



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PETERBILT 343 (S/N 1XPCD40X2ND795749)**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0893767</b>	WC0893941	WC0850996
Sample Date		Client Info		<b>15 Apr 2024</b>	06 Feb 2024	26 Oct 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>22</b>	23	24
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>2</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>6</b>	5	8
Lead	ppm	ASTM D5185m	>45	<b>3</b>	3	2
Copper	ppm	ASTM D5185m	>85	<b>1</b>	0	1
Tin	ppm	ASTM D5185m	>4	<b>2</b>	<1	<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

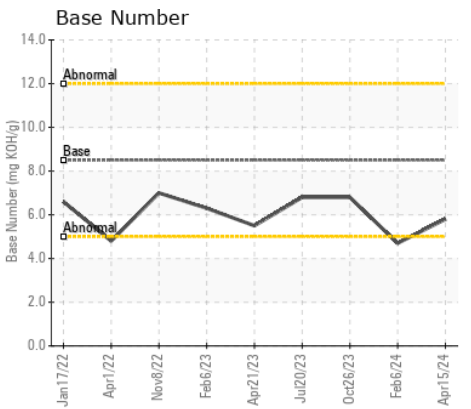
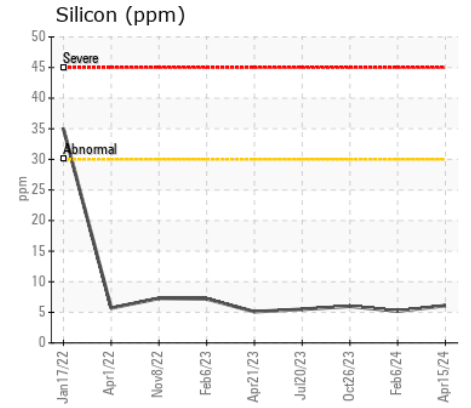
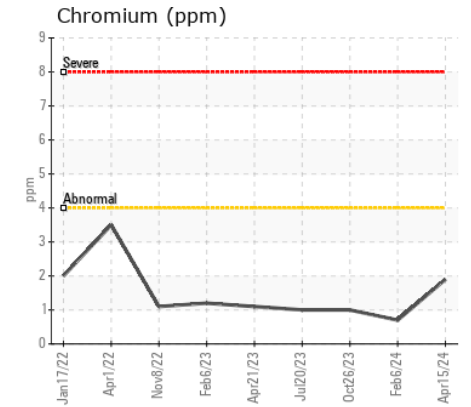
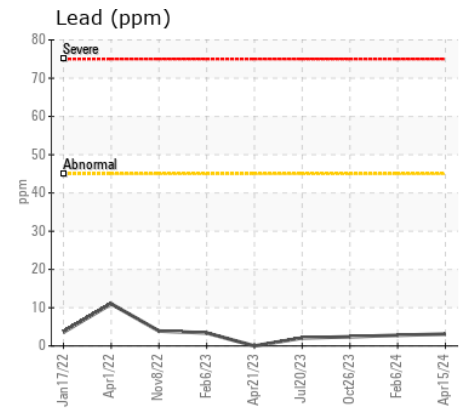
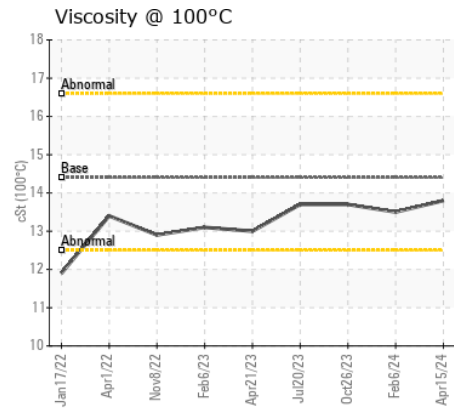
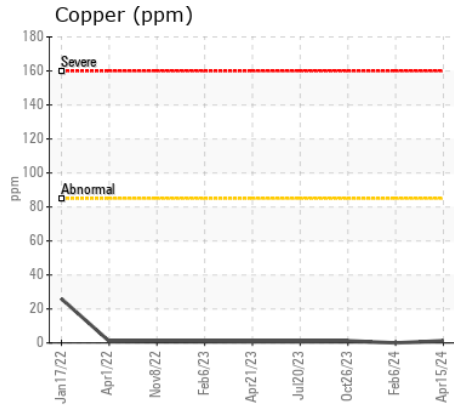
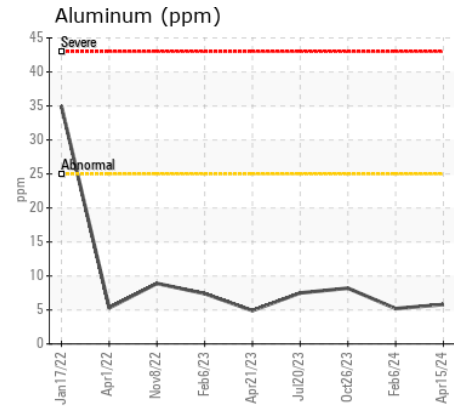
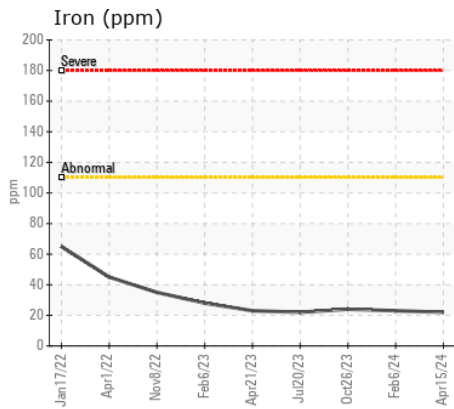
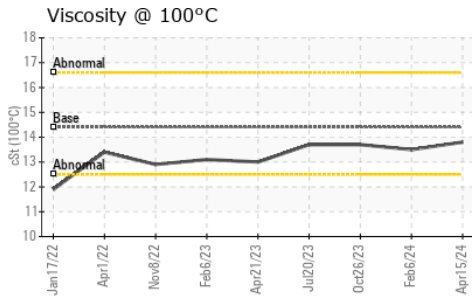
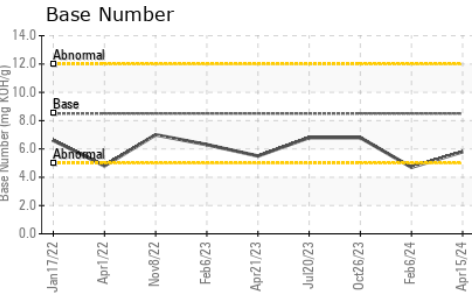
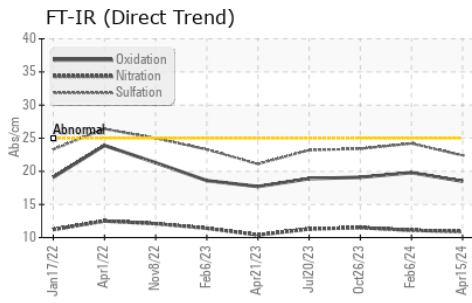
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>6</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	3	12
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>0.6</b>	0.6	1.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.9</b>	11.1	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.4</b>	24.2	23.4
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	>216	<b>2</b>	1	0
Boron	ppm	ASTM D5185m	250	<b>11</b>	27	2
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	4
Molybdenum	ppm	ASTM D5185m	100	<b>74</b>	74	63
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>697</b>	502	913
Calcium	ppm	ASTM D5185m	3000	<b>1495</b>	1520	1058
Phosphorus	ppm	ASTM D5185m	1150	<b>1198</b>	957	1024
Zinc	ppm	ASTM D5185m	1350	<b>1326</b>	1221	1200
Sulfur	ppm	ASTM D5185m	4250	<b>3862</b>	3078	3252
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.5</b>	19.8	19.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.8</b>	4.7	6.8
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.8</b>	13.5	13.7



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0893767 **Received** : 17 Apr 2024  
**Lab Number** : 06152531 **Tested** : 18 Apr 2024  
**Unique Number** : 10982609 **Diagnosed** : 18 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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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)