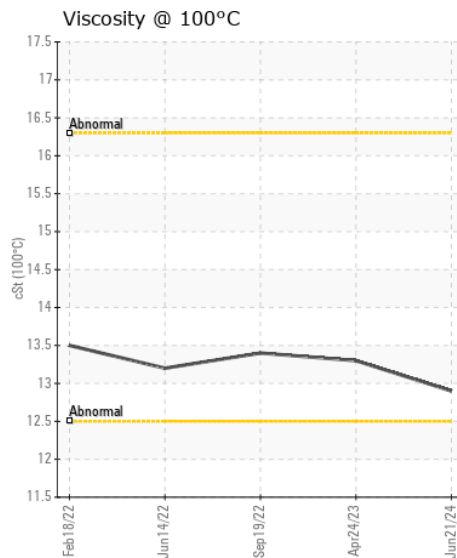
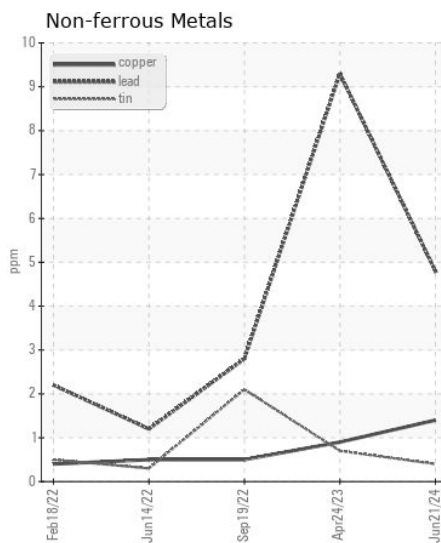
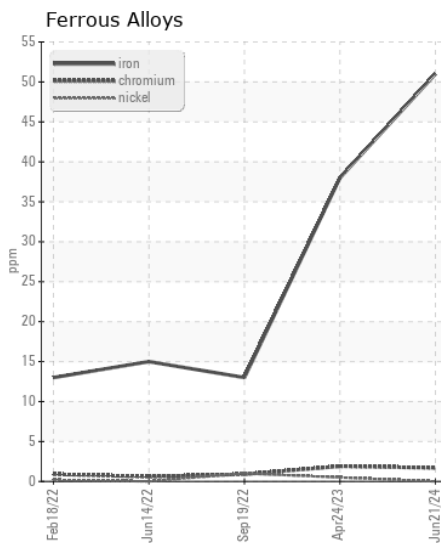
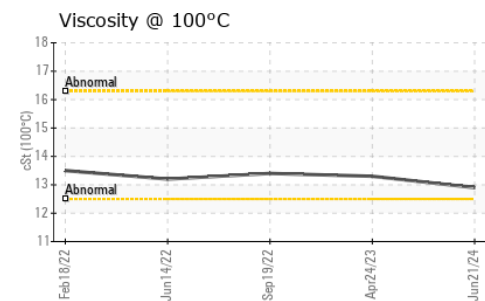
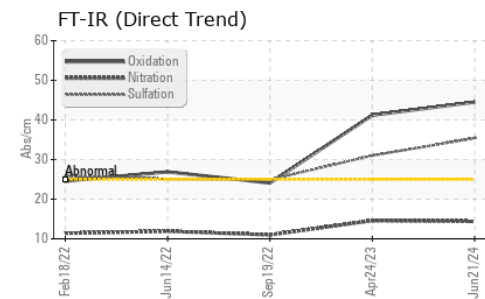
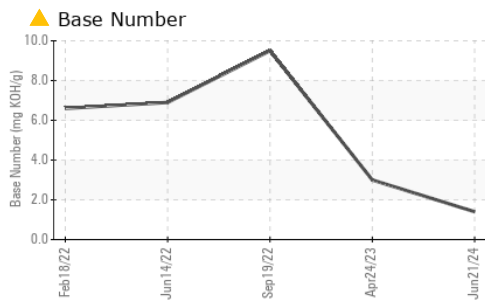
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	<b>8</b>	8	8
Potassium	ppm	ASTM D5185m	>20	<b>14</b>	20	14
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	<b>0.7</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.4</b>	14.6	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>35.4</b>	31.0	24.9
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The BN level is low. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>118	<b>3</b>	2	3
Boron	ppm	ASTM D5185m		<b>33</b>	25	32
Barium	ppm	ASTM D5185m		<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m		<b>115</b>	52	61
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>680</b>	527	558
Calcium	ppm	ASTM D5185m		<b>1283</b>	1648	1552
Phosphorus	ppm	ASTM D5185m		<b>704</b>	739	746
Zinc	ppm	ASTM D5185m		<b>868</b>	941	890
Sulfur	ppm	ASTM D5185m		<b>3254</b>	2425	2536
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>44.5</b>	41.2	24.1
Base Number (BN)	mg KOH/g	ASTM D2896		<b>▲ 1.4</b>	▲ 3.0	9.5
Visc @ 100°C	cSt	ASTM D445		<b>12.9</b>	13.3	13.4



Certificate L2367

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

**Sample No.** : RPL0019837

**Lab Number** : 06220623

**Unique Number** : 11098820

**Test Package** : FLEET

**Received** : 26 Jun 2024

**Tested** : 27 Jun 2024

**Diagnosed** : 27 Jun 2024 - Angela Borella

**RTL PACLEASE - 7018 - West Texas**

1230 South Grandview

Odessa, TX

US 79761

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)