



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**A-400**  
 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>DC0031956</b>	DC0032170	DC0025540
Sample Date		Client Info		<b>15 May 2024</b>	16 Dec 2023	01 Apr 2023
Machine Age	hrs	Client Info		<b>10212</b>	9442	7882
Oil Age	hrs	Client Info		<b>770</b>	825	720
Filter Age	hrs	Client Info		<b>770</b>	825	720
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>14</b>	16	19
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	4	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>3</b>	4	5
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
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

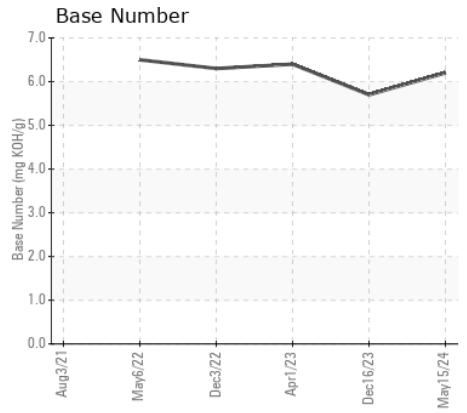
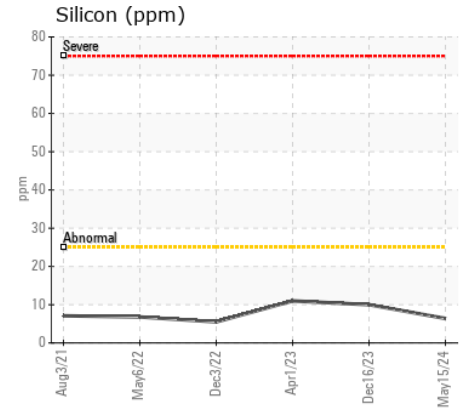
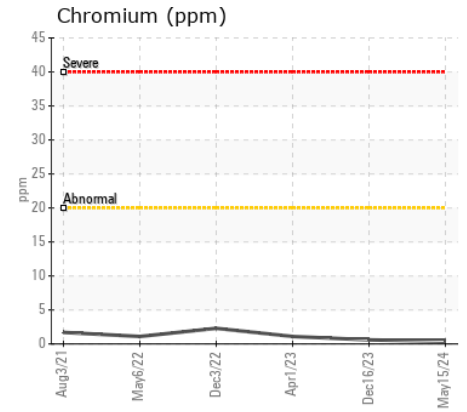
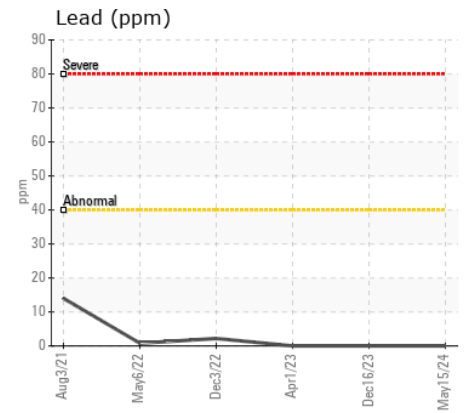
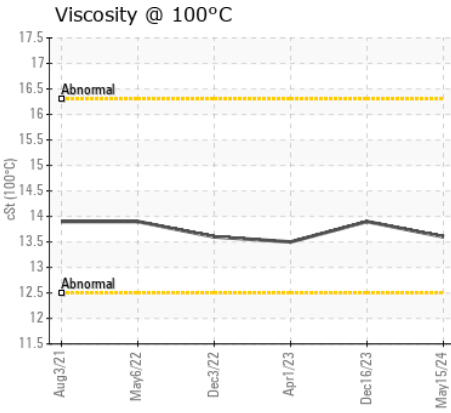
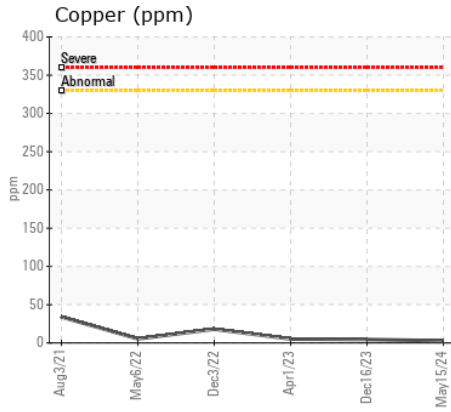
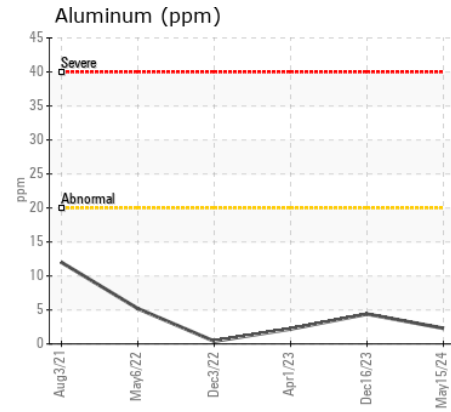
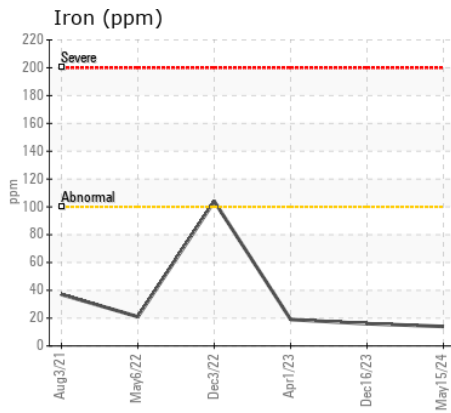
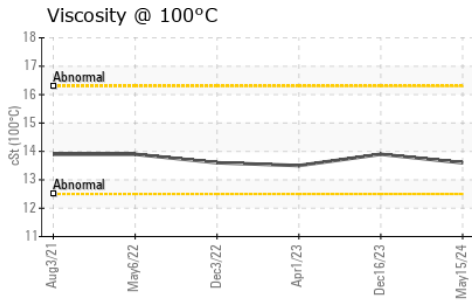
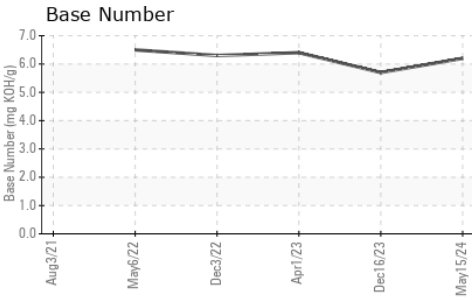
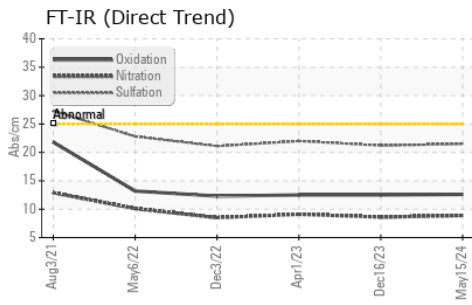
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	10	11
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	9	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>0.8</b>	0.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.9</b>	8.6	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	21.2	22.0
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>1</b>	2	3
Boron	ppm	ASTM D5185m		<b>3</b>	1	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>4</b>	4	3
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>58</b>	65	41
Calcium	ppm	ASTM D5185m		<b>2370</b>	2361	2364
Phosphorus	ppm	ASTM D5185m		<b>819</b>	911	897
Zinc	ppm	ASTM D5185m		<b>1131</b>	1074	1087
Sulfur	ppm	ASTM D5185m		<b>3541</b>	4159	4358
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.6</b>	12.5	12.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.2</b>	5.7	6.4
Visc @ 100°C	cSt	ASTM D445		<b>13.6</b>	13.9	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0031956  
**Lab Number** : 06221055  
**Unique Number** : 11099252  
**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)