			WEAR			NORMAL		
LEAHY-WOLF Lubricating specialists since 1946			CONTAMINATION			NORMAL		
OIL ANALYSIS REPORT		F	FLUID CONDITION			NORMAL		
							NOTIMAL	
K5 CONSTRUCTION CORPORATION - HODGKINS IL Machine Id 1133 Component Diesel Engine Fluid LEAHY WOLF PREMIUM 15W40 (10 GAL)								
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2	
	Sample Number	0.0111	Client Info		LW0008895	LW0008377	LW0008052	
Resample at the next service interval to monitor.	Sample Date		Client Info		05 Feb 2024	20 Nov 2023	19 Sep 2023	
	Machine Age	hrs	Client Info		4515	3784	3784	
	Oil Age	hrs	Client Info		731	3488	3784	
	Filter Age	hrs	Client Info		0	3488	0	
	Oil Changed		Client Info		Not Changd	Changed	Not Changd	
	Filter Changed		Client Info		Not Changd	Changed	Not Changd	
	Sample Status				NORMAL	NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m		13	19	4	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	1	0	
	Nickel	ppm	ASTM D5185m	>5	0	<1	0	
	Titanium	ppm	ASTM D5185m		<1	<1	0	
	Silver	ppm	ASTM D5185m		0	0	0	
	Aluminum	ppm	ASTM D5185m		2	6	1	
	Lead	ppm	ASTM D5185m		<1	4	0	
	Copper	ppm	ASTM D5185m		5	7	3	
	Tin	ppm	ASTM D5185m	>4	1	2	0	
	Vanadium	ppm	ASTM D5185m		0	<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	3	5	2	
	Potassium	ppm	ASTM D5185m		2	1	13	
There is no indication of any contamination in the oil.	Fuel	pp	WC Method	>2.1	- <1.0	6.4	▲ 2.2	
	Water		WC Method		NEG	NEG	NEG	
	Glycol		WC Method		NEG	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.3	0.5	0.1	
	Nitration	Abs/cm	*ASTM D7624		8.4	10.0	5.6	
	Sulfation	Abs/.1mm	*ASTM D7415		18.8	22.6	18.5	
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
	Emulsified Water		*Visual	>0.21	NEG	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	1	10	6	
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		0	0	0	
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	12	
	Molybdenum	ppm	ASTM D5185m		62	60	57	
	Manganaaa	10.10.100	ACTM DE10Em				0	

Manganese

Magnesium

Phosphorus

Calcium

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

ASTM D5185m

ASTM D5185m

ASTM D5185m

ASTM D5185m

ASTM D445 15.6

Abs/.1mm \*ASTM D7414 >25

ppm ASTM D5185m

ppm ASTM D5185m

ppm

ppm

ppm

ppm

Base Number (BN) mg KOH/g ASTM D2896 9.8

0

936

1055

949

1221

2861

15.2

7.9

12.5

<1

878

1192

1026

1223

2499

20.8

6.7

12.3

910

1138

1216

15.2

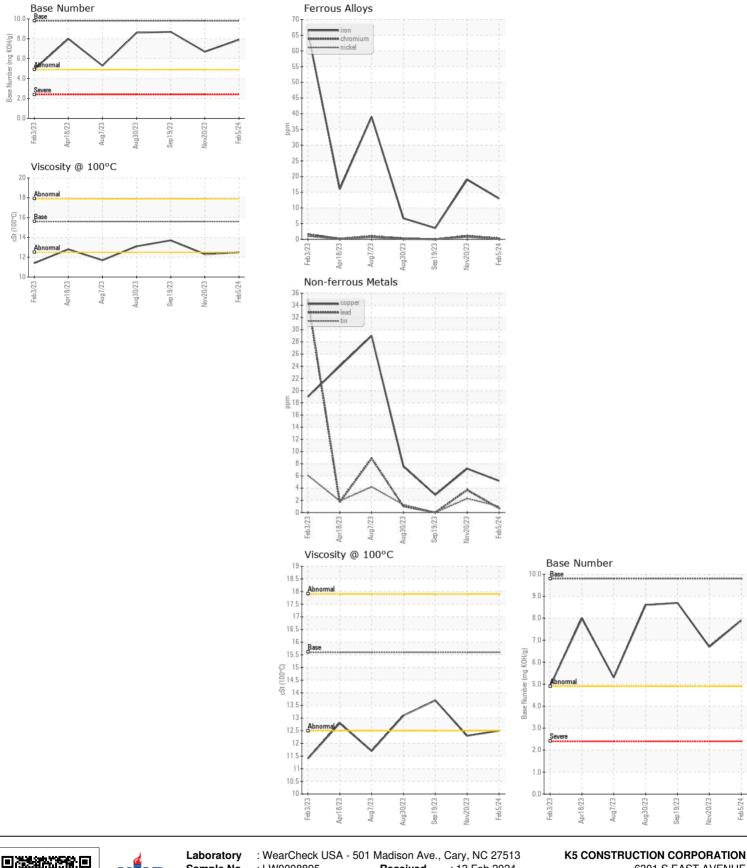
8.7

13.7

3509

1035

0



 Lab Number : 06087063
 Tested : 14 Feb 2024

 Unique Number : 10874508
 Diagnosed : 14 Feb 2024 - Wes Davis

 Certificate 12367
 Test Package : FLEET

 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)

Received

: 13 Feb 2024

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

EØ.

Sample No.

: LW0008895

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