



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**MAINTENANCE**  
Machine Id  
**CHEVROLET/3500HD T326**  
Component  
**Diesel Engine**  
Fluid  
**SHELL 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0810970</b>	WC0743255	---
Sample Date		Client Info		<b>19 Jun 2023</b>	21 Sep 2022	---
Machine Age	mls	Client Info		<b>206414</b>	205755	---
Oil Age	mls	Client Info		<b>0</b>	0	---
Filter Age	mls	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>29</b>	21	---
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	0	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	2	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>4</b>	2	---
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

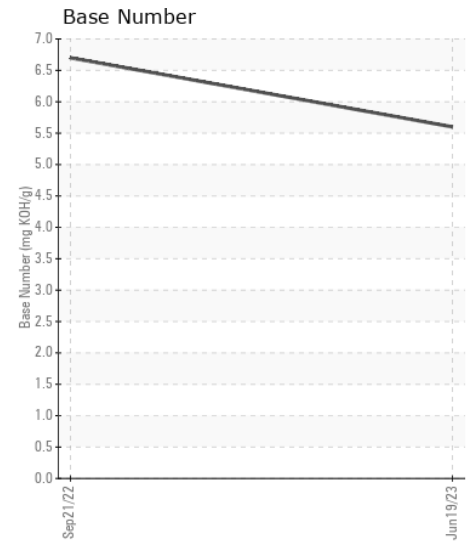
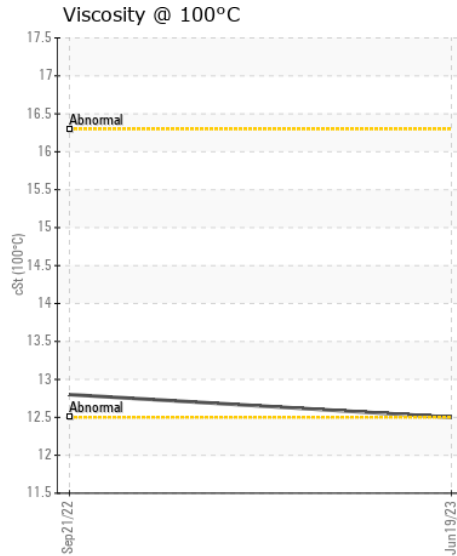
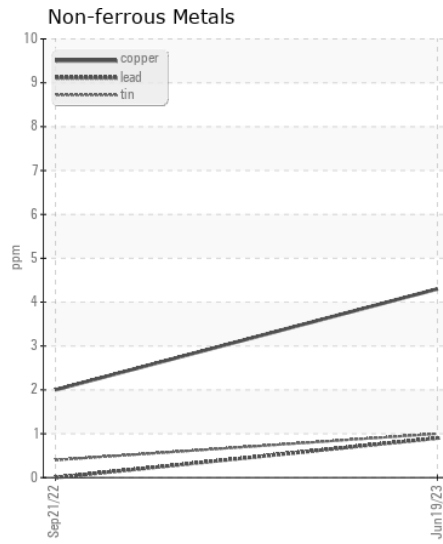
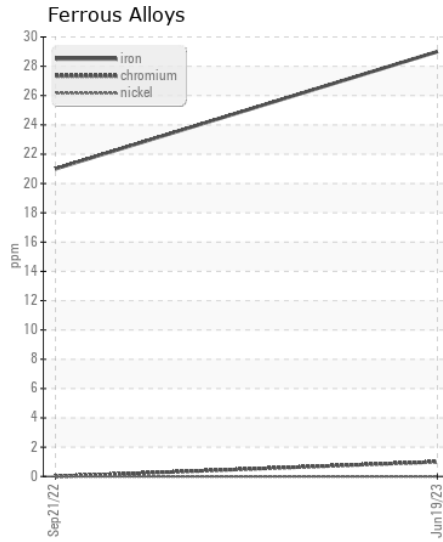
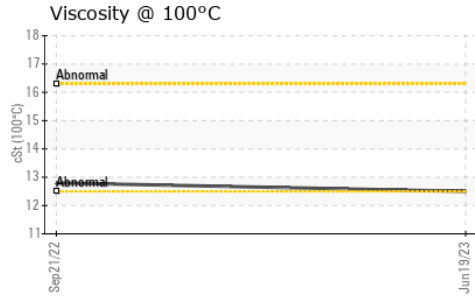
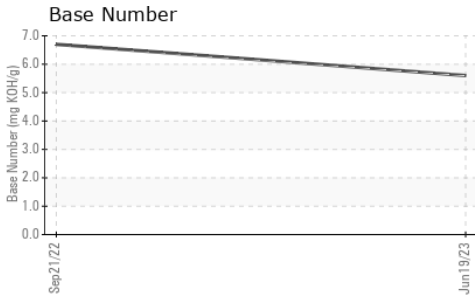
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>9</b>	6	---
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	6	---
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>0.4</b>	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.1</b>	11.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.8</b>	22.4	---
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 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	>150	<b>9</b>	8	---
Boron	ppm	ASTM D5185m		<b>43</b>	30	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>51</b>	48	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m		<b>458</b>	431	---
Calcium	ppm	ASTM D5185m		<b>1725</b>	1643	---
Phosphorus	ppm	ASTM D5185m		<b>895</b>	884	---
Zinc	ppm	ASTM D5185m		<b>1157</b>	1107	---
Sulfur	ppm	ASTM D5185m		<b>3959</b>	3556	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.6</b>	19.0	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.6</b>	6.7	---
Visc @ 100°C	cSt	ASTM D445		<b>12.5</b>	12.8	---



Certificate L2367

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

Sample No. : WC0810970

Lab Number : 05892050

Unique Number : 10547860

Test Package : CONST ( Additional Tests: TBN )

Received : 07 Jul 2023

Tested : 07 Jul 2023

Diagnosed : 07 Jul 2023 - Wes Davis

METRO METALS NORTHWEST INC

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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)