



**LEAHY-WOLF**  
Lubricating specialists since 1946

OIL ANALYSIS REPORT

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

Machine Id  
**AUTOCAR 3017**  
Component  
**Front Center Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 40 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LW0008593</b>	---	---
Sample Date		Client Info		<b>21 Feb 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

**WEAR**

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>▲ 129</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>6</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>12</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>7</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

There is no indication of any contamination in the oil.

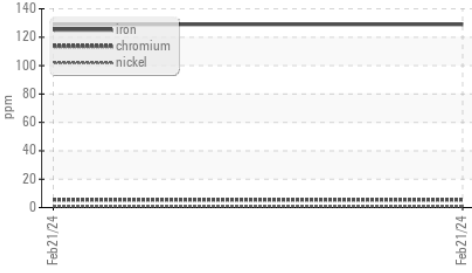
Silicon	ppm	ASTM D5185m	>25	<b>13</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>32</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.2</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

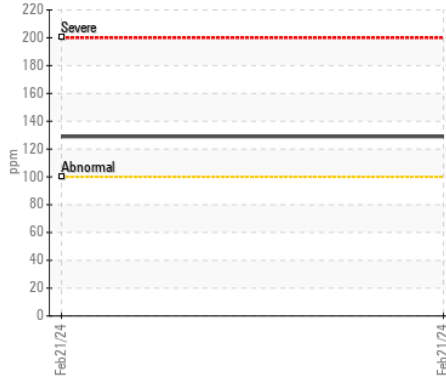
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>216	<b>4</b>	---	---
Boron	ppm	ASTM D5185m	250	<b>8</b>	---	---
Barium	ppm	ASTM D5185m	10	<b>3</b>	---	---
Molybdenum	ppm	ASTM D5185m	100	<b>63</b>	---	---
Manganese	ppm	ASTM D5185m		<b>3</b>	---	---
Magnesium	ppm	ASTM D5185m	450	<b>996</b>	---	---
Calcium	ppm	ASTM D5185m	3000	<b>1206</b>	---	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1187</b>	---	---
Zinc	ppm	ASTM D5185m	1350	<b>1303</b>	---	---
Sulfur	ppm	ASTM D5185m	4250	<b>3605</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.6</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.9</b>	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.5</b>	---	---

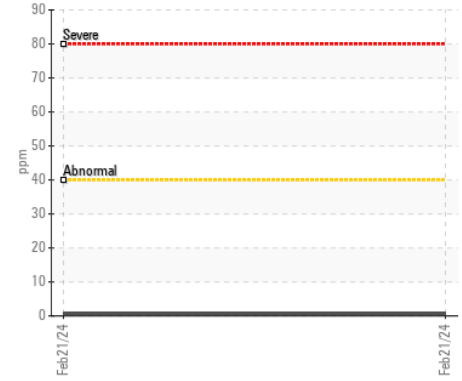
▲ Ferrous Alloys



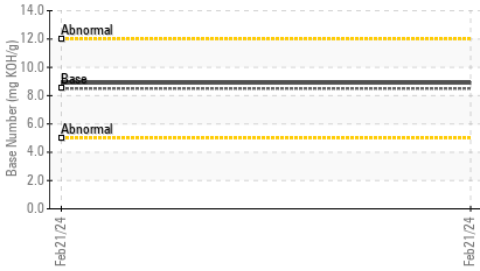
▲ Iron (ppm)



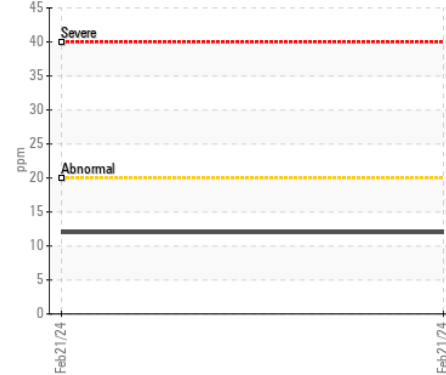
Lead (ppm)



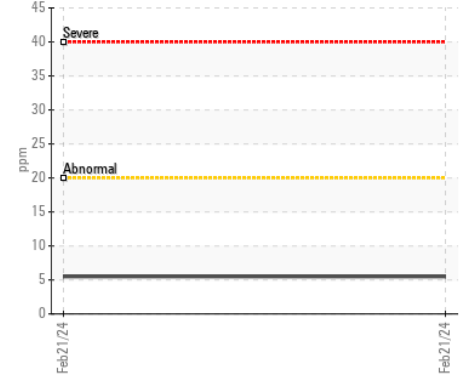
Base Number



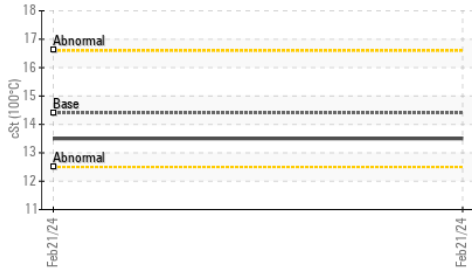
Aluminum (ppm)



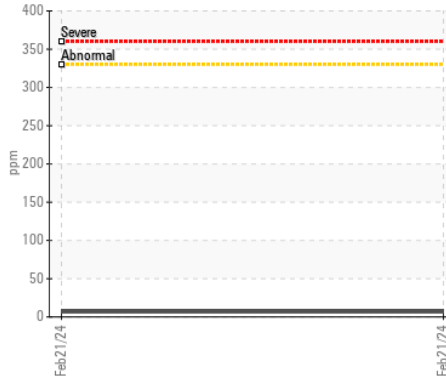
Chromium (ppm)



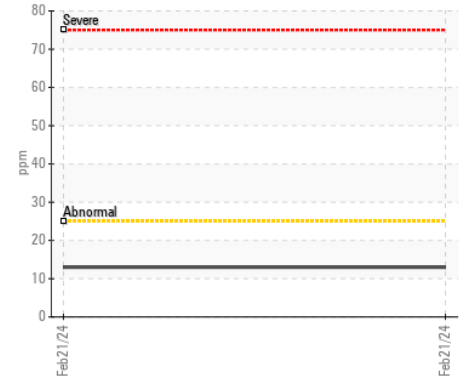
Viscosity @ 100°C



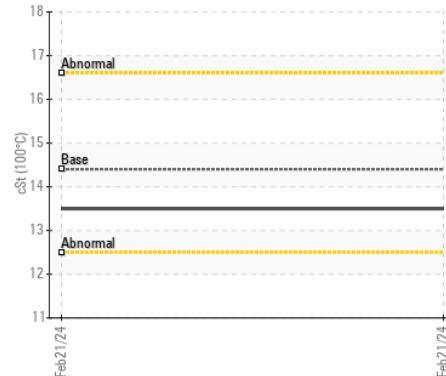
Copper (ppm)



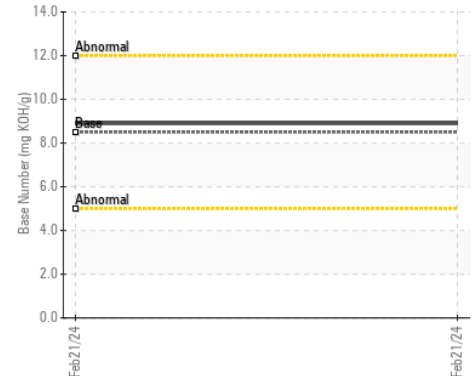
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0008593  
**Lab Number** : 06125453  
**Unique Number** : 10939604  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 21 Mar 2024  
**Tested** : 22 Mar 2024  
**Diagnosed** : 25 Mar 2024 - Don Baldrige

**LRS - NILES**  
 33541 REUM RD  
 NILES, MI  
 US 49120

Contact: JOHN HUGHES  
 johnh@michianarecyclinganddisposal.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: (269)684-0900 X:124  
 F: