



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



Area  
**K5 CONSTRUCTION CORPORATION - HODGKINS IL**  
Machine Id  
**1861**  
Component  
**Diesel Engine**  
Fluid  
**LEAHY WOLF PREMIUM 15W40 (9 LTR)**

**RECOMMENDATION**

Oil and filter change at the time of sampling has been noted. 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>PCA0122002</b>	LW0007433	LW0007020
Sample Date		Client Info		<b>19 Apr 2024</b>	18 Jul 2023	02 May 2023
Machine Age	hrs	Client Info		<b>1892</b>	1660	1360
Oil Age	hrs	Client Info		<b>232</b>	1426	234
Filter Age	hrs	Client Info		<b>232</b>	1426	234
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>8</b>	34	26
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	6	5
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>7</b>	264	182
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	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**

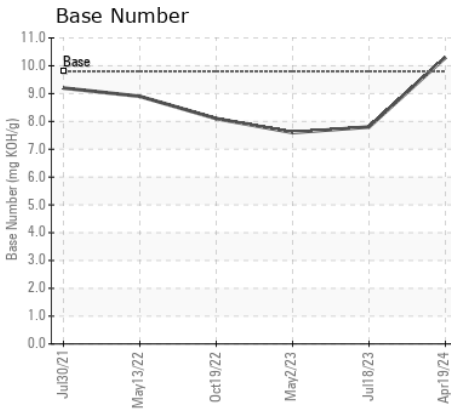
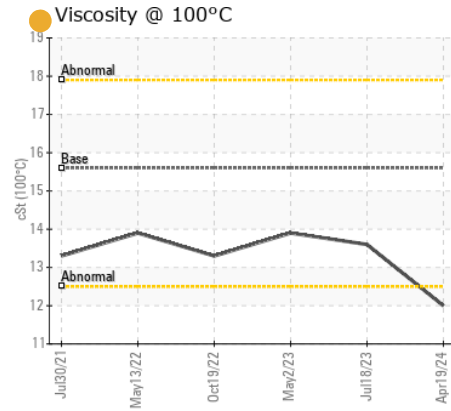
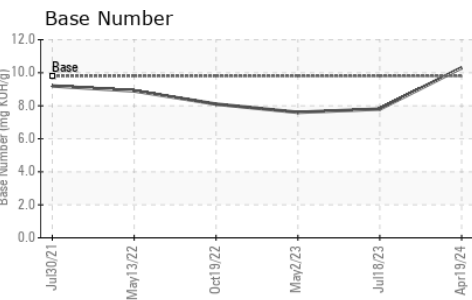
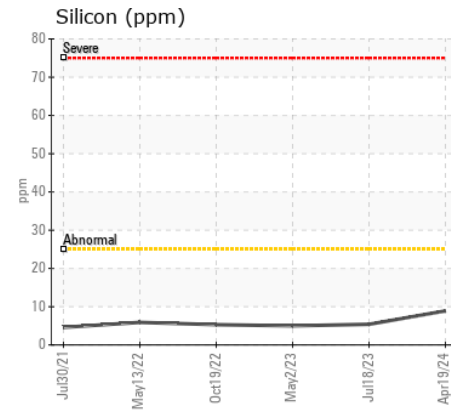
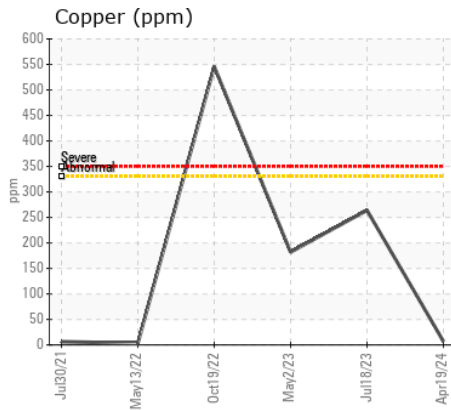
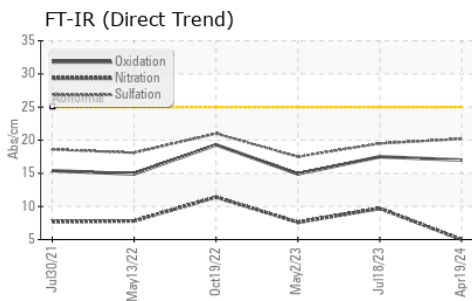
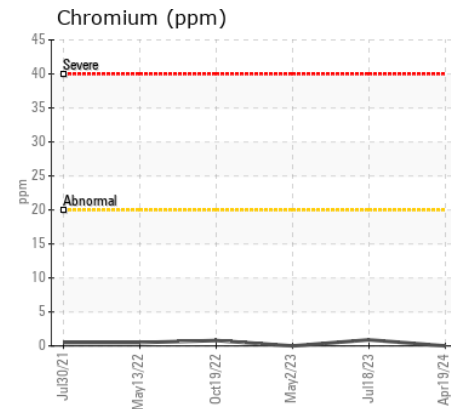
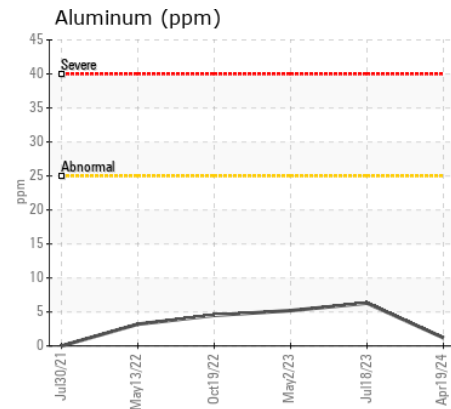
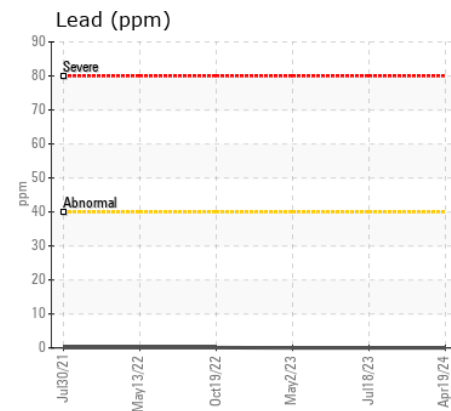
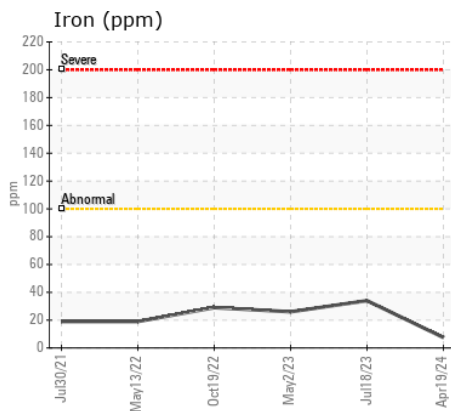
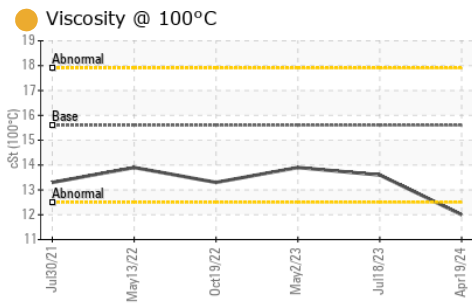
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>9</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Fuel	%	ASTM D3524	>5	<b>0.3</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>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.0</b>	9.7	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.2</b>	19.5	17.5
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	0
Boron	ppm	ASTM D5185m		<b>48</b>	2	<1
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>44</b>	61	54
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>672</b>	1011	941
Calcium	ppm	ASTM D5185m		<b>1639</b>	1210	1085
Phosphorus	ppm	ASTM D5185m		<b>1002</b>	1058	972
Zinc	ppm	ASTM D5185m		<b>1254</b>	1357	1249
Sulfur	ppm	ASTM D5185m		<b>3938</b>	3222	2997
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.0</b>	17.5	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>10.3</b>	7.8	7.6
Visc @ 100°C	cSt	ASTM D445	15.6	<b>12.0</b>	13.6	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0122002 **Received** : 25 Apr 2024  
**Lab Number** : 06160073 **Tested** : 29 Apr 2024  
**Unique Number** : 10995496 **Diagnosed** : 29 Apr 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

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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)