



WEAR **NORMAL**

CONTAMINATION **NORMAL**

FLUID CONDITION **NORMAL**

OIL ANALYSIS REPORT



Area
K5 CONSTRUCTION CORPORATION - HODGKINS IL
Machine Id
1117
Component
Diesel Engine
Fluid
LEAHY WOLF PREMIUM 15W40 (3 hrs)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LW0008904	LW0007743	LW0006492
Sample Date		Client Info		05 Feb 2024	23 Aug 2023	17 Mar 2023
Machine Age	hrs	Client Info		2944	2399	2399
Oil Age	hrs	Client Info		545	1927	234
Filter Age	hrs	Client Info		0	1927	234
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	15	35	20
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	3	4	4
Lead	ppm	ASTM D5185m	>26	0	0	0
Copper	ppm	ASTM D5185m	>26	9	▲ 26	6
Tin	ppm	ASTM D5185m	>4	0	<1	<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

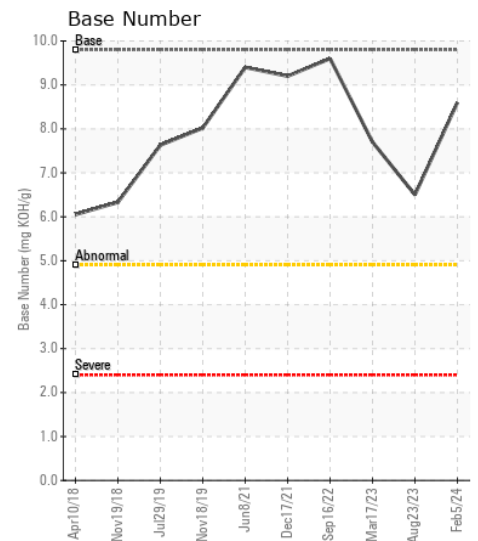
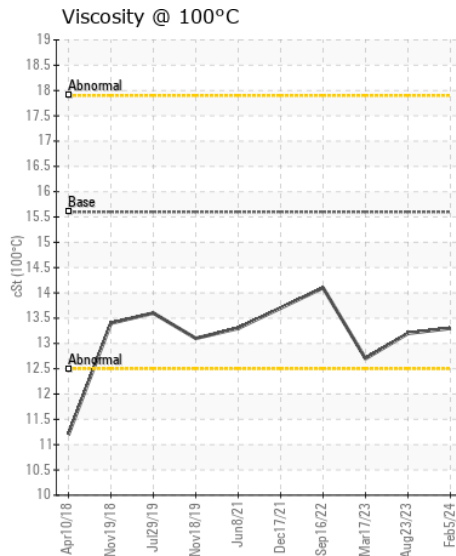
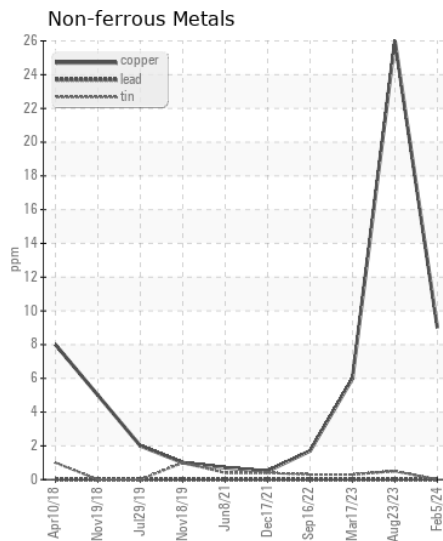
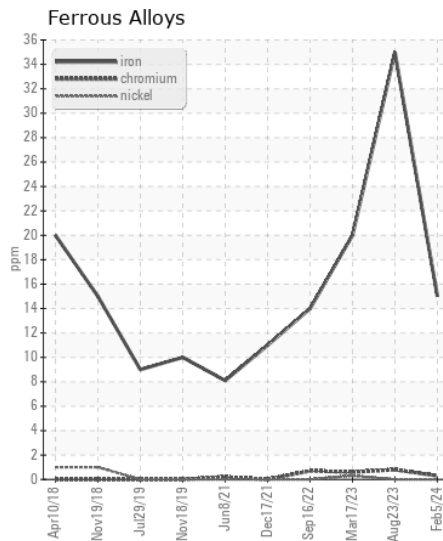
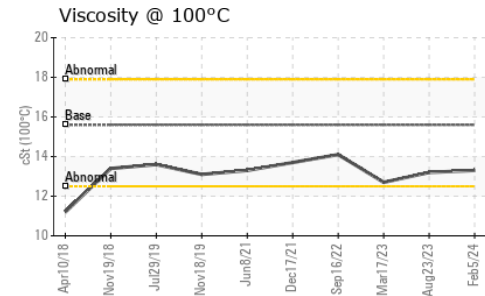
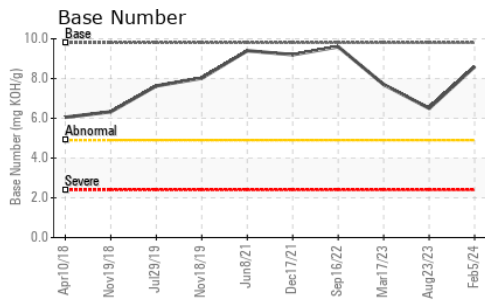
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	9	11	8
Potassium	ppm	ASTM D5185m	>20	2	0	2
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.5	11.7	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	22.9	20.8
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	>0.21	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	>31	<1	2	0
Boron	ppm	ASTM D5185m		4	<1	1
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		85	62	58
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		1298	995	878
Calcium	ppm	ASTM D5185m		1486	1177	1113
Phosphorus	ppm	ASTM D5185m		1364	1019	1005
Zinc	ppm	ASTM D5185m		1746	1263	1239
Sulfur	ppm	ASTM D5185m		4247	3397	3094
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	22.9	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.6	6.5	7.7
Visc @ 100°C	cSt	ASTM D445	15.6	13.3	13.2	12.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LW0008904
Lab Number : 06087060
Unique Number : 10874505
Test Package : FLEET

Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Don Baldrige

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)