



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PETERBILT 117353**  
Component  
**Diesel Engine**  
Fluid  
**CHEVRON 15W40 (28 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0009873</b>	RPL0003412	RPL0003359
Sample Date		Client Info		<b>12 Oct 2023</b>	12 Jan 2023	30 Aug 2022
Machine Age	mls	Client Info		<b>123975</b>	123975	0
Oil Age	mls	Client Info		<b>123975</b>	18996	0
Filter Age	mls	Client Info		<b>0</b>	18996	0
Oil Changed		Client Info		<b>N/A</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>37</b>	25	11
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>16</b>	12	7
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
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

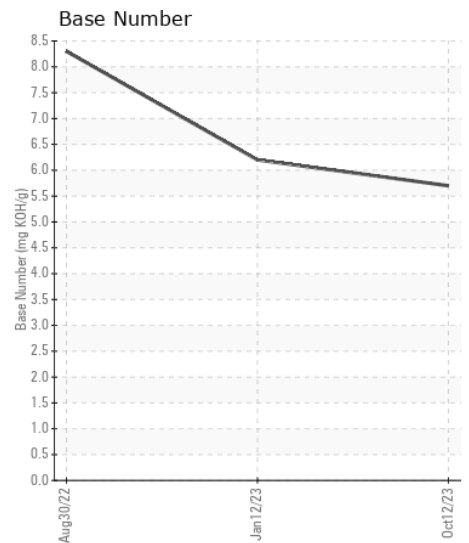
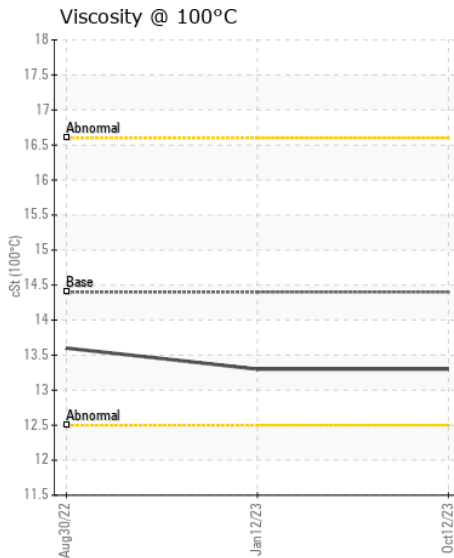
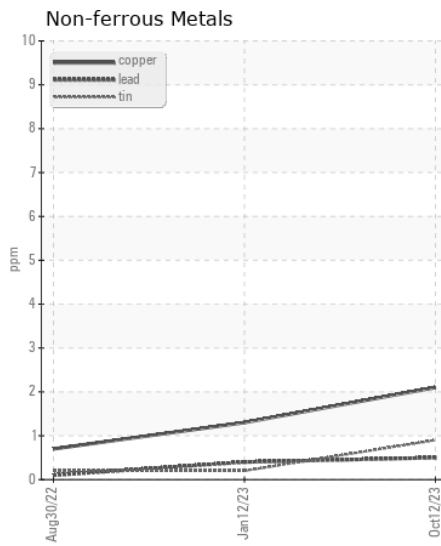
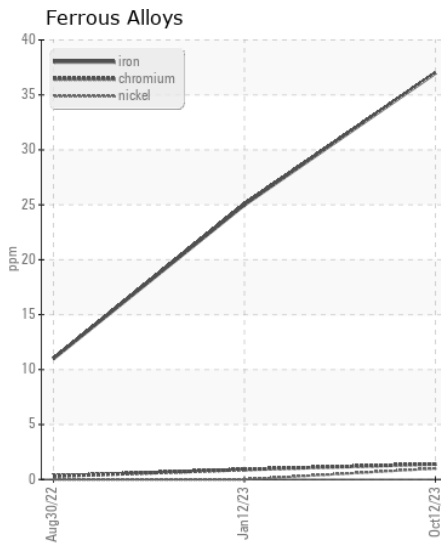
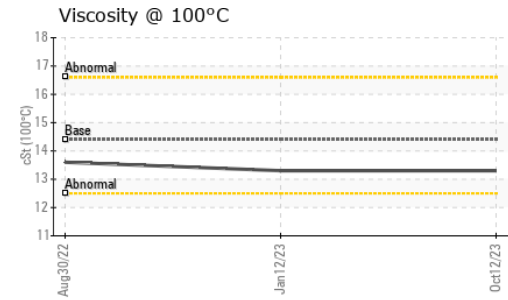
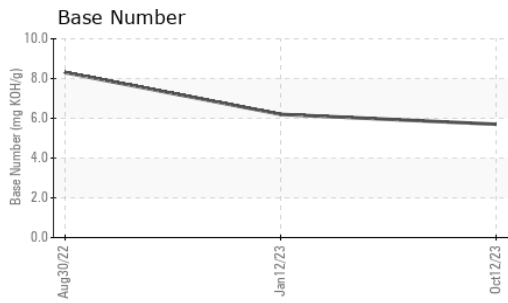
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>13</b>	8	6
Potassium	ppm	ASTM D5185m	>20	<b>25</b>	12	9
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>0.7</b>	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.3</b>	9.7	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>27.2</b>	25.2	21.9
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 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	>50	<b>0</b>	2	<1
Boron	ppm	ASTM D5185m		<b>92</b>	188	483
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>102</b>	87	96
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>491</b>	401	405
Calcium	ppm	ASTM D5185m		<b>1725</b>	1507	1565
Phosphorus	ppm	ASTM D5185m		<b>1123</b>	1034	1194
Zinc	ppm	ASTM D5185m		<b>1549</b>	1302	1406
Sulfur	ppm	ASTM D5185m		<b>4147</b>	3701	3514
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.7</b>	19.8	15.8
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.7</b>	6.2	8.3
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.3</b>	13.3	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0009873 **Received** : 09 Jan 2024  
**Lab Number** : 06055254 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821203 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**RTL PACLEASE - 7019 - Birmingham**  
 601 Republic Circle  
 Birmingham, AL  
 US 35214  
 Contact: Johnathan King  
 KingJ1@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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