



**LEAHY-WOLF**  
Lubricating specialists since 1946



OIL ANALYSIS REPORT

WEAR **NORMAL**

CONTAMINATION **NORMAL**

FLUID CONDITION **NORMAL**



Area  
**K5 CONSTRUCTION CORPORATION - HODGKINS IL**  
Machine Id  
**1718**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (8 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LW0008900</b>	LW0007509	LW0007174
Sample Date		Client Info		<b>05 Feb 2024</b>	24 Jul 2023	23 May 2023
Machine Age	hrs	Client Info		<b>2742</b>	2382	1831
Oil Age	hrs	Client Info		<b>2191</b>	258	580
Filter Age	hrs	Client Info		<b>0</b>	258	580
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>19</b>	9	19
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	<1	1
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	2
Copper	ppm	ASTM D5185m	>330	<b>3</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

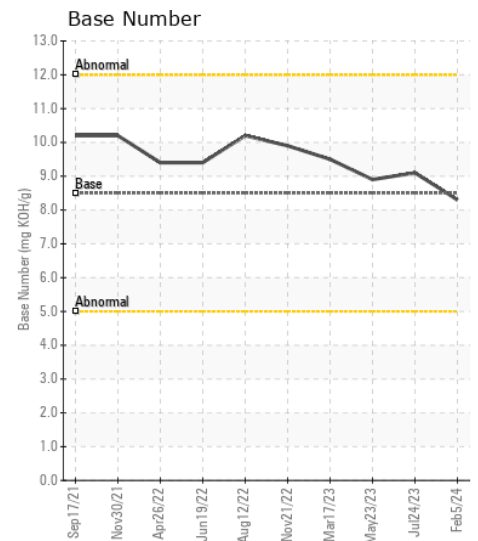
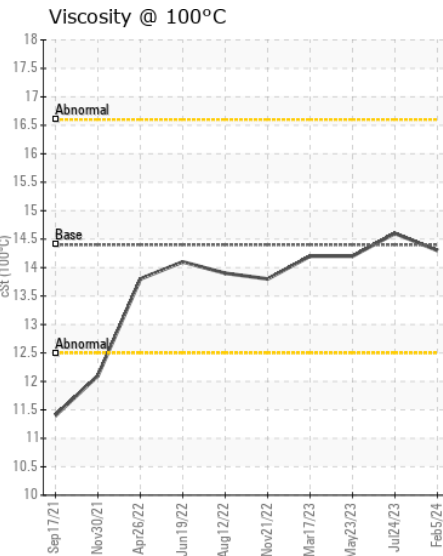
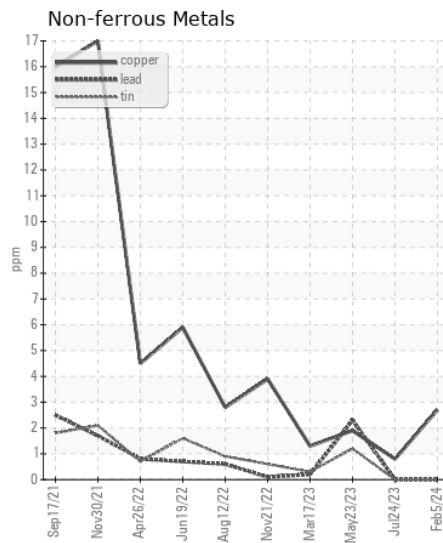
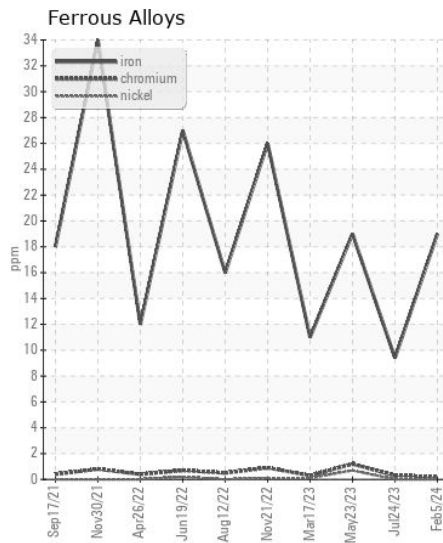
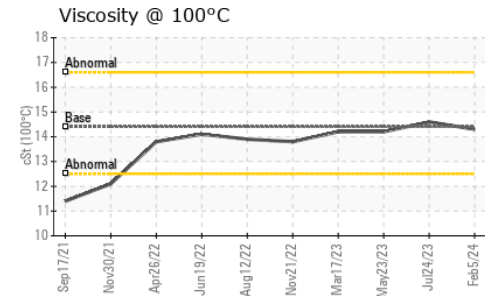
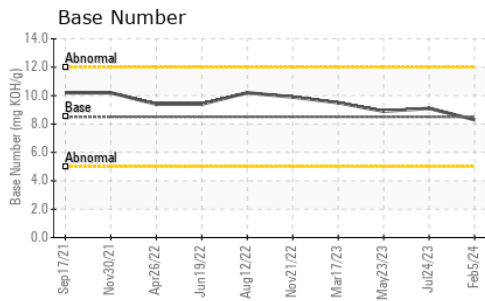
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	3	5
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	<1	4
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>1.1</b>	0.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	6.2	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.8</b>	18.8	19.1
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	>158	<b>&lt;1</b>	1	1
Boron	ppm	ASTM D5185m	250	<b>0</b>	2	3
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>63</b>	60	57
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185m	450	<b>956</b>	997	1037
Calcium	ppm	ASTM D5185m	3000	<b>1109</b>	1117	1320
Phosphorus	ppm	ASTM D5185m	1150	<b>980</b>	1066	1055
Zinc	ppm	ASTM D5185m	1350	<b>1214</b>	1292	1381
Sulfur	ppm	ASTM D5185m	4250	<b>3012</b>	3770	3992
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.7</b>	14.0	14.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.3</b>	9.1	8.9
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.3</b>	14.6	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0008900  
**Lab Number** : 06087061  
**Unique Number** : 10874506  
**Test Package** : FLEET

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

**K5 CONSTRUCTION CORPORATION**  
 6301 S EAST AVENUE  
 HODGKINS, IL  
 US 60525  
 Contact: DAVE GORSKI  
 daveg@k-five.net

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: