



# OIL ANALYSIS REPORT

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

Machine Id  
**PETERBILT 453671**  
Component  
**1 Diesel Engine**  
Fluid  
**CITGO CITGUARD 600 15W40 (22 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0013067</b>	RPL0004552	RPL0004463
Sample Date		Client Info		<b>03 Oct 2023</b>	23 May 2023	23 Sep 2022
Machine Age	hrs	Client Info		<b>6441</b>	5727	4445
Oil Age	hrs	Client Info		<b>714</b>	1430	148
Filter Age	hrs	Client Info		<b>714</b>	1430	148
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>13</b>	84	6
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	11	3
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	6	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

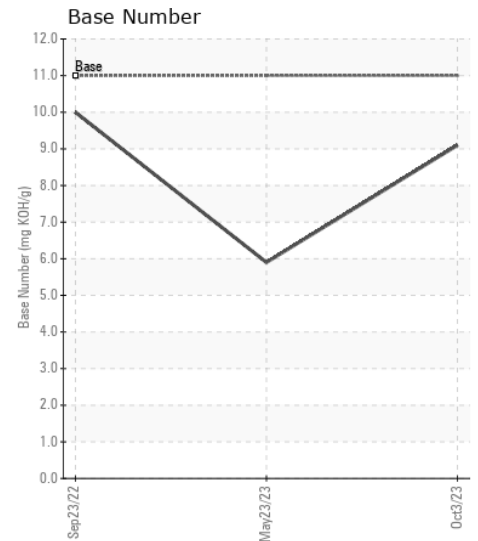
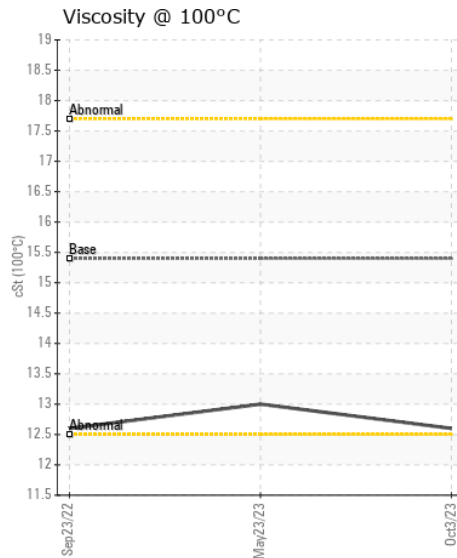
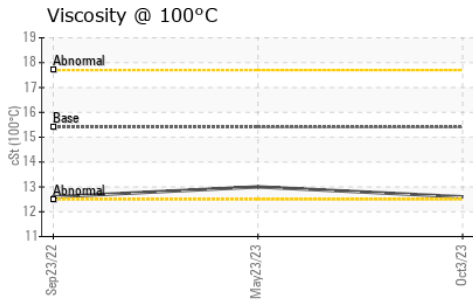
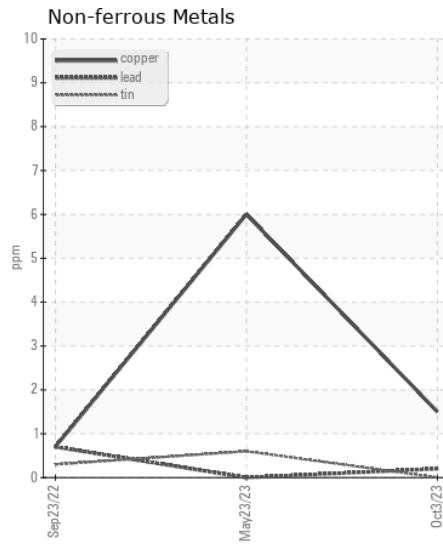
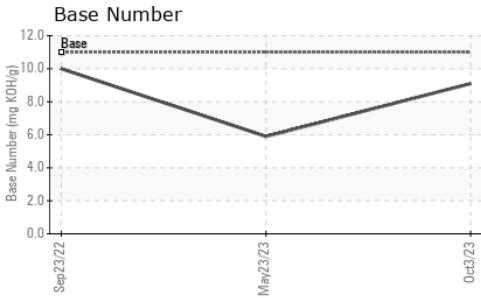
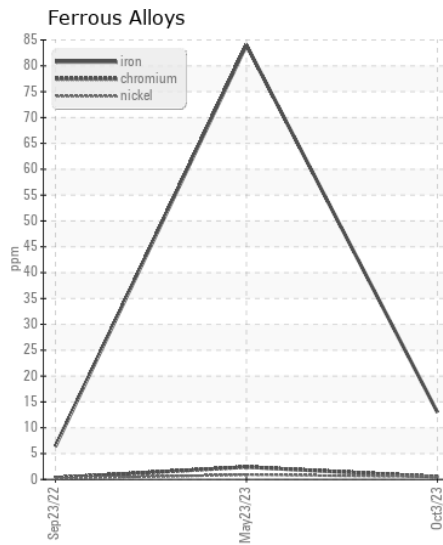
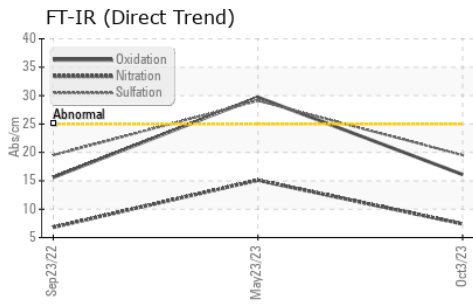
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	13	4
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	9	4
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>0.3</b>	1.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.4</b>	15.1	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	29.1	19.5
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 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		<b>0</b>	4	<1
Boron	ppm	ASTM D5185m	13	<b>1</b>	2	4
Barium	ppm	ASTM D5185m	0	<b>9</b>	0	0
Molybdenum	ppm	ASTM D5185m	57	<b>65</b>	67	56
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	825	<b>378</b>	491	390
Calcium	ppm	ASTM D5185m	1100	<b>1771</b>	1911	1633
Phosphorus	ppm	ASTM D5185m	933	<b>1054</b>	1042	946
Zinc	ppm	ASTM D5185m	1089	<b>1235</b>	1327	1173
Sulfur	ppm	ASTM D5185m	2769	<b>3254</b>	3679	3567
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	29.7	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	<b>9.1</b>	5.9	10
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.6</b>	13.0	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0013067 **Received** : 21 Nov 2023  
**Lab Number** : 06013668 **Tested** : 21 Nov 2023  
**Unique Number** : 10752812 **Diagnosed** : 21 Nov 2023 - Wes Davis  
**Test Package** : FLEET

**RTL PACLEASE - 7010 - Florida**  
 9407 Bachman Road  
 Orlando, FL  
 US 32824

Contact: John Churchwell  
 ChurchwellJ@rushenterprises.com  
 T: (407)240-7511

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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