



**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  
**4270**  
Component  
**Diesel Engine**  
Fluid  
**LEAHY WOLF PREMIUM 15W40 (9 hrs)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LW0009465</b>	LW0008102	LW0006449
Sample Date		Client Info		<b>27 Jun 2024</b>	19 Sep 2023	22 Dec 2022
Machine Age	hrs	Client Info		<b>492776</b>	492776	492776
Oil Age	hrs	Client Info		<b>492776</b>	492776	502
Filter Age	hrs	Client Info		<b>0</b>	0	502
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	>120	<b>19</b>	9	19
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>14</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	1	<1
Lead	ppm	ASTM D5185m	>40	<b>4</b>	0	5
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

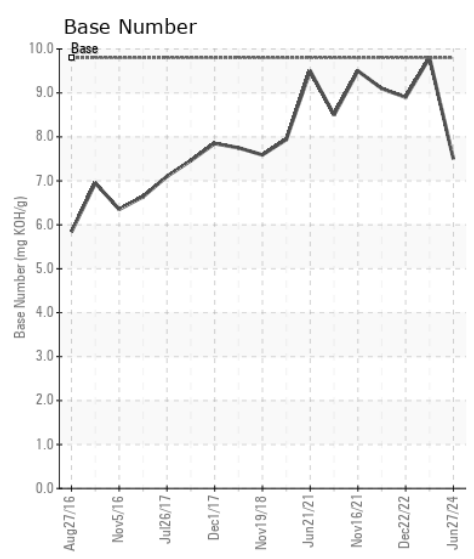
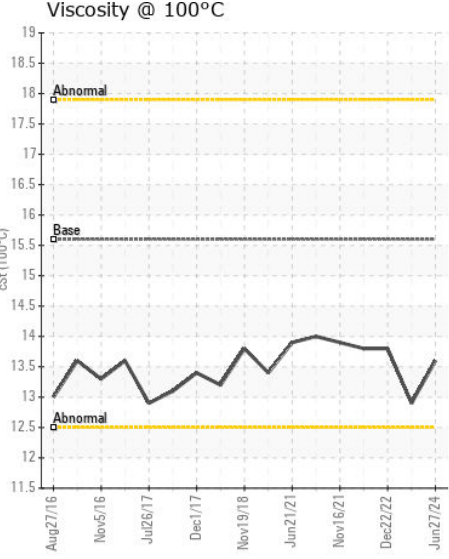
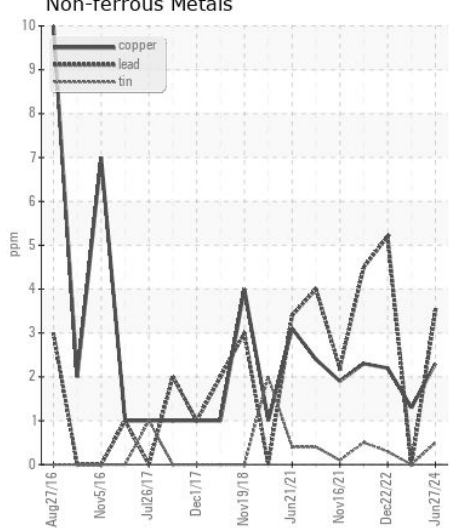
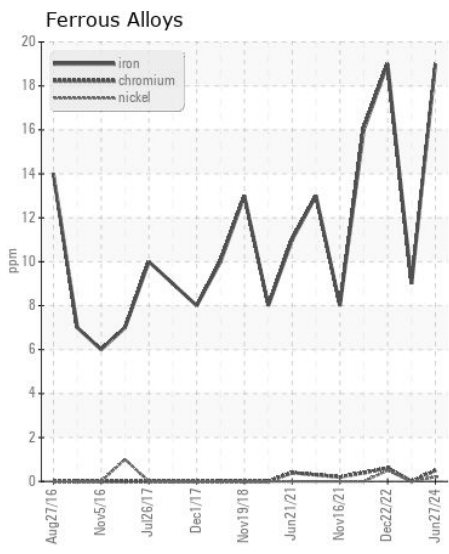
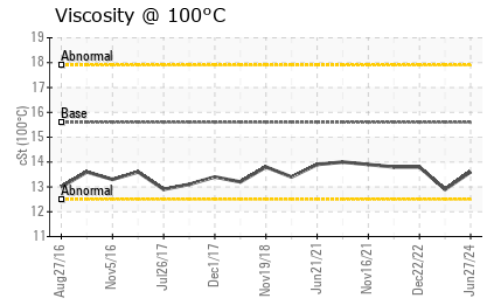
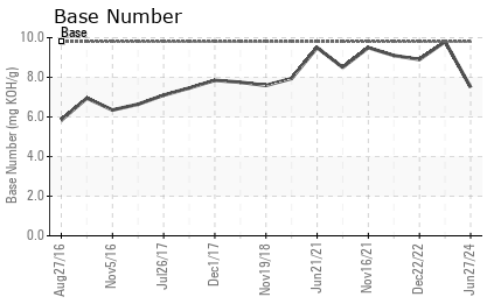
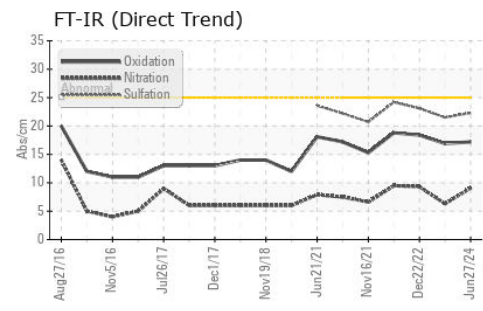
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	5	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	15	1
Fuel		WC Method	>3.0	<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	>4	<b>1.9</b>	1	1.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	6.3	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.3</b>	21.5	23.1
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	2
Boron	ppm	ASTM D5185m		<b>14</b>	15	4
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	12	0
Molybdenum	ppm	ASTM D5185m		<b>49</b>	55	54
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>802</b>	838	825
Calcium	ppm	ASTM D5185m		<b>1082</b>	1257	1079
Phosphorus	ppm	ASTM D5185m		<b>843</b>	960	942
Zinc	ppm	ASTM D5185m		<b>1089</b>	1128	1149
Sulfur	ppm	ASTM D5185m		<b>2399</b>	3304	3133
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.2</b>	16.9	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.5</b>	9.8	8.9
Visc @ 100°C	cSt	ASTM D445	15.6	<b>13.6</b>	12.9	13.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0009465  
**Lab Number** : 06225777  
**Unique Number** : 11109270  
**Test Package** : FLEET  
**Received** : 02 Jul 2024  
**Tested** : 03 Jul 2024  
**Diagnosed** : 03 Jul 2024 - Wes Davis

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Certificate L2367  
 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)