



WEAR **NORMAL**

CONTAMINATION **NORMAL**

FLUID CONDITION **NORMAL**

OIL ANALYSIS REPORT



Area  
**K5 CONSTRUCTION CORPORATION - HODGKINS IL**  
Machine Id  
**1112**  
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>LW0009266</b>	LW0008487	LW0007721
Sample Date		Client Info		<b>21 May 2024</b>	11 Dec 2023	06 Sep 2023
Machine Age	hrs	Client Info		<b>136842</b>	136842	136842
Oil Age	hrs	Client Info		<b>0</b>	136842	136842
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>20</b>	15	6
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>40	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>14</b>	17	10
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</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.

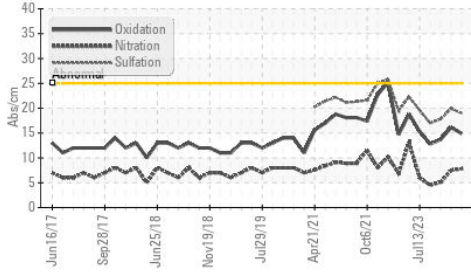
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	7	5
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	7.5	5.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.0</b>	19.9	17.8
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**

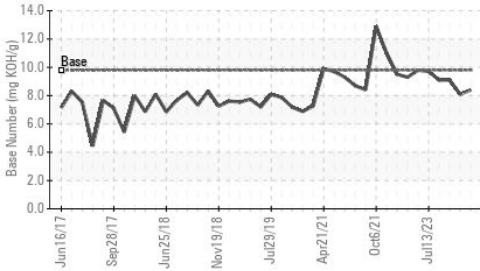
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>5</b>	21	16
Boron	ppm	ASTM D5185m		<b>0</b>	3	4
Barium	ppm	ASTM D5185m		<b>0</b>	12	0
Molybdenum	ppm	ASTM D5185m		<b>61</b>	62	61
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>1071</b>	897	1051
Calcium	ppm	ASTM D5185m		<b>1250</b>	1073	1199
Phosphorus	ppm	ASTM D5185m		<b>1148</b>	976	1130
Zinc	ppm	ASTM D5185m		<b>1433</b>	1188	1431
Sulfur	ppm	ASTM D5185m		<b>4113</b>	3130	4309
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.9</b>	16.1	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.4</b>	8.1	9.1
Visc @ 100°C	cSt	ASTM D445	15.6	<b>13.0</b>	13.0	13.8

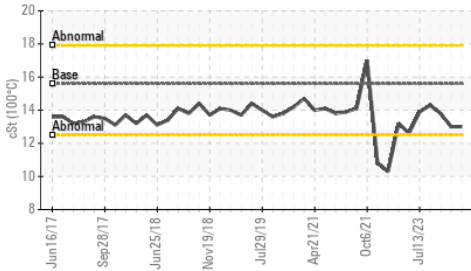
**FT-IR (Direct Trend)**



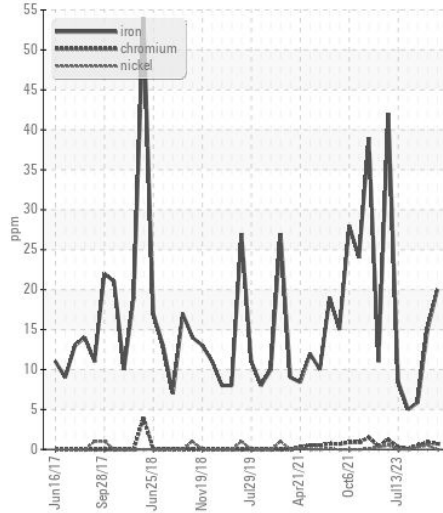
**Base Number**



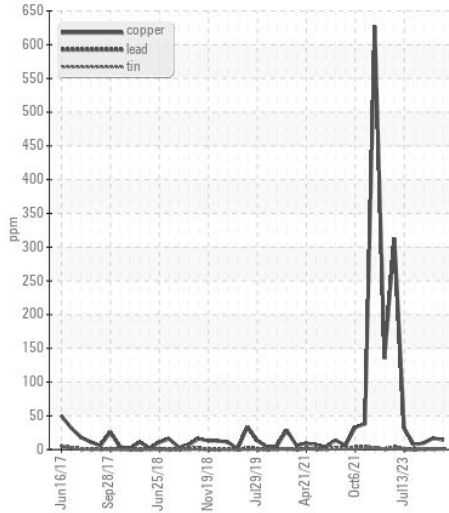
**Viscosity @ 100°C**



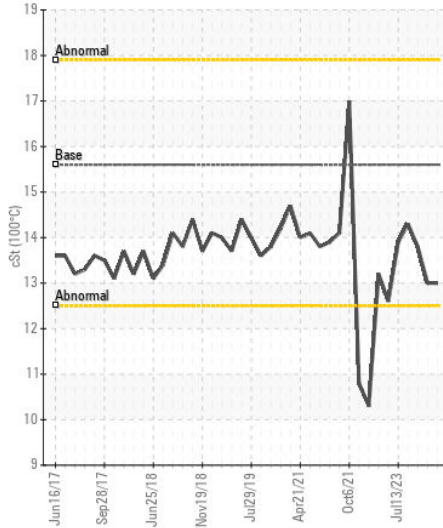
**Ferrous Alloys**



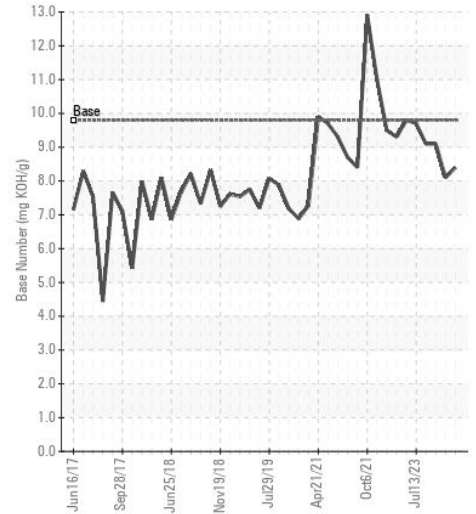
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0009266  
**Lab Number** : 06193189  
**Unique Number** : 11049941  
**Test Package** : FLEET

**Received** : 28 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 30 May 2024 - Wes Davis

**K5 CONSTRUCTION CORPORATION**  
 6301 S EAST AVENUE  
 HODGKINS, IL  
 US 60525  
 Contact: Dave Gorski  
 daveg@k-five.net  
 T: (630)257-5600  
 F:

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)