



# OIL ANALYSIS REPORT

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

Machine Id  
**PETERBILT 21716**  
Component  
**Diesel Engine**  
Fluid  
**SHELL ROTELLA T 10W30 (52 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0866843</b>	WC0909768	WC0801716
Sample Date		Client Info		<b>11 Jun 2024</b>	26 Feb 2024	08 Jun 2023
Machine Age	mls	Client Info		<b>202001</b>	197713	183941
Oil Age	mls	Client Info		<b>5000</b>	5475	8020
Filter Age	mls	Client Info		<b>5000</b>	5475	8020
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	<b>3</b>	5	6
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m	>150	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>90	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
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

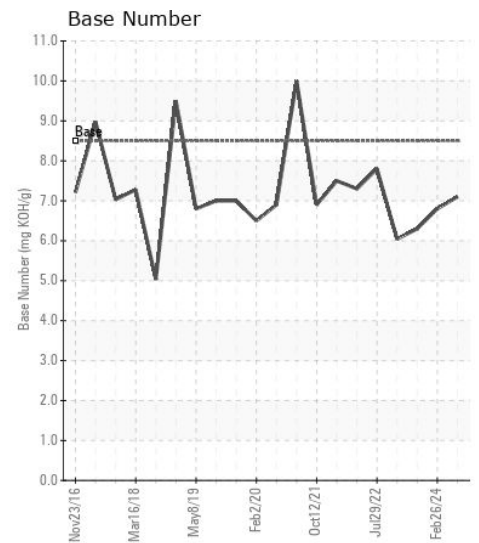
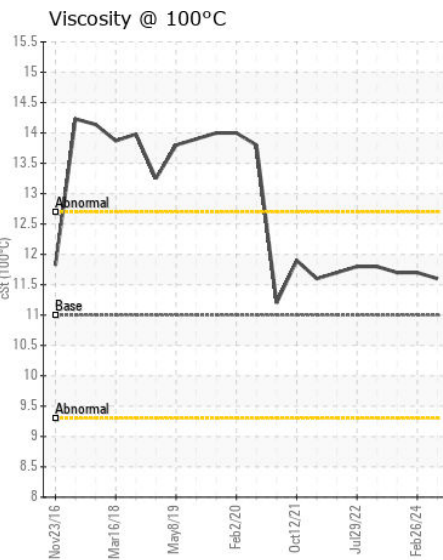
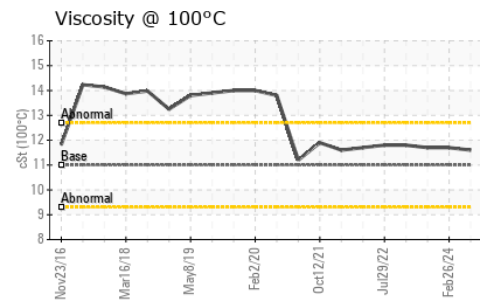
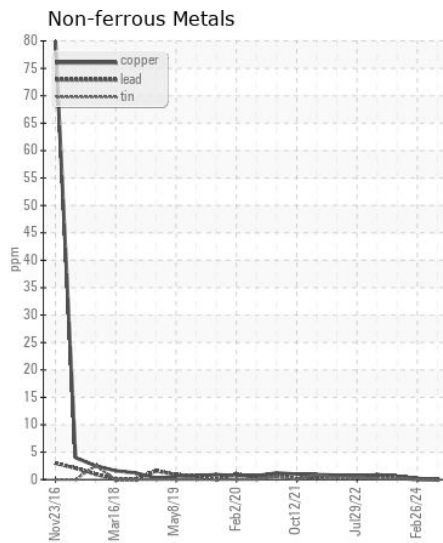
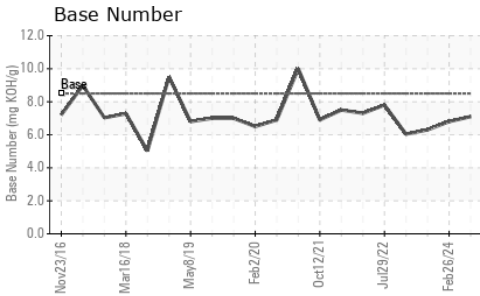
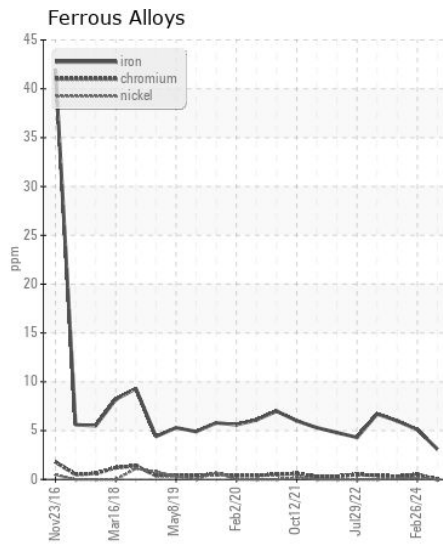
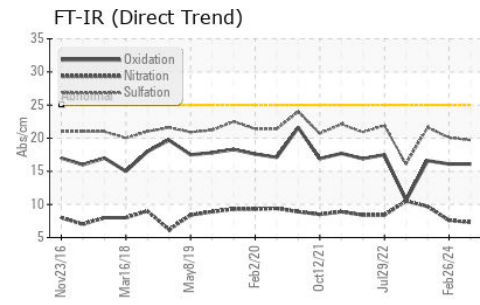
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	<b>3</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	6
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>0.1</b>	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.3</b>	7.6	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.7</b>	20.1	21.6
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>&lt;1</b>	<1	0
Boron	ppm	ASTM D5185m	269	<b>151</b>	151	130
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>3</b>	7	6
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	20	<b>25</b>	50	33
Calcium	ppm	ASTM D5185m	1521	<b>2389</b>	2153	2167
Phosphorus	ppm	ASTM D5185m	948	<b>1042</b>	1037	957
Zinc	ppm	ASTM D5185m	893	<b>1229</b>	1242	1167
Sulfur	ppm	ASTM D5185m		<b>4163</b>	3906	3592
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	16.1	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.1</b>	6.8	6.3
Visc @ 100°C	cSt	ASTM D445	11.0	<b>11.6</b>	11.7	11.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0866843  
**Lab Number** : 06211081  
**Unique Number** : 11083945  
**Test Package** : FLEET

**Received** : 14 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Sean Felton

**GUY M TURNER & TURNER TRANSFER**  
 4505 SOUTH HOLDEN ROAD  
 GREENSBORO, NC  
 US 27406

Contact: ROGER HIXSON  
 rhixson@guyturner.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)

T: (336)294-4660  
 F: (336)294-6644