



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id  
**3840028**

Component  
**Diesel Engine**

Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. 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		WCMC153552	---	---
Sample Date		Client Info		13 Feb 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				MARGINAL	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	8	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	2	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	<1	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

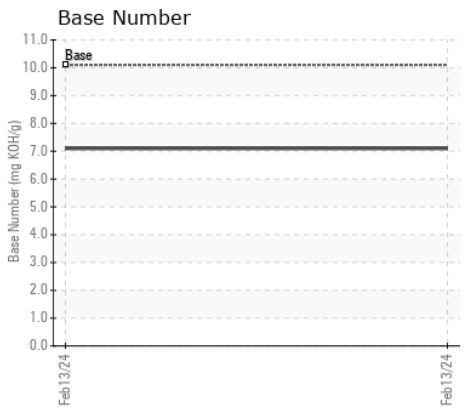
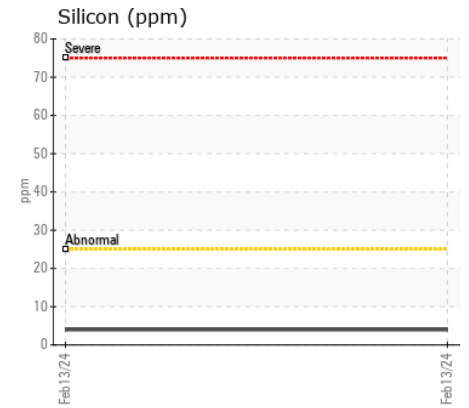
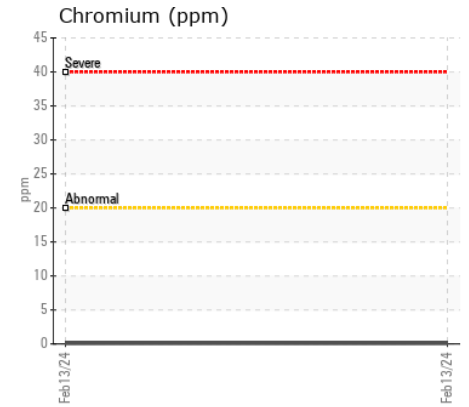
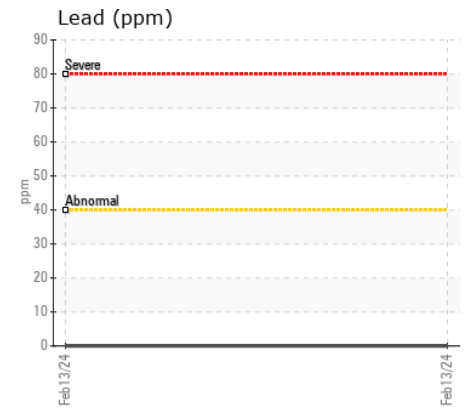
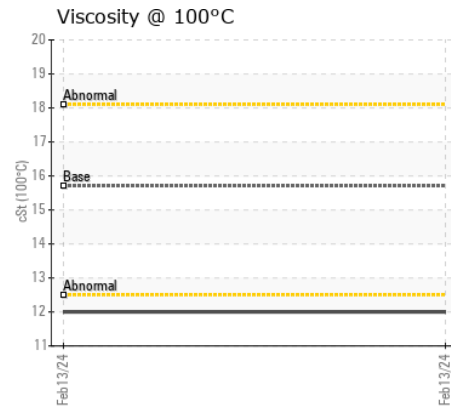
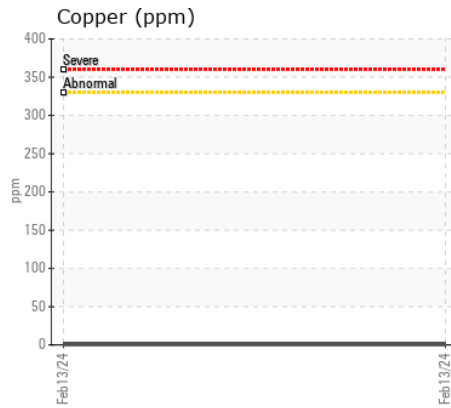
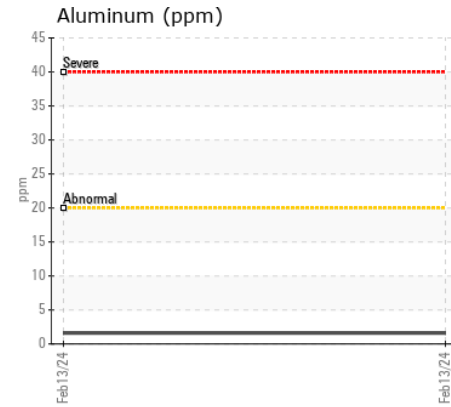
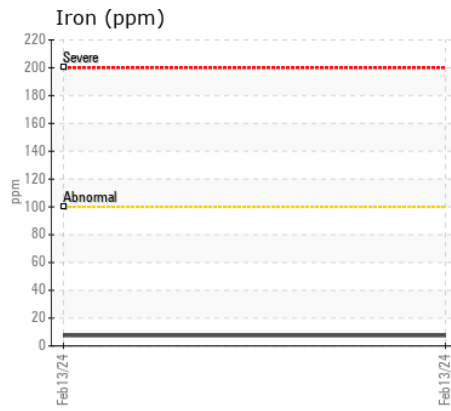
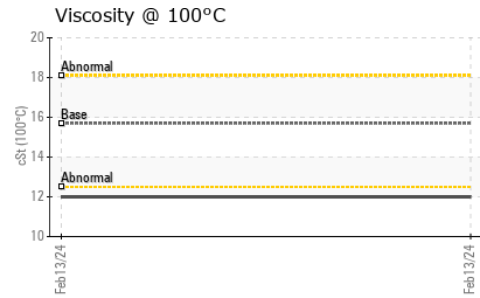
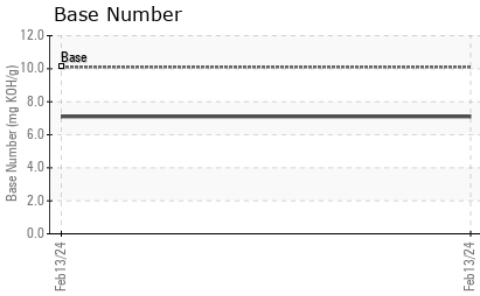
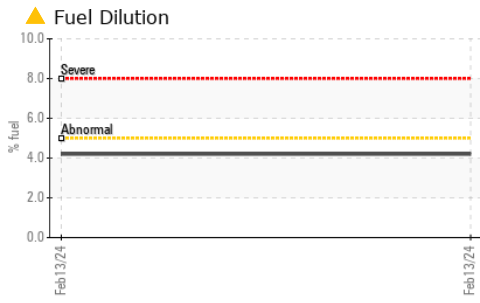
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	4	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Fuel	%	ASTM D3524	>5	▲ 4.2	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	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		0	---	---
Boron	ppm	ASTM D5185m	316	231	---	---
Barium	ppm	ASTM D5185m	0.0	12	---	---
Molybdenum	ppm	ASTM D5185m	1.2	73	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	24	374	---	---
Calcium	ppm	ASTM D5185m	2292	1244	---	---
Phosphorus	ppm	ASTM D5185m	1064	961	---	---
Zinc	ppm	ASTM D5185m	1160	1073	---	---
Sulfur	ppm	ASTM D5185m	4996	3251	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	7.1	---	---
Visc @ 100°C	cSt	ASTM D445	15.7	12.0	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WCMC153552 **Received** : 14 Feb 2024  
**Lab Number** : 06088587 **Tested** : 15 Feb 2024  
**Unique Number** : 10876032 **Diagnosed** : 15 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

**KELLER-NA - KERNERSVILLE**  
 1024 EAST MOUNTAIN ST  
 KERNERSVILLE, NC  
 US 27284  
 Contact: KEN COOK  
 KENNETH.COOK@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)

T:  
 F: (336)668-3259