



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
A-416
 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		DC0032172	DC0029741	DC0021264
Sample Date		Client Info		12 Dec 2023	07 Sep 2023	01 Oct 2022
Machine Age	hrs	Client Info		6140	5505	3630
Oil Age	hrs	Client Info		635	1205	891
Filter Age	hrs	Client Info		635	1205	891
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	13	33	28
Chromium	ppm	ASTM D5185m	>20	<1	2	2
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	13	24
Lead	ppm	ASTM D5185m	>40	0	4	<1
Copper	ppm	ASTM D5185m	>330	3	4	9
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

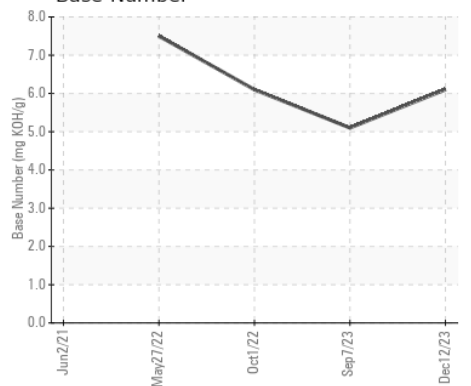
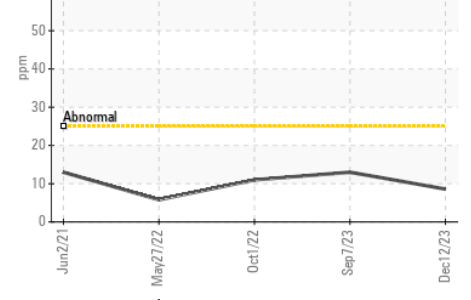
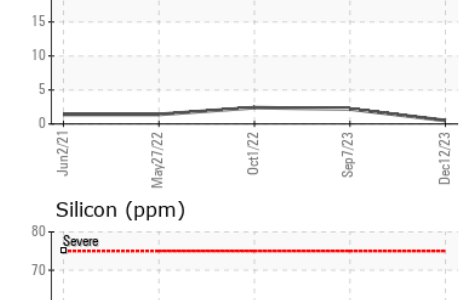
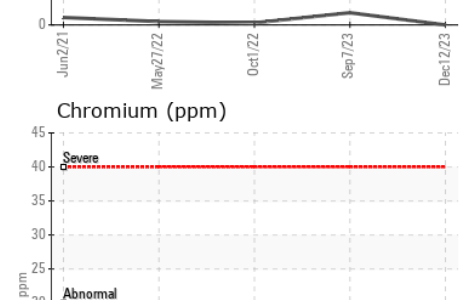
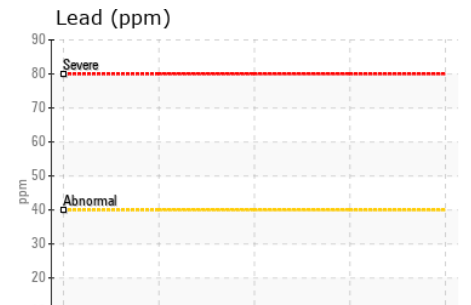
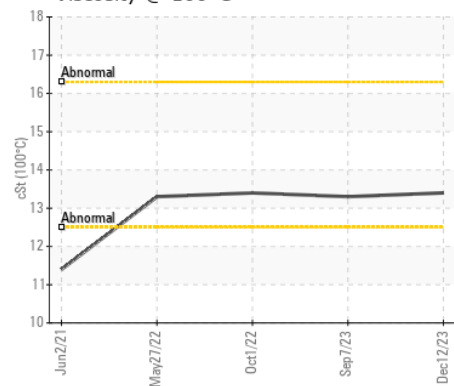
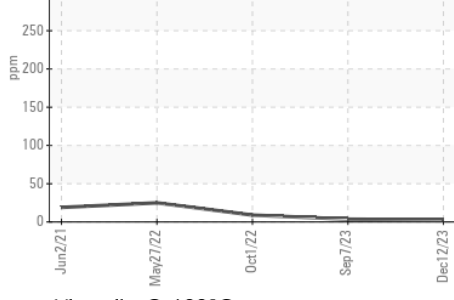
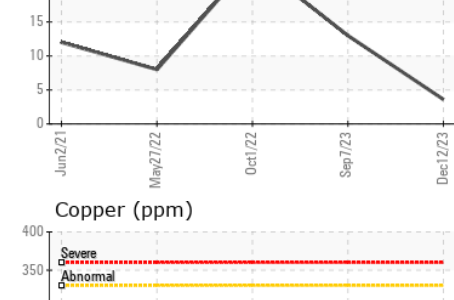
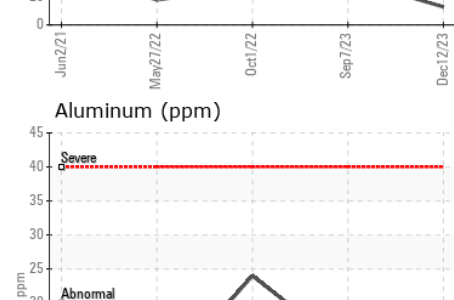
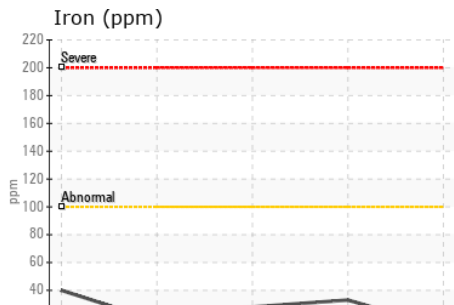
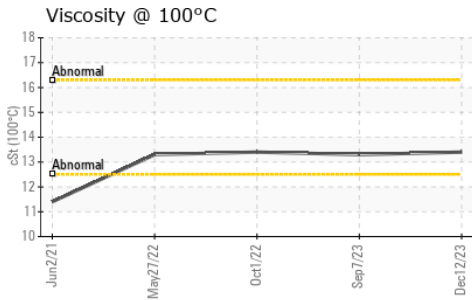
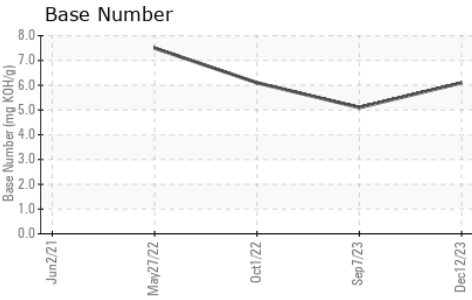
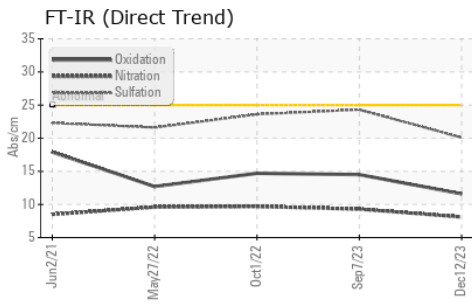
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	13	11
Potassium	ppm	ASTM D5185m	>20	8	37	58
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.9	0.7
Nitration	Abs/cm	*ASTM D7624	>20	8.1	9.3	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	24.3	23.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	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		2	4	2
Boron	ppm	ASTM D5185m		3	0	2
Barium	ppm	ASTM D5185m		0	11	0
Molybdenum	ppm	ASTM D5185m		4	3	6
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		57	51	80
Calcium	ppm	ASTM D5185m		2260	2334	2546
Phosphorus	ppm	ASTM D5185m		863	903	925
Zinc	ppm	ASTM D5185m		1034	1122	1136
Sulfur	ppm	ASTM D5185m		3953	3647	4119
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.6	14.5	14.7
Base Number (BN)	mg KOH/g	ASTM D2896		6.1	5.1	6.1
Visc @ 100°C	cSt	ASTM D445		13.4	13.3	13.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0032172 **Received** : 11 Apr 2024
Lab Number : 06146450 **Tested** : 12 Apr 2024
Unique Number : 10976528 **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)