



WEAR **NORMAL**

CONTAMINATION **NORMAL**

FLUID CONDITION **NORMAL**

OIL ANALYSIS REPORT



Area  
**K5 CONSTRUCTION CORPORATION - HODGKINS IL**  
Machine Id  
**1133**  
Component  
**Diesel Engine**  
Fluid  
**LEAHY WOLF PREMIUM 15W40 (10 GAL)**

**RECOMMENDATION**

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LW0008414</b>	LW0008895	LW0008377
Sample Date		Client Info		<b>19 Apr 2024</b>	05 Feb 2024	20 Nov 2023
Machine Age	hrs	Client Info		<b>6788</b>	4515	3784
Oil Age	hrs	Client Info		<b>6057</b>	731	3488
Filter Age	hrs	Client Info		<b>0</b>	0	3488
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	>51	<b>21</b>	13	19
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	2	6
Lead	ppm	ASTM D5185m	>26	<b>0</b>	<1	4
Copper	ppm	ASTM D5185m	>26	<b>6</b>	5	7
Tin	ppm	ASTM D5185m	>4	<b>2</b>	1	2
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**

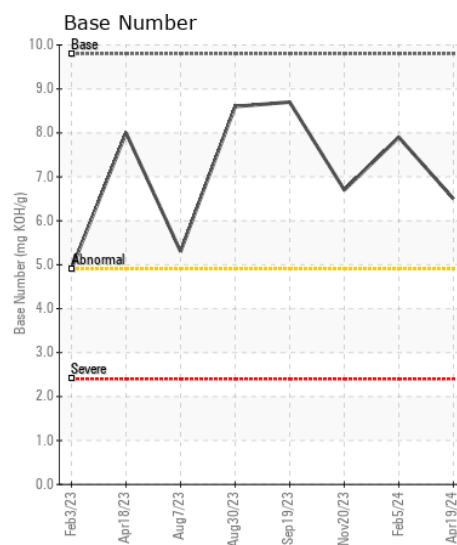
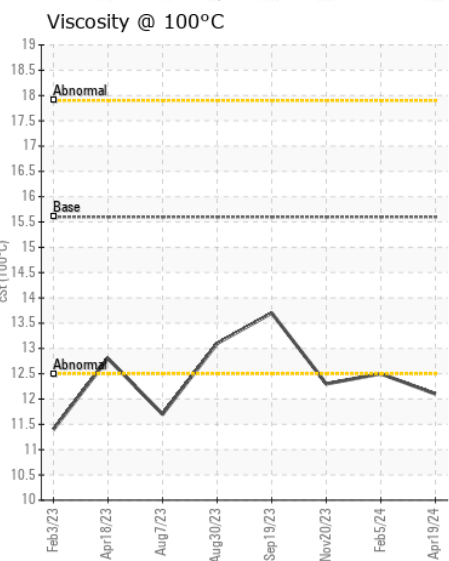
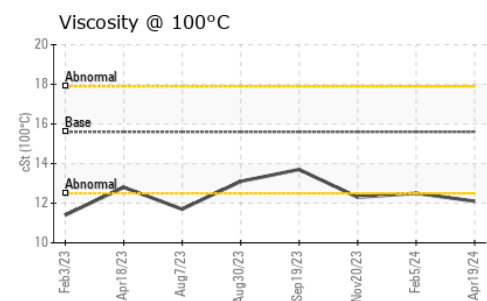
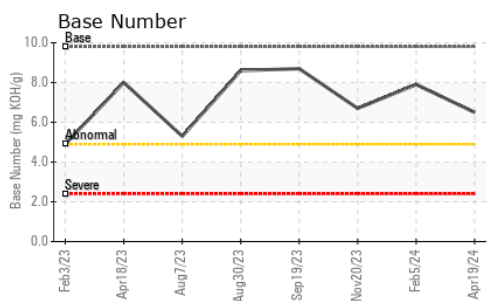
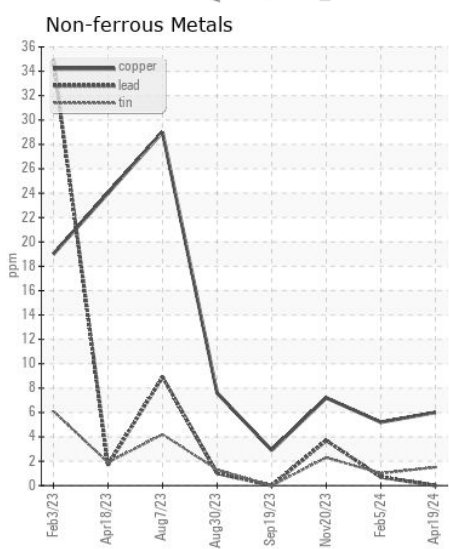
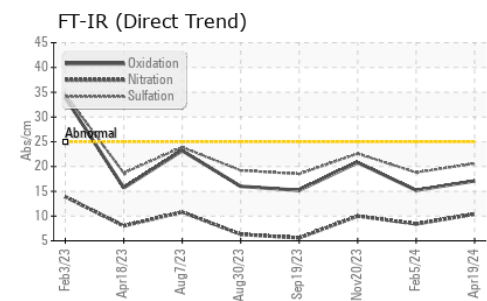
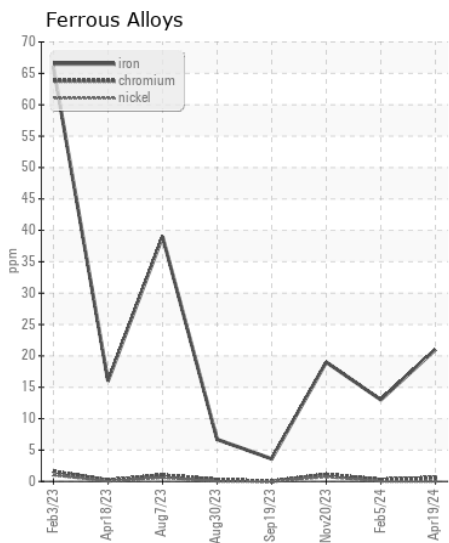
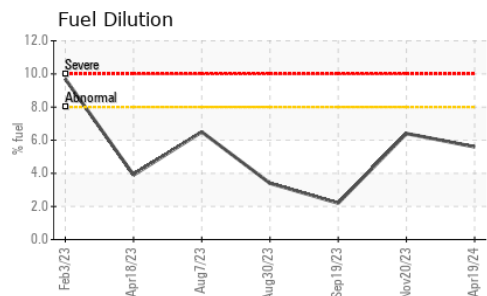
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>3</b>	3	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	1
Fuel	%	ASTM D3524	>8.0	<b>5.6</b>	<1.0	6.4
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	8.4	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.6</b>	18.8	22.6
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	>0.21	<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	>31	<b>3</b>	1	10
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>58</b>	62	60
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>924</b>	936	878
Calcium	ppm	ASTM D5185m		<b>1100</b>	1055	1192
Phosphorus	ppm	ASTM D5185m		<b>971</b>	949	1026
Zinc	ppm	ASTM D5185m		<b>1225</b>	1221	1223
Sulfur	ppm	ASTM D5185m		<b>3208</b>	2861	2499
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.1</b>	15.2	20.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.5</b>	7.9	6.7
Visc @ 100°C	cSt	ASTM D445	15.6	<b>12.1</b>	12.5	12.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0008414 **Received** : 24 Apr 2024  
**Lab Number** : 06158923 **Tested** : 26 Apr 2024  
**Unique Number** : 10994346 **Diagnosed** : 26 Apr 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

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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)