



# OIL ANALYSIS REPORT

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

Machine Id  
**A-367**  
Component  
**Diesel Engine**  
Fluid  
**DURAMAX 15W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0034939</b>	DC0030810	DC0030731
Sample Date		Client Info		<b>31 May 2024</b>	21 Nov 2023	21 Nov 2023
Machine Age	hrs	Client Info		<b>21096</b>	20332	20232
Oil Age	hrs	Client Info		<b>424</b>	512	512
Filter Age	hrs	Client Info		<b>424</b>	512	512
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>24</b>	18	19
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>5</b>	6	4
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	5	5
Lead	ppm	ASTM D5185m	>40	<b>15</b>	13	6
Copper	ppm	ASTM D5185m	>330	<b>3</b>	9	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

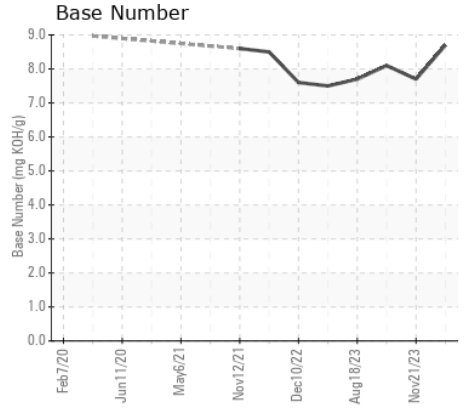
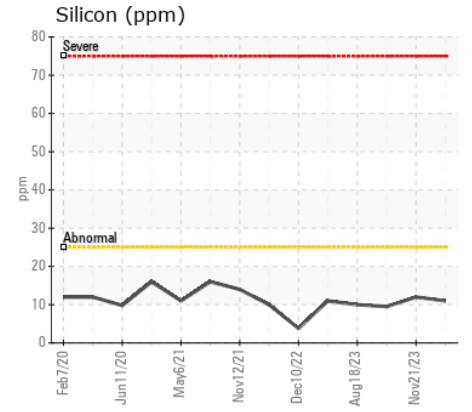
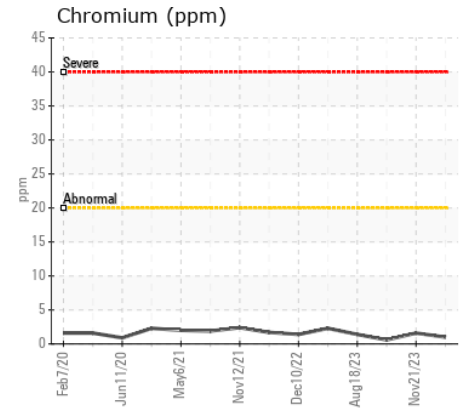
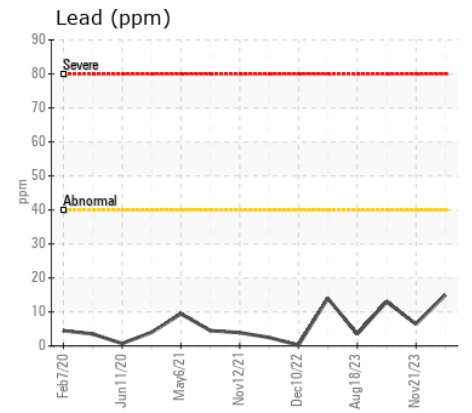
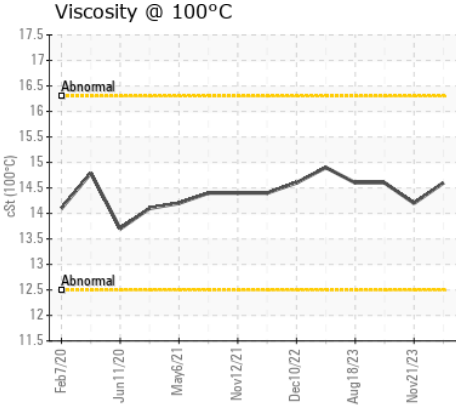
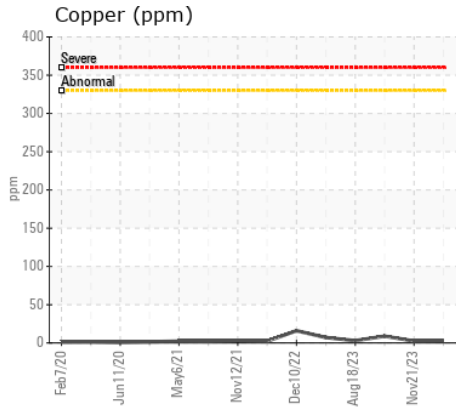
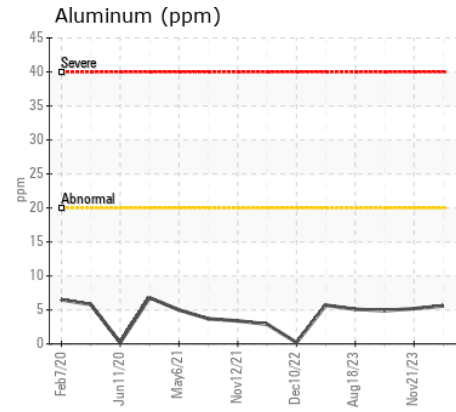
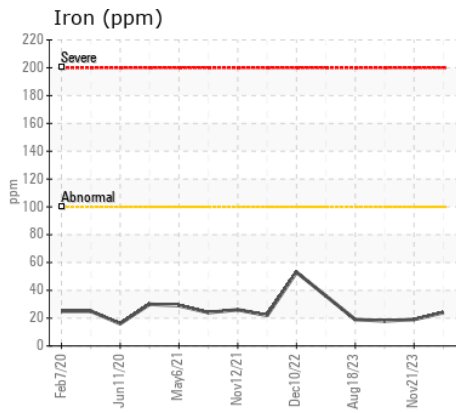
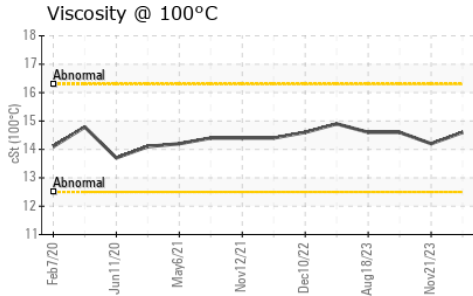
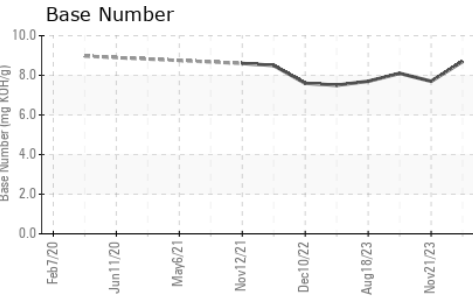
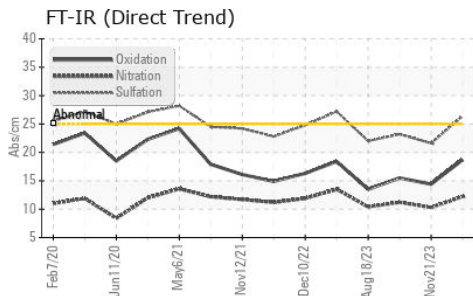
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>11</b>	10	12
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	4	7
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>1.7</b>	1.1	1.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.2</b>	10.3	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.4</b>	21.6	23.2
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>	3	2
Boron	ppm	ASTM D5185m		<b>77</b>	12	25
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>62</b>	10	17
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>339</b>	94	119
Calcium	ppm	ASTM D5185m		<b>2035</b>	2320	2424
Phosphorus	ppm	ASTM D5185m		<b>769</b>	970	999
Zinc	ppm	ASTM D5185m		<b>1054</b>	1100	1101
Sulfur	ppm	ASTM D5185m		<b>3160</b>	4322	3864
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.7</b>	14.4	15.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.7</b>	7.7	8.1
Visc @ 100°C	cSt	ASTM D445		<b>14.6</b>	14.2	14.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0034939  
**Lab Number** : 06221053  
**Unique Number** : 11099250  
**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)