



# OIL ANALYSIS REPORT

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

Machine Id  
**A-414**  
 Component  
**Diesel Engine**  
 Fluid  
**DURAMAX 15W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0032171</b>	DC0029729	DC0025544
Sample Date		Client Info		<b>15 Jan 2024</b>	19 Aug 2023	27 Apr 2023
Machine Age	hrs	Client Info		<b>6005</b>	5271	4577
Oil Age	hrs	Client Info		<b>734</b>	694	714
Filter Age	hrs	Client Info		<b>734</b>	694	714
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	>100	<b>13</b>	11	15
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
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>2</b>	2	<1
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>4</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

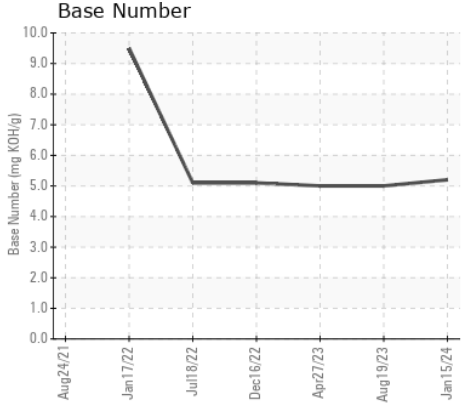
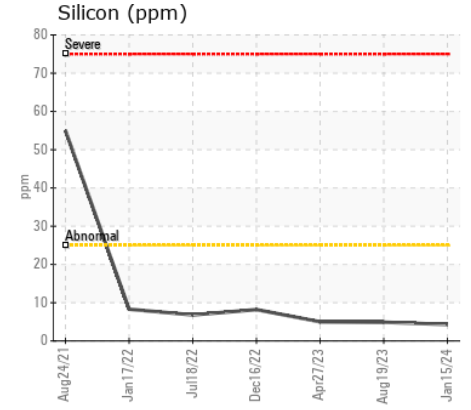
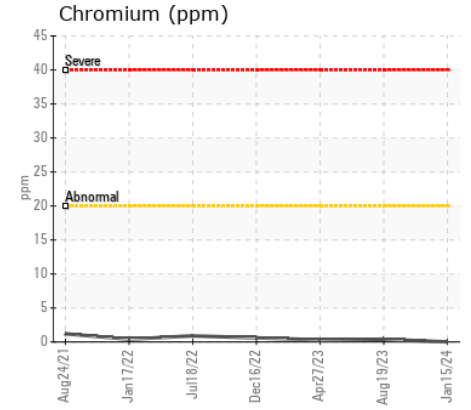
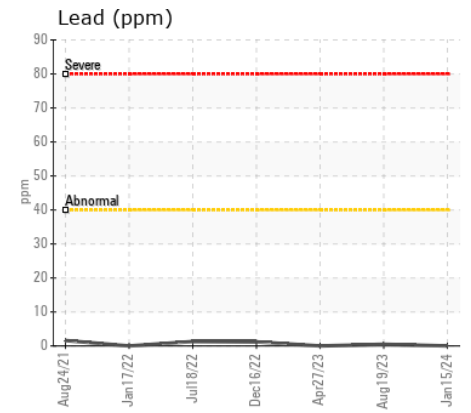
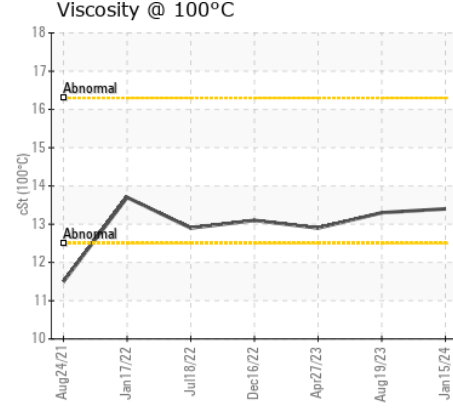
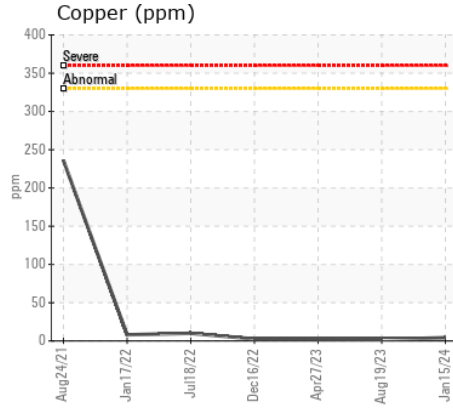
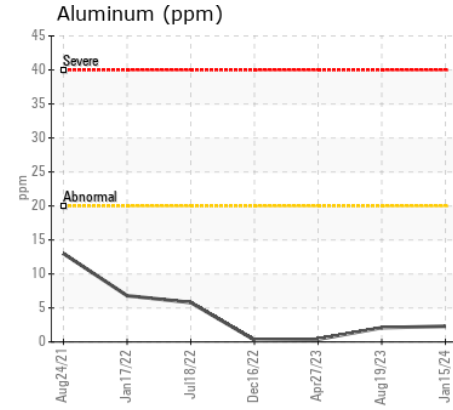
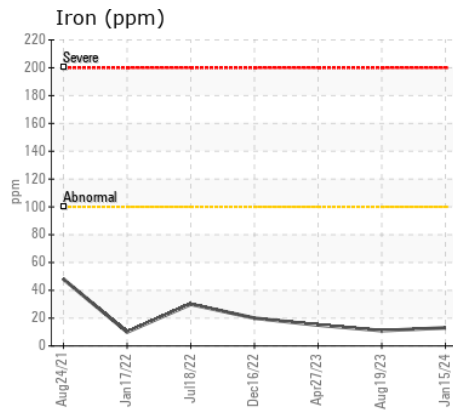
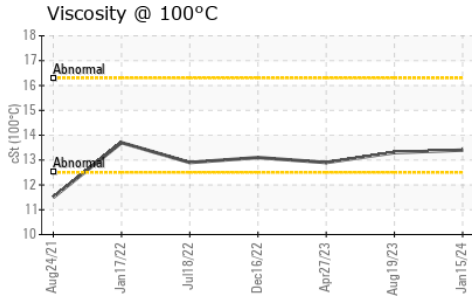
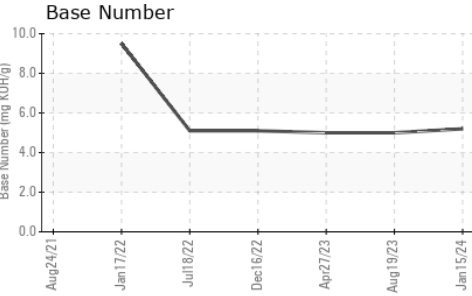
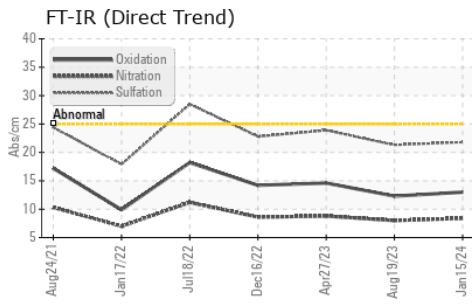
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	6	4
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	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	8.0	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.8</b>	21.3	23.9
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>5</b>	6	6
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	2	0
Barium	ppm	ASTM D5185m		<b>0</b>	12	0
Molybdenum	ppm	ASTM D5185m		<b>3</b>	5	3
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>52</b>	67	47
Calcium	ppm	ASTM D5185m		<b>2285</b>	2187	2338
Phosphorus	ppm	ASTM D5185m		<b>909</b>	875	890
Zinc	ppm	ASTM D5185m		<b>1062</b>	1080	1104
Sulfur	ppm	ASTM D5185m		<b>4038</b>	3506	4190
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.0</b>	12.3	14.6
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.2</b>	5.0	5.0
Visc @ 100°C	cSt	ASTM D445		<b>13.4</b>	13.3	12.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0032171 **Received** : 11 Apr 2024  
**Lab Number** : 06146448 **Tested** : 12 Apr 2024  
**Unique Number** : 10976526 **Diagnosed** : 12 Apr 2024 - Wes Davis  
**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)