



# OIL ANALYSIS REPORT

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

Area  
**[PMOAS3340830]**  
 Machine Id  
**CUMMINS DSFAA D090240788**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (14 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0034964</b>	DC0027717	DC0020410
Sample Date		Client Info		<b>11 Apr 2024</b>	17 Apr 2023	05 Apr 2022
Machine Age	hrs	Client Info		<b>253</b>	0	238
Oil Age	hrs	Client Info		<b>0</b>	12	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>90	<b>&lt;1</b>	1	1
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	<1	7
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

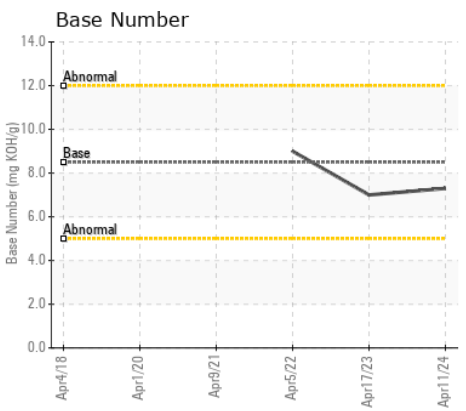
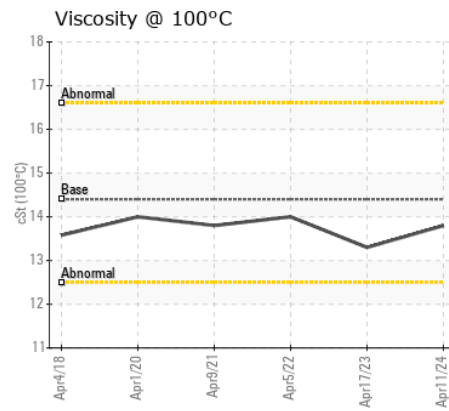
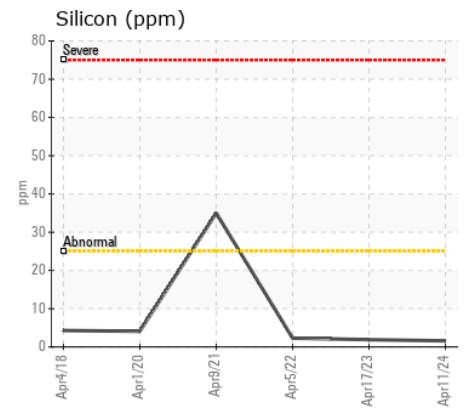
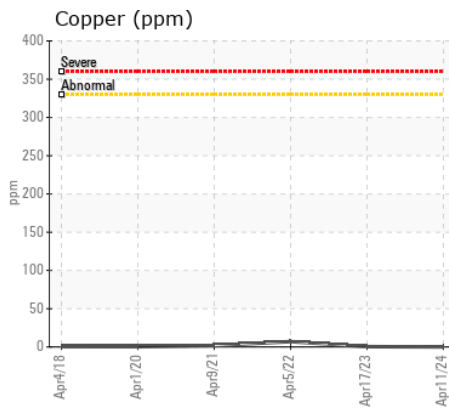
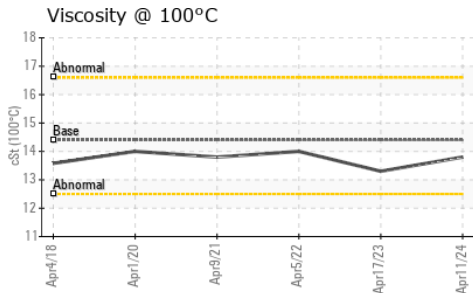
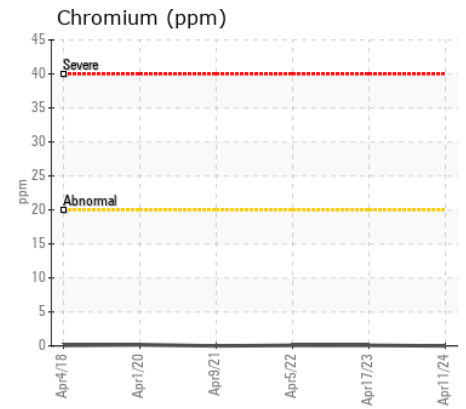
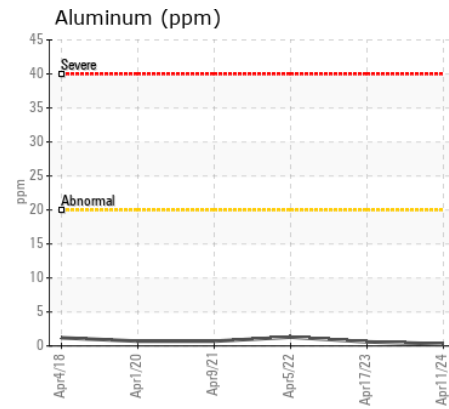
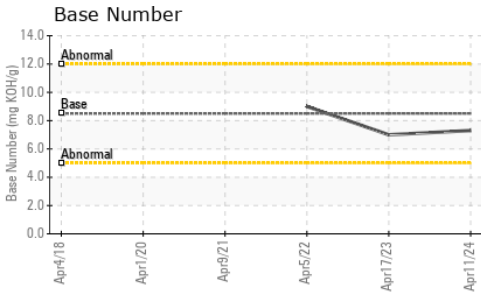
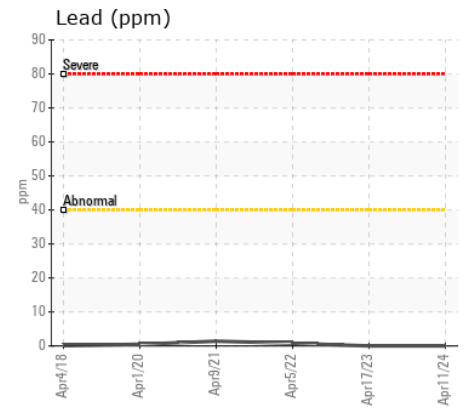
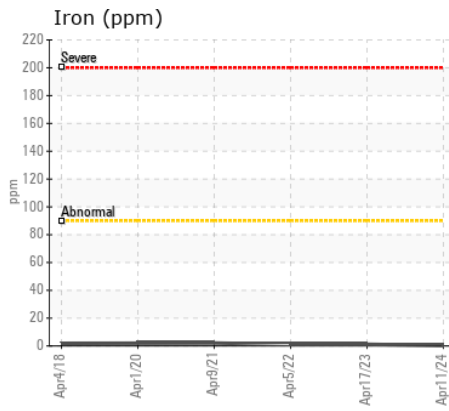
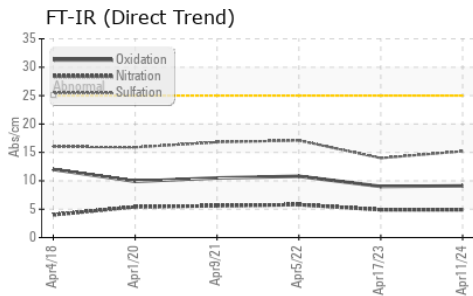
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	2
Fuel		WC Method	>3.0	<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	>6	<b>0</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.9</b>	4.9	5.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>15.2</b>	14.0	17.1
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	>158	<b>&lt;1</b>	1	0
Boron	ppm	ASTM D5185m	250	<b>0</b>	8	7
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>2</b>	5	2
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>42</b>	63	42
Calcium	ppm	ASTM D5185m	3000	<b>2190</b>	2369	2214
Phosphorus	ppm	ASTM D5185m	1150	<b>907</b>	954	859
Zinc	ppm	ASTM D5185m	1350	<b>1114</b>	1116	1032
Sulfur	ppm	ASTM D5185m	4250	<b>4660</b>	4809	2917
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.1</b>	9.0	10.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.3</b>	7.0	9.0
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.8</b>	13.3	14.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0034964 **Received** : 23 Apr 2024  
**Lab Number** : 06157463 **Tested** : 24 Apr 2024  
**Unique Number** : 10992886 **Diagnosed** : 24 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**KELLY GENERATOR & EQUIPMENT INC**  
 1955 DALE LN  
 OWINGS, MD  
 US 20736  
 Contact: LESLIE SNURR  
 LSNURR@KGE.COM  
 T: (410)257-5225  
 F: (410)257-5227

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)