



**LEAHY-WOLF**  
Lubricating specialists since 1946



OIL ANALYSIS REPORT

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



Area  
**K5 CONSTRUCTION CORPORATION - HODGKINS IL**  
Machine Id  
**1858**  
Component  
**Diesel Engine**  
Fluid  
**LEAHY WOLF PREMIUM 15W40 (3 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LW0008515</b>	LW0008048	LW0005942
Sample Date		Client Info		<b>01 Feb 2024</b>	19 Sep 2023	16 Nov 2022
Machine Age	hrs	Client Info		<b>2392</b>	2125	1735
Oil Age	hrs	Client Info		<b>1743</b>	250	259
Filter Age	hrs	Client Info		<b>0</b>	250	259
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>55</b>	35	20
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>8</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>6</b>	5	11
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

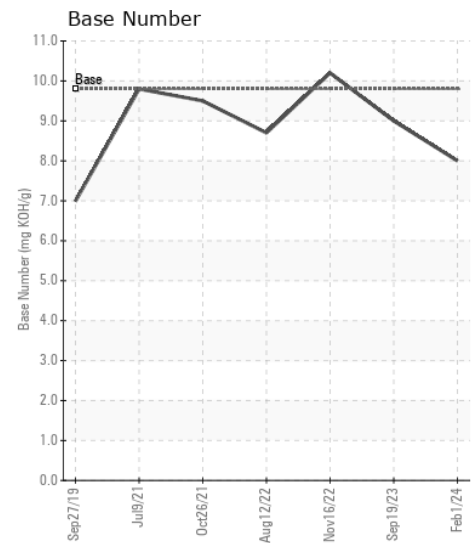
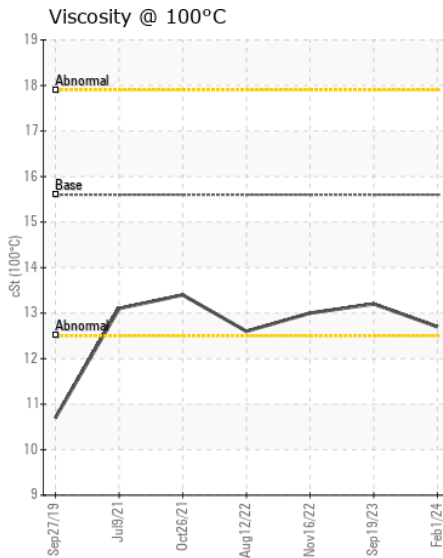
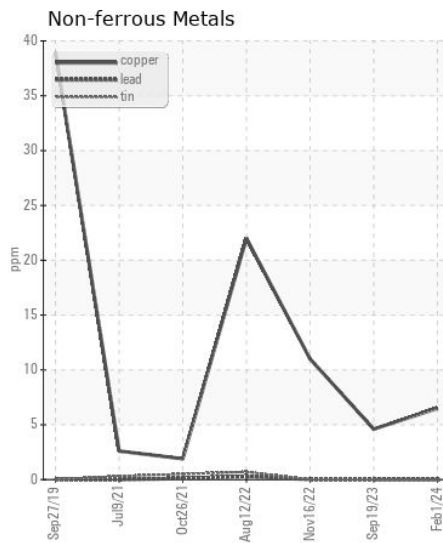
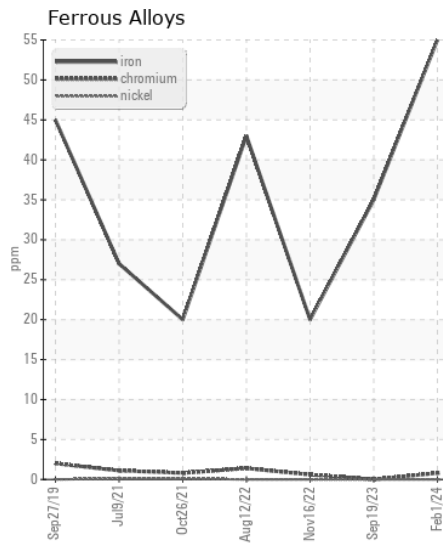
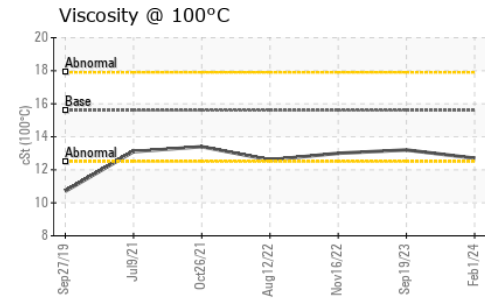
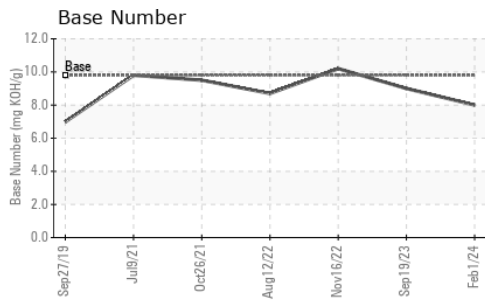
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	16	0
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>0.3</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	7.3	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.9</b>	18.6	20.3
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>0</b>	5	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	12	0
Molybdenum	ppm	ASTM D5185m		<b>65</b>	61	57
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>966</b>	969	874
Calcium	ppm	ASTM D5185m		<b>1070</b>	1132	1204
Phosphorus	ppm	ASTM D5185m		<b>991</b>	1052	1008
Zinc	ppm	ASTM D5185m		<b>1265</b>	1241	1188
Sulfur	ppm	ASTM D5185m		<b>2878</b>	3433	3571
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.7</b>	15.2	16.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.0</b>	9.0	10.2
Visc @ 100°C	cSt	ASTM D445	15.6	<b>12.7</b>	13.2	13.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0008515  
**Lab Number** : 06087029  
**Unique Number** : 10874474  
**Test Package** : FLEET

**Received** : 13 Feb 2024  
**Tested** : 14 Feb 2024  
**Diagnosed** : 14 Feb 2024 - Wes Davis

**K5 CONSTRUCTION CORPORATION**  
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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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F: