



**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  
**4128**

Component  
**Diesel Engine**

Fluid  
**LEAHY WOLF PREMIUM 15W40 (10 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LW0008546</b>	LW0008046	LW0006962
Sample Date		Client Info		<b>05 Feb 2024</b>	03 Oct 2023	12 May 2023
Machine Age	hrs	Client Info		<b>5414</b>	4851	3838
Oil Age	hrs	Client Info		<b>563</b>	528	523
Filter Age	hrs	Client Info		<b>563</b>	528	523
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>7</b>	27	7
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	0	4
Lead	ppm	ASTM D5185m	>45	<b>0</b>	2	0
Copper	ppm	ASTM D5185m	>85	<b>1</b>	3	<1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
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**

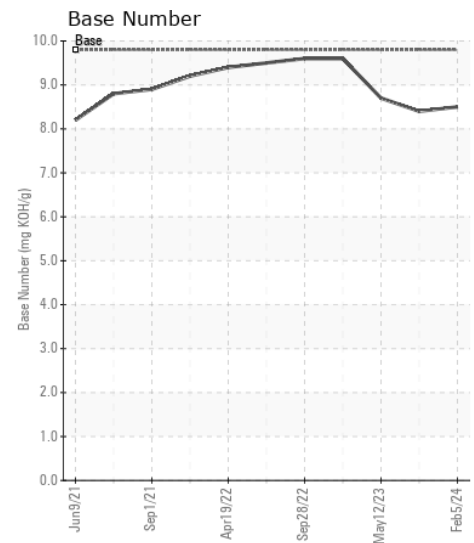
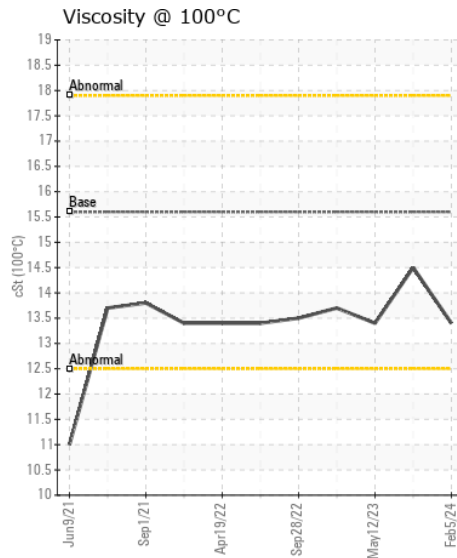
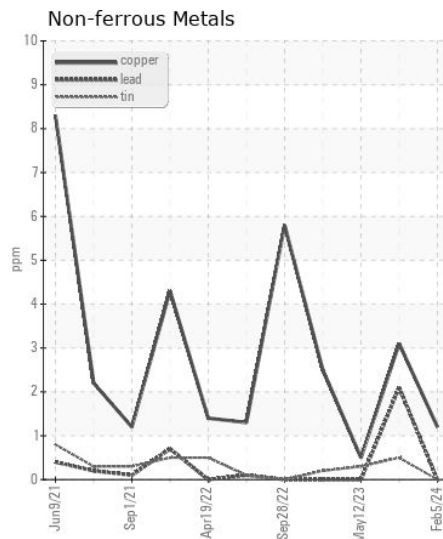
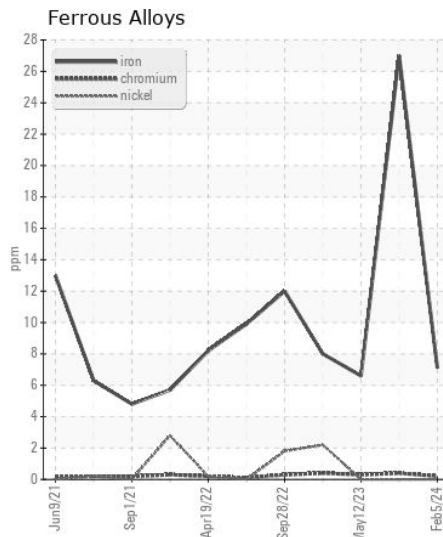
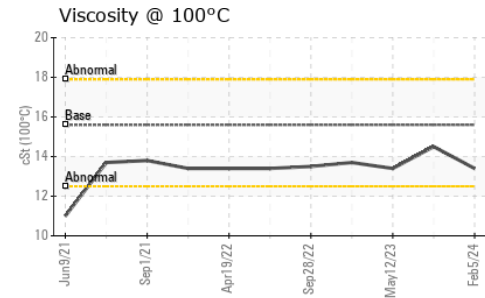
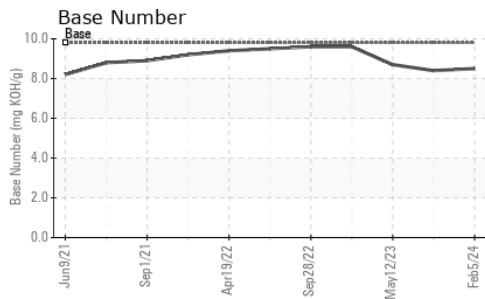
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>5</b>	3	5
Potassium	ppm	ASTM D5185m	>20	<b>14</b>	5	9
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>0.2</b>	2.5	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.3</b>	8.7	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.8</b>	23.8	19.0
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>	2	1
Boron	ppm	ASTM D5185m		<b>0</b>	0	5
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>65</b>	59	58
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>986</b>	965	966
Calcium	ppm	ASTM D5185m		<b>1092</b>	1085	1185
Phosphorus	ppm	ASTM D5185m		<b>980</b>	1023	1067
Zinc	ppm	ASTM D5185m		<b>1281</b>	1274	1321
Sulfur	ppm	ASTM D5185m		<b>2916</b>	3162	3748
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.7</b>	17.0	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.5</b>	8.4	8.7
Visc @ 100°C	cSt	ASTM D445	15.6	<b>13.4</b>	14.5	13.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0008546  
**Lab Number** : 06087065  
**Unique Number** : 10874510  
**Test Package** : FLEET

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

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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)