



# OIL ANALYSIS REPORT

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

Machine Id  
**PETERBILT 8271012**  
Component  
**Diesel Engine**  
Fluid  
**CHEVRON DELO 400 SAE 10W30 (40 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>RPL0004687</b>	RPL0004792	---
Sample Date		Client Info		<b>03 Jul 2023</b>	30 Nov 2022	---
Machine Age	mls	Client Info		<b>113911</b>	51985	---
Oil Age	mls	Client Info		<b>72132</b>	10206	---
Filter Age	mls	Client Info		<b>72132</b>	10206	---
Oil Changed		Client Info		<b>Changed</b>	Not Changed	---
Filter Changed		Client Info		<b>Changed</b>	Not Changed	---
Sample Status				<b>ABNORMAL</b>	NORMAL	---

## WEAR

Piston, ring and cylinder wear is indicated.

Iron	ppm	ASTM D5185m	>100	<b>▲ 147</b>	34	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m	>20	<b>▲ 27</b>	14	---
Lead	ppm	ASTM D5185m	>40	<b>1</b>	2	---
Copper	ppm	ASTM D5185m	>330	<b>14</b>	6	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

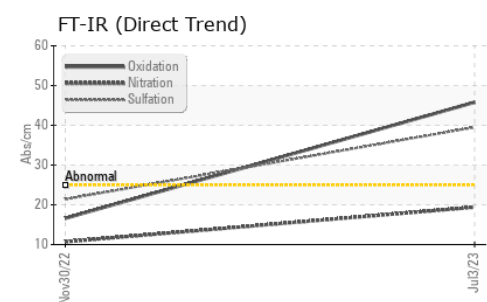
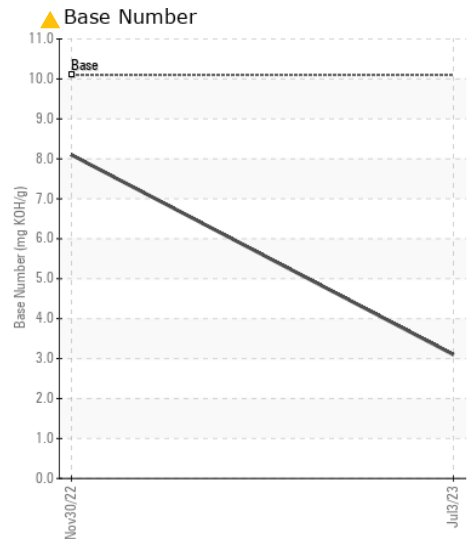
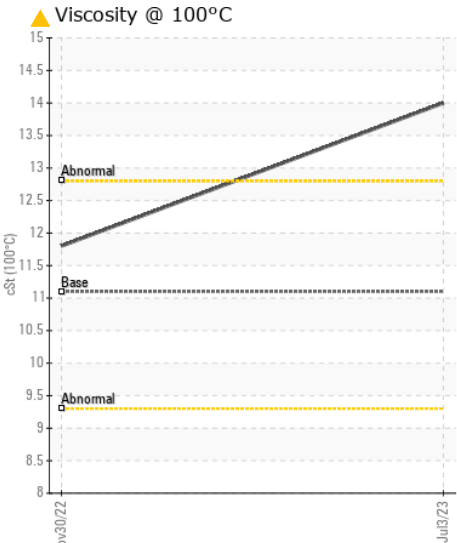
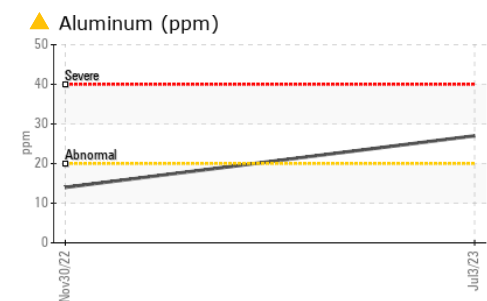
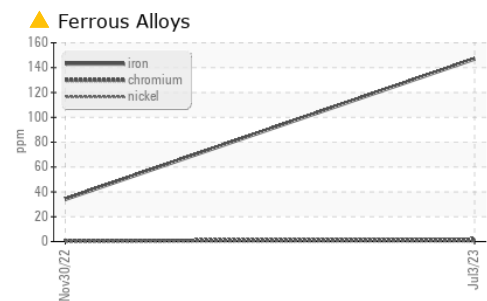
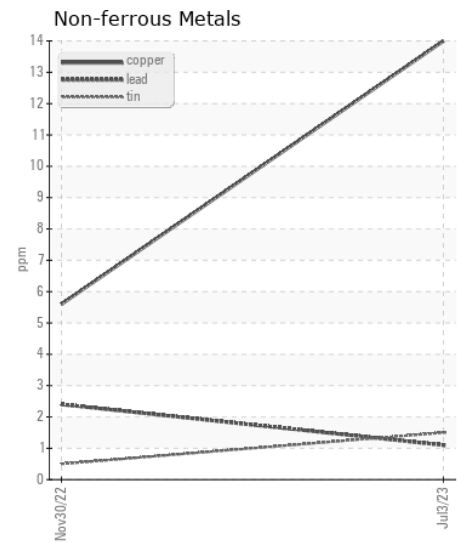
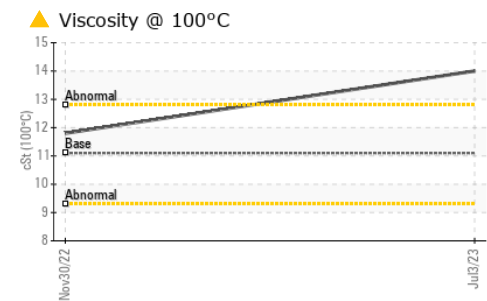
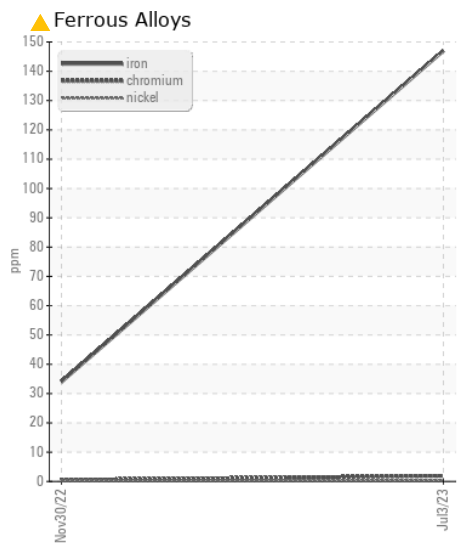
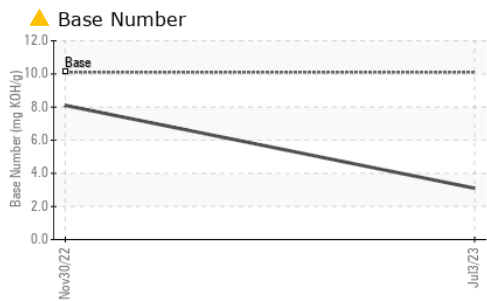
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>18</b>	10	---
Potassium	ppm	ASTM D5185m	>20	<b>49</b>	23	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>1</b>	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>19.4</b>	10.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>39.5</b>	21.4	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

## FLUID CONDITION

The oil viscosity is higher than normal. The BN level is low.

Sodium	ppm	ASTM D5185m		<b>6</b>	2	---
Boron	ppm	ASTM D5185m		<b>13</b>	64	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>11</b>	9	---
Manganese	ppm	ASTM D5185m		<b>3</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>897</b>	740	---
Calcium	ppm	ASTM D5185m		<b>1709</b>	1446	---
Phosphorus	ppm	ASTM D5185m	1260	<b>884</b>	725	---
Zinc	ppm	ASTM D5185m	1400	<b>1077</b>	969	---
Sulfur	ppm	ASTM D5185m		<b>3802</b>	3350	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>45.8</b>	16.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>▲ 3.1</b>	8.1	---
Visc @ 100°C	cSt	ASTM D445	11.1	<b>▲ 14.0</b>	11.8	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0004687  
**Lab Number** : 05893211  
**Unique Number** : 10549021  
**Test Package** : FLEET  
**Received** : 10 Jul 2023  
**Tested** : 12 Jul 2023  
**Diagnosed** : 12 Jul 2023 - Jonathan Hester

**RTL PACLEASE - 7009 - Nashville**  
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Certificate L2367  
 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)