



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id  
**PETERBILT 846-4466**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 40 (18 QTS)**

## RECOMMENDATION

The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0017588</b>	RPL0015039	RPL0012569
Sample Date		Client Info		<b>25 Jan 2024</b>	07 Sep 2023	04 May 2023
Machine Age	mls	Client Info		<b>183103</b>	165899	151312
Oil Age	mls	Client Info		<b>31791</b>	14587	14727
Filter Age	mls	Client Info		<b>31791</b>	14587	14727
Oil Changed		Client Info		<b>Not Changd</b>	Filtered	N/A
Filter Changed		Client Info		<b>Not Changd</b>	Changed	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>125</b>	29	48
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>15</b>	2	15
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>4</b>	<1	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

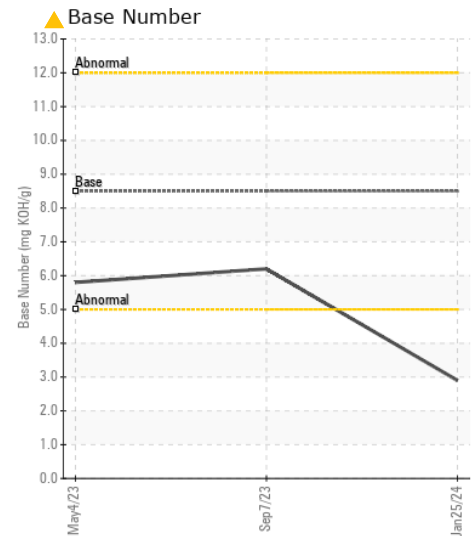
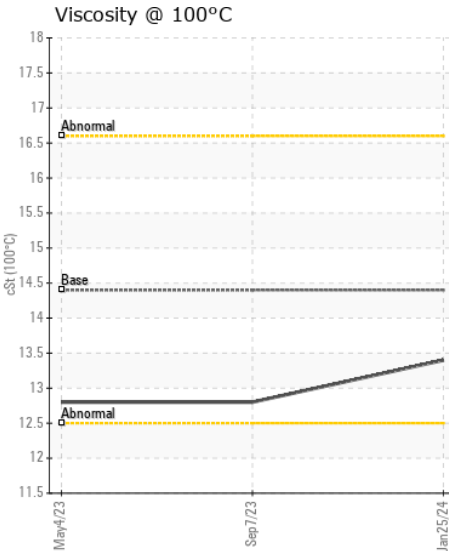
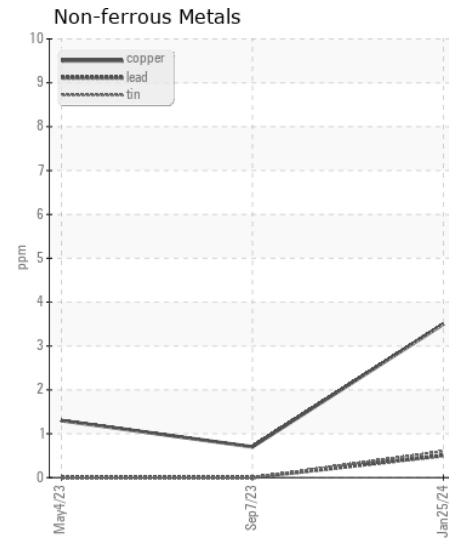
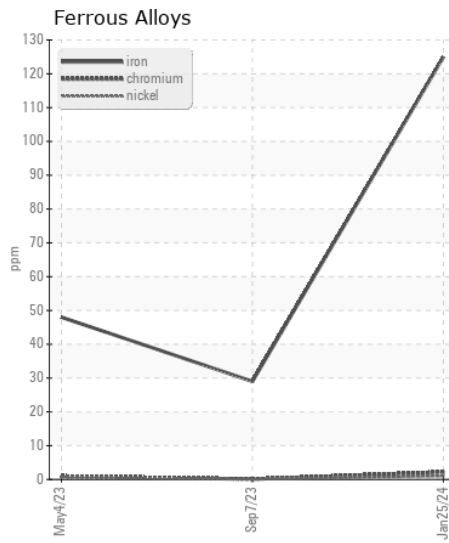
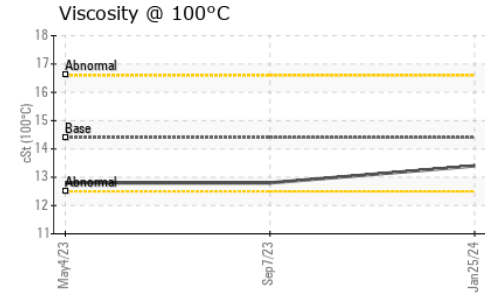
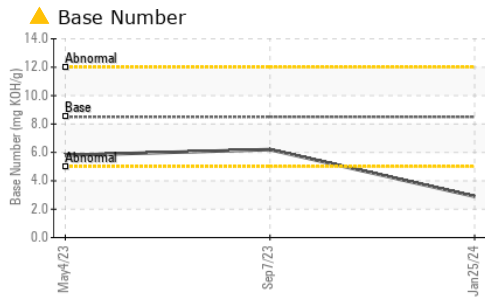
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>13</b>	5	7
Potassium	ppm	ASTM D5185m	>20	<b>20</b>	8	26
Fuel		WC Method	>5	<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	>3	<b>0.8</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>17.6</b>	11.5	12.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>35.3</b>	22.6	24.8
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	>216	<b>0</b>	4	<1
Boron	ppm	ASTM D5185m	250	<b>2</b>	<1	1
Barium	ppm	ASTM D5185m	10	<b>&lt;1</b>	0	2
Molybdenum	ppm	ASTM D5185m	100	<b>88</b>	62	65
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>1404</b>	1042	946
Calcium	ppm	ASTM D5185m	3000	<b>1594</b>	1202	1175
Phosphorus	ppm	ASTM D5185m	1150	<b>1550</b>	1089	1012
Zinc	ppm	ASTM D5185m	1350	<b>1792</b>	1383	1227
Sulfur	ppm	ASTM D5185m	4250	<b>4275</b>	3971	2852
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>40.7</b>	22.2	25.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>2.9</b>	6.2	5.8
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.4</b>	12.8	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0017588  
**Lab Number** : 06083356  
**Unique Number** : 10870801  
**Test Package** : FLEET

**Received** : 08 Feb 2024  
**Tested** : 08 Feb 2024  
**Diagnosed** : 09 Feb 2024 - Don Baldrige

**RTL PACLEASE - 7006 - Pico Rivera**  
 7837 Telegraph Rd  
 Pico Rivera, CA  
 US 90660

Contact: Rudy Trevizo  
 TrevizoR@RushEnterprises.Com

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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F: