



**LEAHY-WOLF**  
Lubricating specialists since 1946

**OIL ANALYSIS REPORT**

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

Machine Id  
**AUTO CAR 3016**  
Component  
**Diesel Engine**  
Fluid  
**NOT GIVEN (--- 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>LW0007897</b>	LW0007852	---
Sample Date		Client Info		<b>21 Feb 2024</b>	01 Dec 2023	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>41</b>	30	---
Chromium	ppm	ASTM D5185m	>20	<b>6</b>	4	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>30</b>	34	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

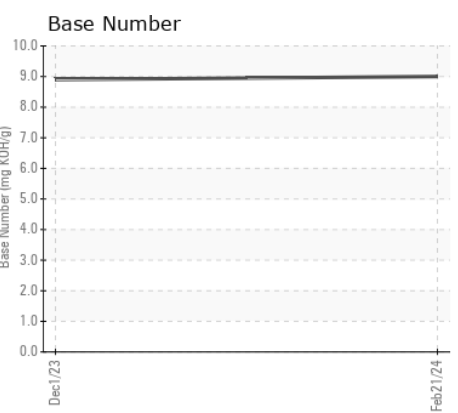
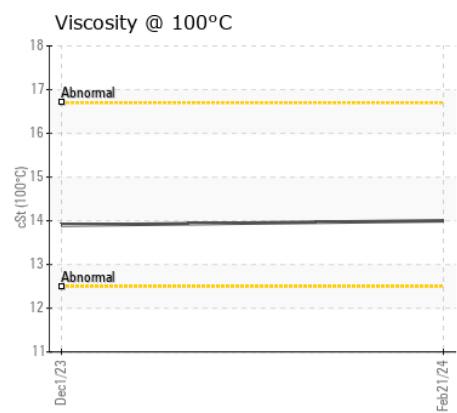
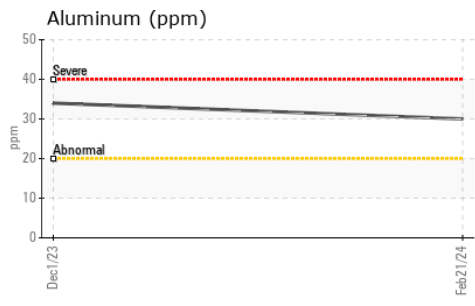
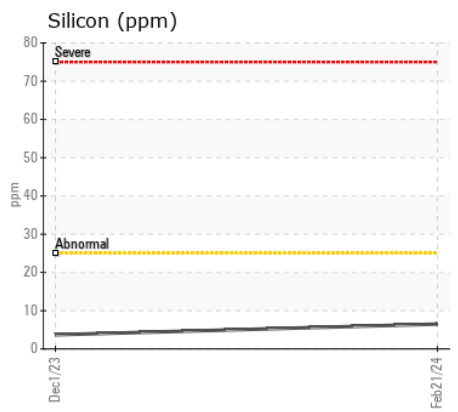
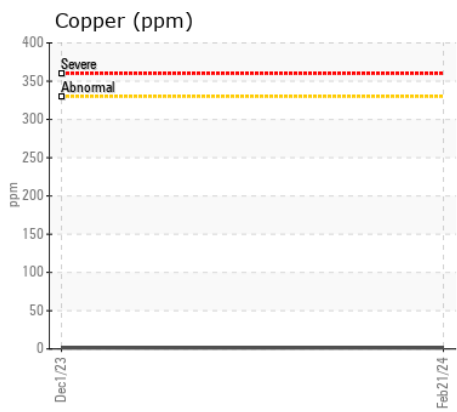
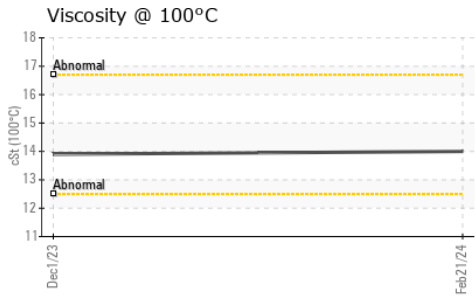
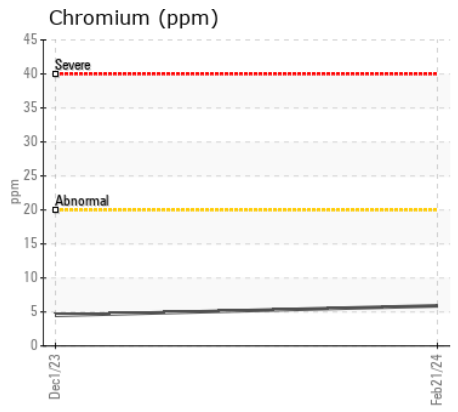
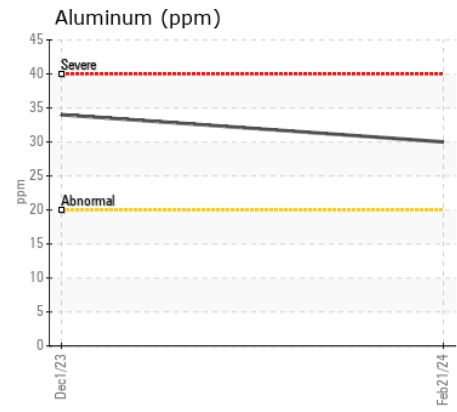
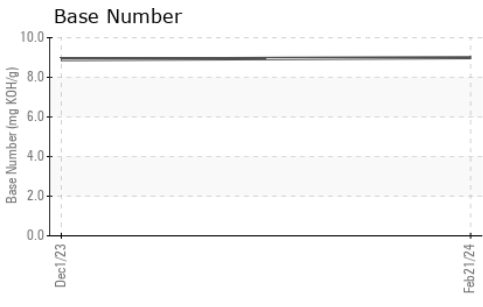
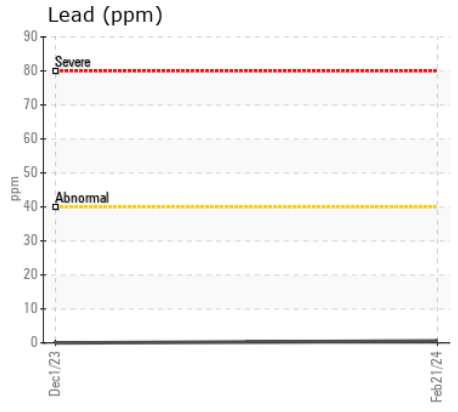
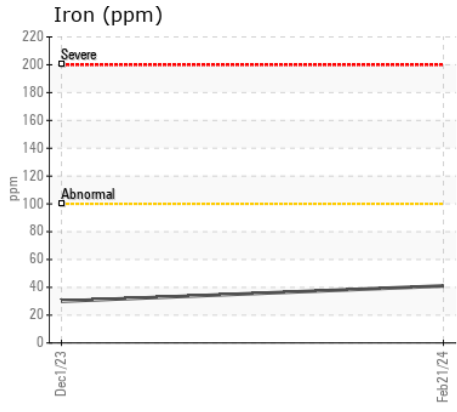
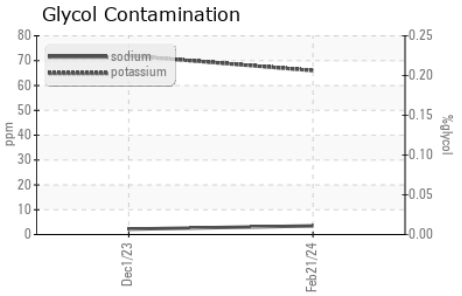
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	4	---
Potassium	ppm	ASTM D5185m	>20	<b>66</b>	72	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.0</b>	7.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.6</b>	18.9	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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>4</b>	2	---
Boron	ppm	ASTM D5185m		<b>6</b>	6	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>92</b>	56	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>1540</b>	912	---
Calcium	ppm	ASTM D5185m		<b>1672</b>	1020	---
Phosphorus	ppm	ASTM D5185m		<b>1729</b>	1004	---
Zinc	ppm	ASTM D5185m		<b>1988</b>	1224	---
Sulfur	ppm	ASTM D5185m		<b>5506</b>	3059	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	14.1	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.0</b>	8.9	---
Visc @ 100°C	cSt	ASTM D445		<b>14.0</b>	13.9	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0007897  
**Lab Number** : 06125446  
**Unique Number** : 10939597  
**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)

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