



# OIL ANALYSIS REPORT

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

Machine Id  
**A-415**  
 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>DC0034944</b>	DC0030800	DC0022577
Sample Date		Client Info		<b>06 Apr 2024</b>	17 Nov 2023	09 Sep 2023
Machine Age	hrs	Client Info		<b>7167</b>	6608	6126
Oil Age	hrs	Client Info		<b>550</b>	482	582
Filter Age	hrs	Client Info		<b>550</b>	482	582
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>14</b>	9	14
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	5	8
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>0</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

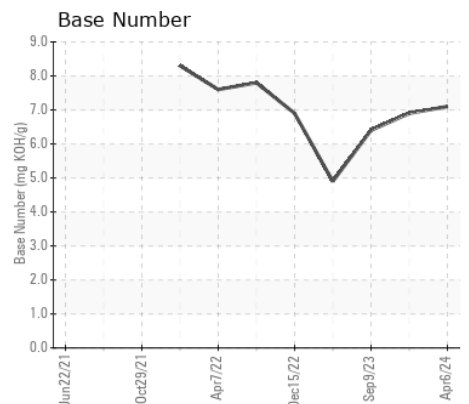
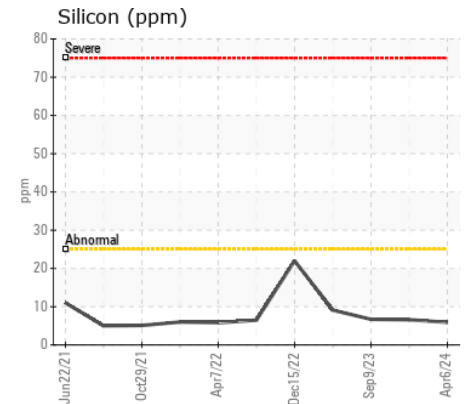
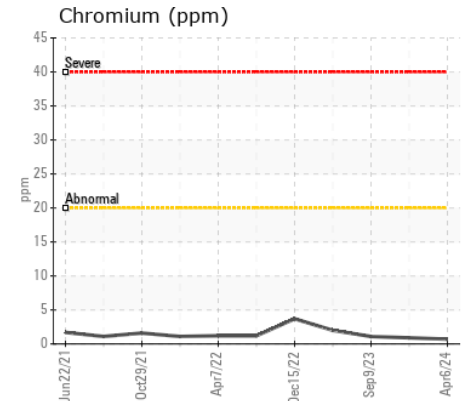
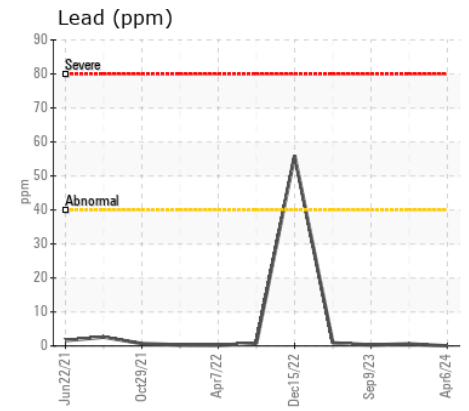
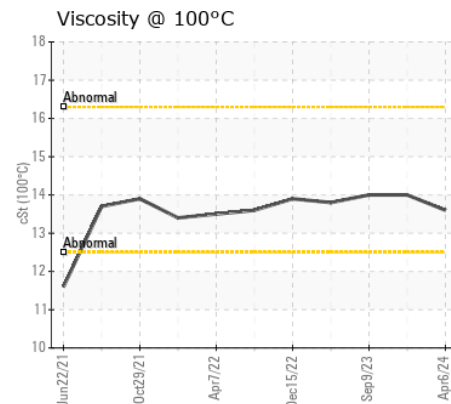
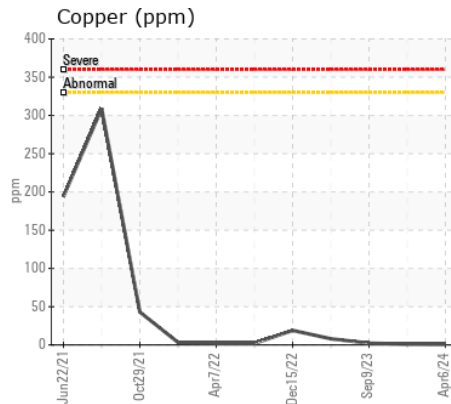
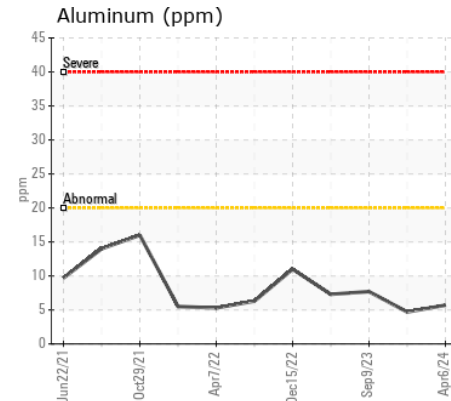
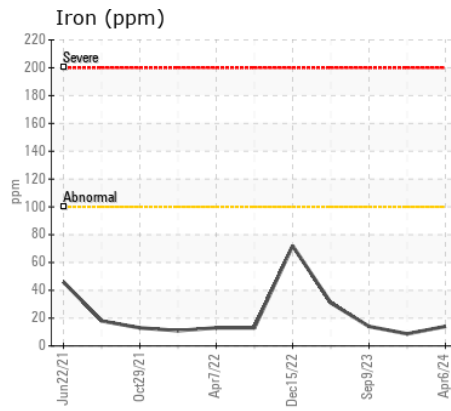
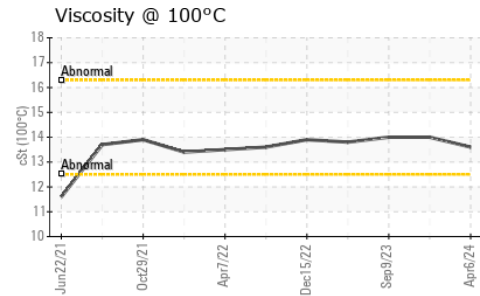
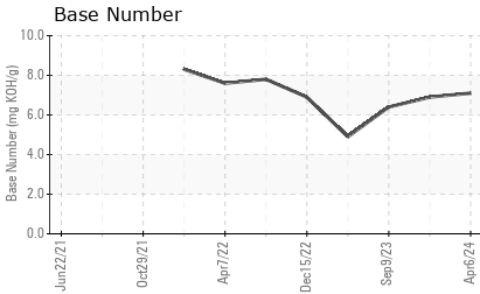
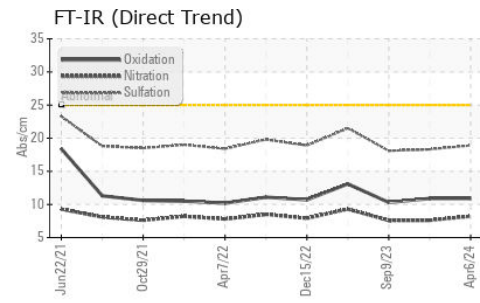
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>14</b>	11	20
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>0.7</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	7.6	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.9</b>	18.3	18.1
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>	<1	2
Boron	ppm	ASTM D5185m		<b>17</b>	32	4
Barium	ppm	ASTM D5185m		<b>0</b>	<1	11
Molybdenum	ppm	ASTM D5185m		<b>10</b>	15	4
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>95</b>	97	55
Calcium	ppm	ASTM D5185m		<b>2369</b>	2151	2257
Phosphorus	ppm	ASTM D5185m		<b>853</b>	860	888
Zinc	ppm	ASTM D5185m		<b>1169</b>	990	1094
Sulfur	ppm	ASTM D5185m		<b>3771</b>	3439	3621
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>10.9</b>	10.9	10.3
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.1</b>	6.9	6.4
Visc @ 100°C	cSt	ASTM D445		<b>13.6</b>	14.0	14.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0034944  
**Lab Number** : 06221043  
**Unique Number** : 11099240  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 26 Jun 2024  
**Tested** : 27 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Wes Davis

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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)