



# OIL ANALYSIS REPORT

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

Machine Id  
**CAM DVT 4 4850015 (S/N SAV0247)**  
 Component  
**Diesel Engine**  
 Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0919233</b>	WCMC153940	WCMC153563
Sample Date		Client Info		<b>15 Apr 2024</b>	06 Feb 2024	02 Jun 2021
Machine Age	hrs	Client Info		<b>3875</b>	3656	1017
Oil Age	hrs	Client Info		<b>0</b>	0	39
Filter Age	hrs	Client Info		<b>0</b>	0	39
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>6</b>	13	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>7</b>	23	11
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

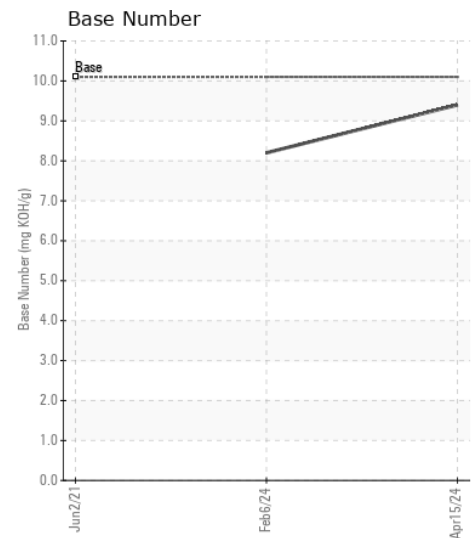
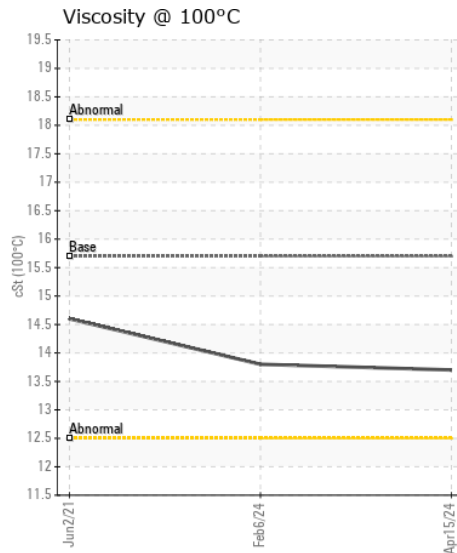
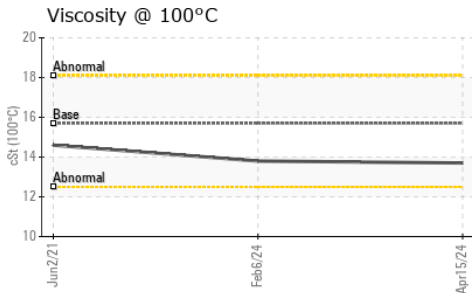
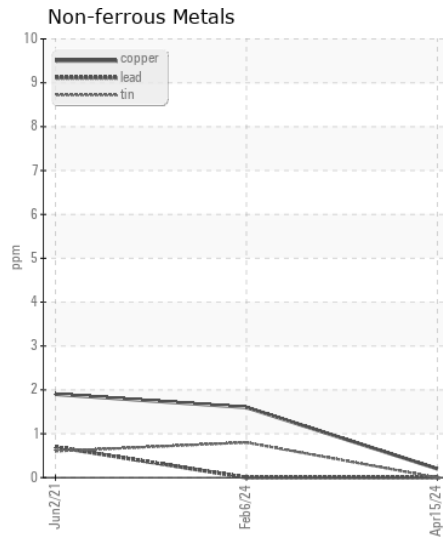
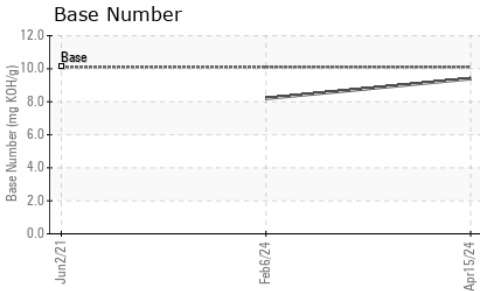
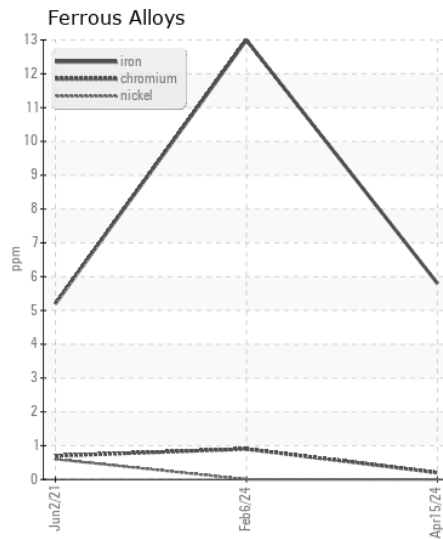
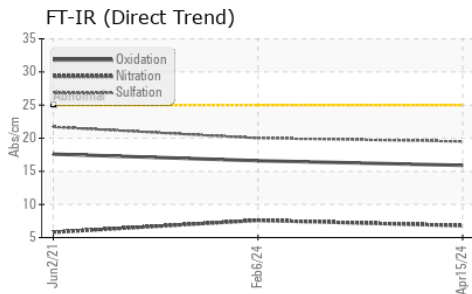
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	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>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	7.6	5.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	20.0	21.7
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>	2	2
Boron	ppm	ASTM D5185m	316	<b>52</b>	91	371
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>41</b>	27	4
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	24	<b>452</b>	313	64
Calcium	ppm	ASTM D5185m	2292	<b>1639</b>	1730	2059
Phosphorus	ppm	ASTM D5185m	1064	<b>1124</b>	1017	964
Zinc	ppm	ASTM D5185m	1160	<b>1254</b>	1230	1153
Sulfur	ppm	ASTM D5185m	4996	<b>3244</b>	3317	2971
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	16.6	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>9.4</b>	8.2	---
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.7</b>	13.8	14.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0919233 **Received** : 17 Apr 2024  
**Lab Number** : 06151772 **Tested** : 18 Apr 2024  
**Unique Number** : 10981850 **Diagnosed** : 18 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**KELLER-NA - KERNERSVILLE**  
 1024 EAST MOUNTAIN ST  
 KERNERSVILLE, NC  
 US 27284

Contact: BRENT SHIRLEY  
 BShirley@keller-na.com

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)

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