



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PETERBILT 94111**  
Component  
**Diesel Engine**  
Fluid  
**VALVOLINE PREMIUM BLUE 2000 15W40 (12 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0811875</b>	WC0811887	WC0712594
Sample Date		Client Info		<b>06 Feb 2024</b>	05 Jul 2023	08 Apr 2023
Machine Age	mls	Client Info		<b>0</b>	0	0
Oil Age	mls	Client Info		<b>15000</b>	15000	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>26</b>	24	16
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
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>4</b>	5	1
Lead	ppm	ASTM D5185m	>40	<b>3</b>	4	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	3	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

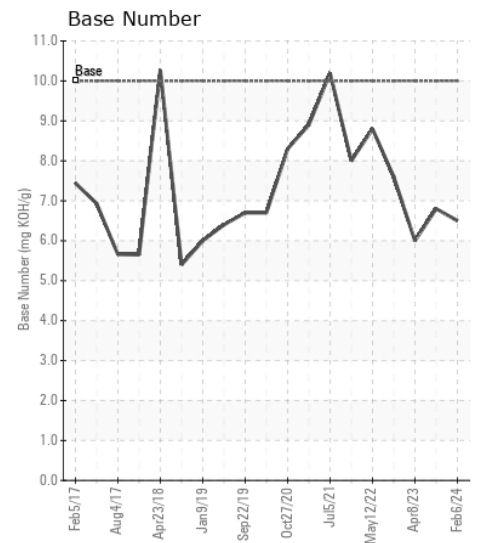
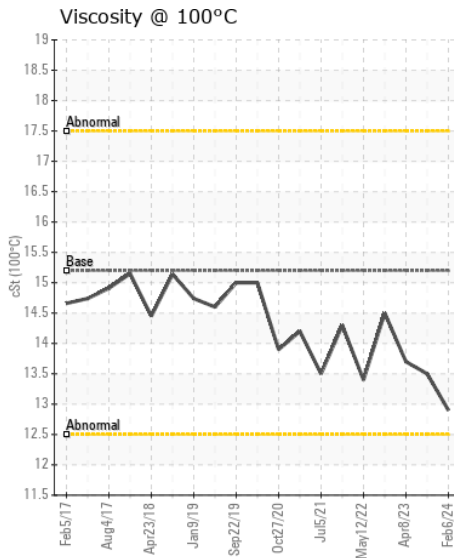
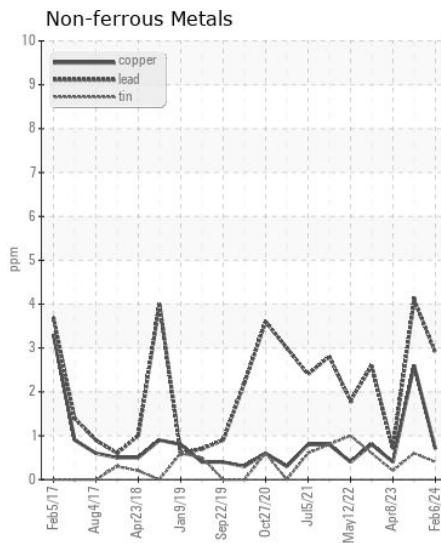
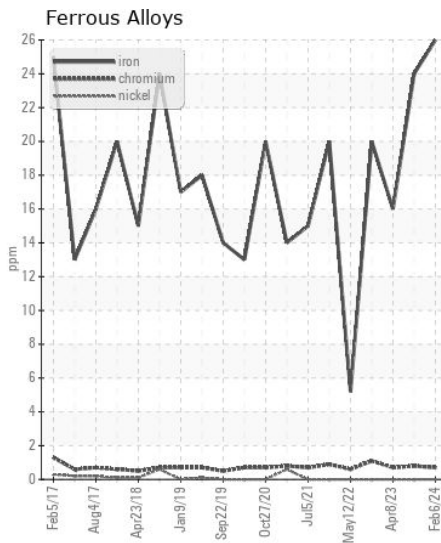
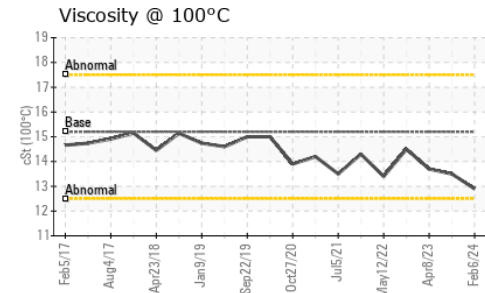
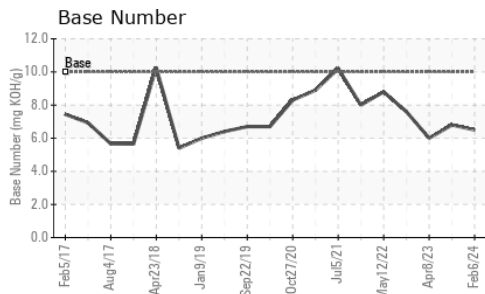
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>11</b>	14	▲ 26
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
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	>6	<b>1.4</b>	1.6	1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.2</b>	13.5	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.0</b>	25.4	20.6
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>8</b>	5	4
Boron	ppm	ASTM D5185m		<b>26</b>	18	20
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>86</b>	71	55
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>792</b>	803	677
Calcium	ppm	ASTM D5185m		<b>1396</b>	1454	1220
Phosphorus	ppm	ASTM D5185m		<b>828</b>	780	662
Zinc	ppm	ASTM D5185m		<b>1023</b>	1035	885
Sulfur	ppm	ASTM D5185m		<b>2620</b>	3057	2217
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.6</b>	20.6	18.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	<b>6.5</b>	6.8	6.0
Visc @ 100°C	cSt	ASTM D445	15.2	<b>12.9</b>	13.5	13.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : WC0811875

**Lab Number** : 06103538

**Unique Number** : 10901768

**Test Package** : FLEET

**Received** : 28 Feb 2024

**Tested** : 01 Mar 2024

**Diagnosed** : 01 Mar 2024 - Wes Davis

**TALLEN TRANSPORT**

262 COUNTY ROAD 580

MADISONVILLE, TN

US 37303

Contact: COBY JOHNSON

tallenttransport@gmail.com

T:

F:

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)