



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PETERBILT 389 DT93**  
Component  
**Diesel Engine**  
Fluid  
**DURAMAX 15W40 (42 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0035457</b>	DC0032198	DC0029756
Sample Date		Client Info		<b>21 Mar 2024</b>	12 Oct 2023	13 Jun 2023
Machine Age	mls	Client Info		<b>169547</b>	159955	150684
Oil Age	mls	Client Info		<b>9592</b>	9271	9678
Filter Age	mls	Client Info		<b>9592</b>	9271	9678
Oil Changed		Client Info		<b>N/A</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	>100	<b>10</b>	6	4
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	0
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>1</b>	2	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<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

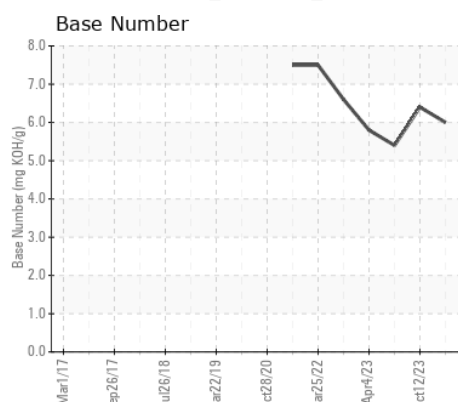
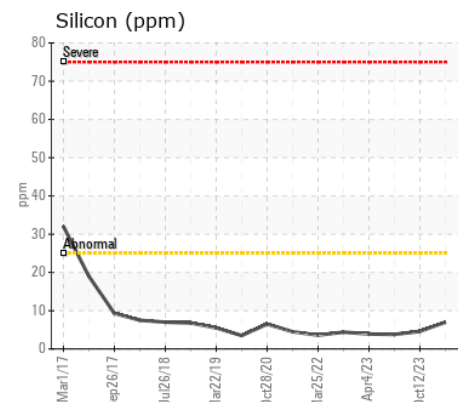
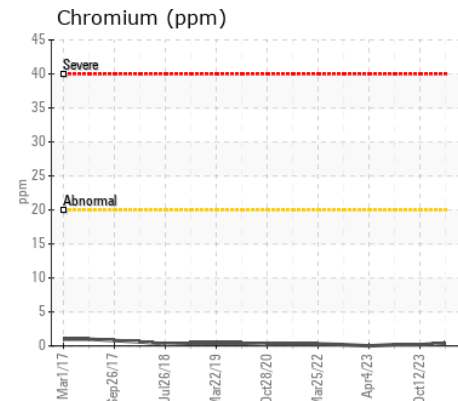
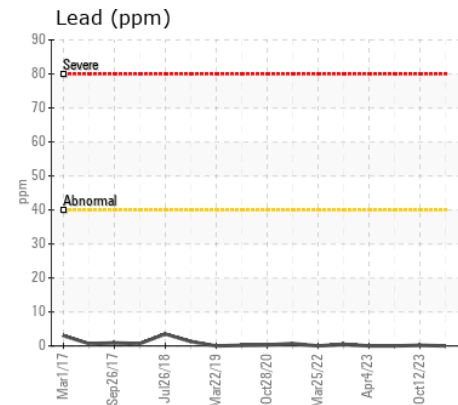
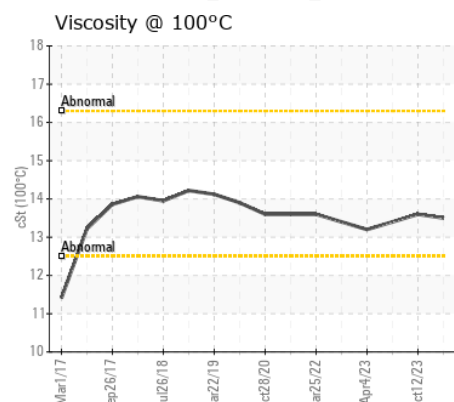
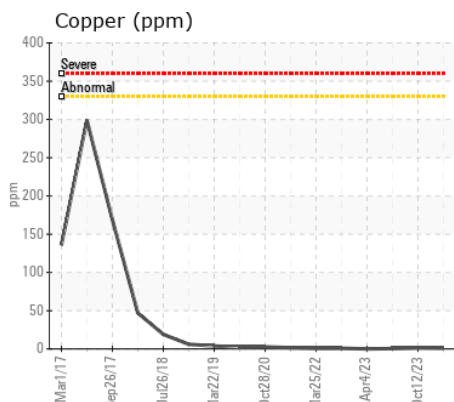
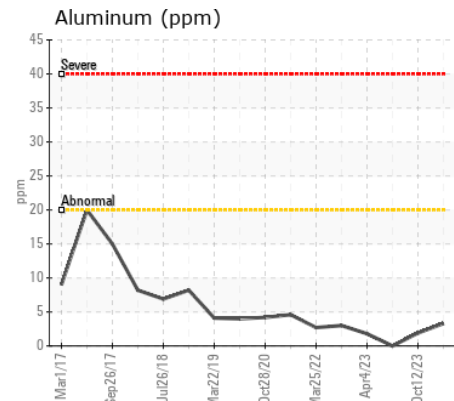
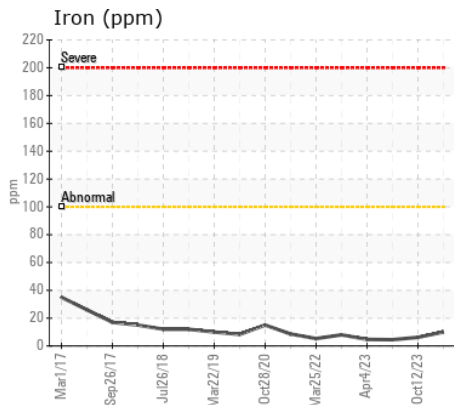
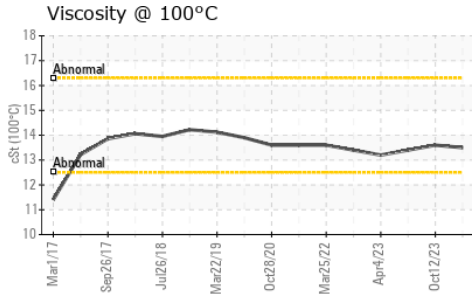
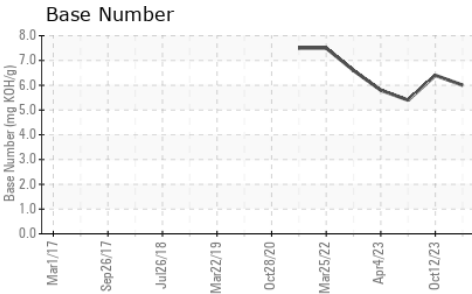
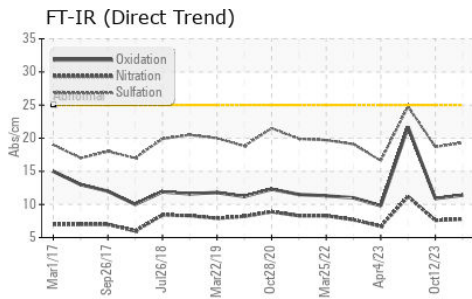
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	5	2
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>0.3</b>	0.3	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	7.6	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.3</b>	18.7	24.8
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>2</b>	0	<1
Boron	ppm	ASTM D5185m		<b>2</b>	1	4
Barium	ppm	ASTM D5185m		<b>0</b>	3	0
Molybdenum	ppm	ASTM D5185m		<b>4</b>	3	4
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>62</b>	41	42
Calcium	ppm	ASTM D5185m		<b>3276</b>	2302	2295
Phosphorus	ppm	ASTM D5185m		<b>1340</b>	851	878
Zinc	ppm	ASTM D5185m		<b>1487</b>	1073	1059
Sulfur	ppm	ASTM D5185m		<b>5475</b>	3937	4078
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>11.4</b>	10.9	21.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.0</b>	6.4	5.4
Visc @ 100°C	cSt	ASTM D445		<b>13.5</b>	13.6	13.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0035457 **Received** : 15 Apr 2024  
**Lab Number** : 06148493 **Tested** : 16 Apr 2024  
**Unique Number** : 10978571 **Diagnosed** : 17 Apr 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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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)