



WEAR **NORMAL**

CONTAMINATION **NORMAL**

FLUID CONDITION **NORMAL**

OIL ANALYSIS REPORT



Area
K5 CONSTRUCTION CORPORATION - HODGKINS IL
Machine Id
1179
Component
Diesel Engine
Fluid
LEAHY WOLF PREMIUM 15W40 (9 hrs)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LW0009223	LW0009264	LW0008367
Sample Date		Client Info		27 Jun 2024	13 May 2024	11 Dec 2023
Machine Age	hrs	Client Info		14295	14295	14295
Oil Age	hrs	Client Info		11222	14295	14295
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	30	13	36
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	1
Titanium	ppm	ASTM D5185m	>2	<1	2	1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>25	3	1	2
Lead	ppm	ASTM D5185m	>40	2	0	2
Copper	ppm	ASTM D5185m	>330	70	25	54
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

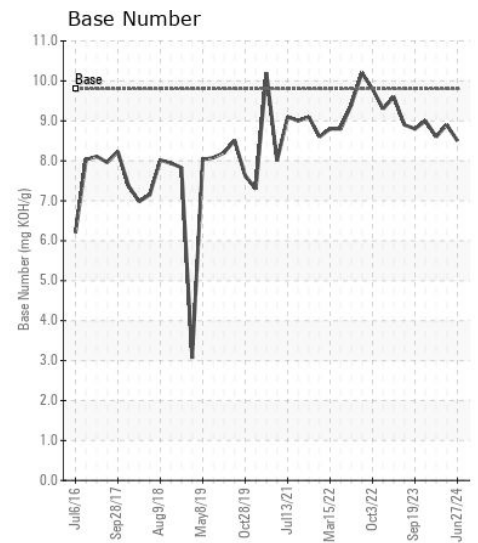
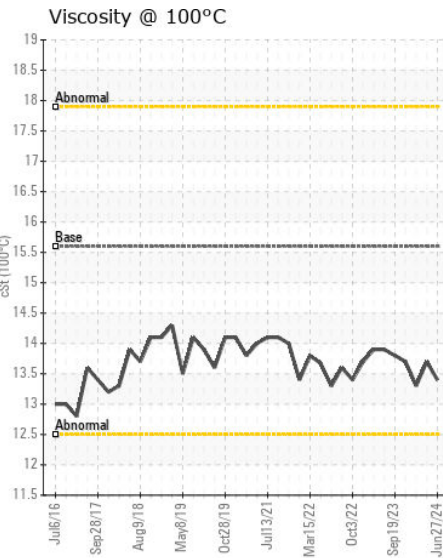
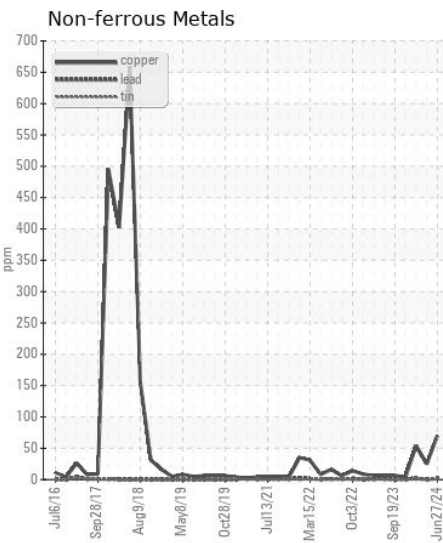
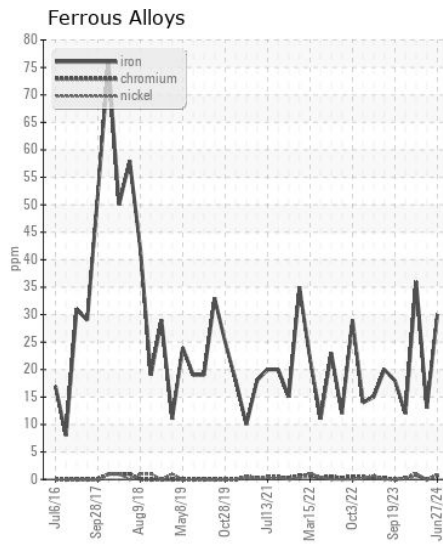
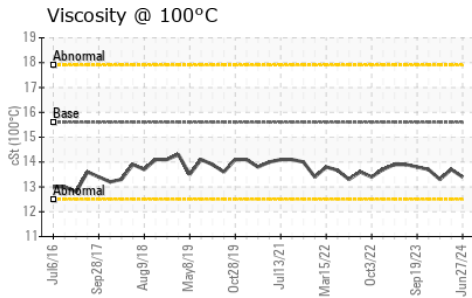
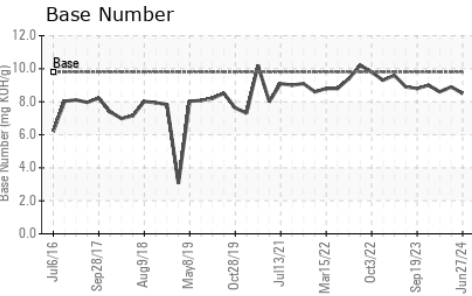
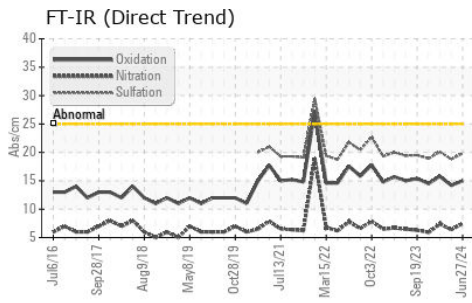
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	3	4
Potassium	ppm	ASTM D5185m	>20	2	1	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	7.5	6.4	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	18.8	20.1
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	scalar	*Visual	>0.2	NEG	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		<1	2	0
Boron	ppm	ASTM D5185m		2	1	3
Barium	ppm	ASTM D5185m		<1	0	12
Molybdenum	ppm	ASTM D5185m		58	58	57
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		884	928	903
Calcium	ppm	ASTM D5185m		1121	1099	1092
Phosphorus	ppm	ASTM D5185m		985	1018	997
Zinc	ppm	ASTM D5185m		1203	1261	1213
Sulfur	ppm	ASTM D5185m		2726	3612	3096
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.0	14.2	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.5	8.9	8.6
Visc @ 100°C	cSt	ASTM D445	15.6	13.4	13.7	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LW0009223
Lab Number : 06225794
Unique Number : 11109287
Test Package : FLEET

Received : 02 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 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)