



Area
K5 CONSTRUCTION CORPORATION - HODGKINS IL
Machine Id
1165
Component
Diesel Engine
Fluid
LEAHY WOLF PREMIUM 15W40 (8 hrs)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0122068	LW0006480	LW0004735
Sample Date		Client Info		19 Apr 2024	18 Apr 2023	09 May 2022
Machine Age	hrs	Client Info		9866	9612	9352
Oil Age	hrs	Client Info		254	260	290
Filter Age	hrs	Client Info		254	260	290
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	11	6	7
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	1	<1	<1
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	6	<1	1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

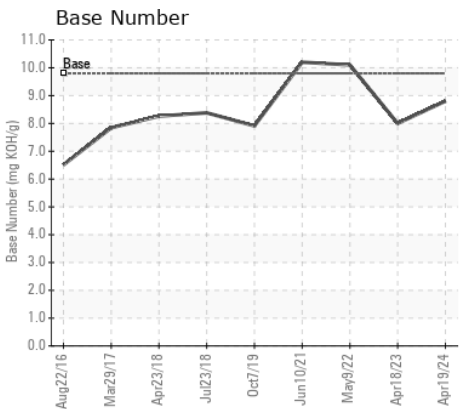
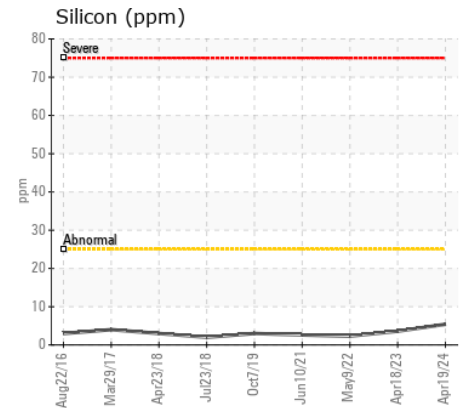
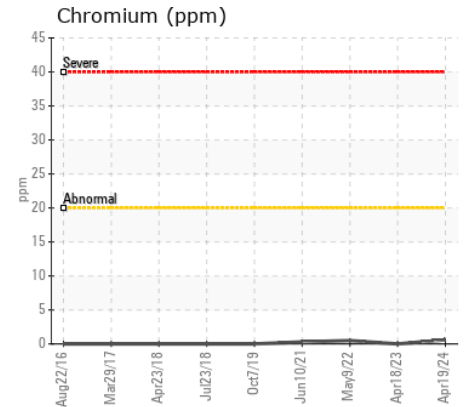
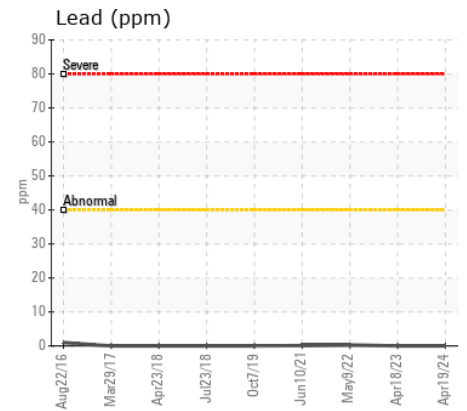
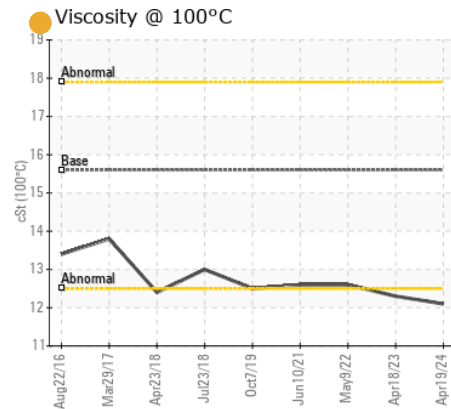
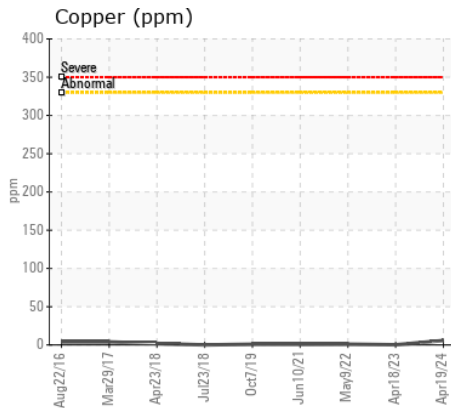
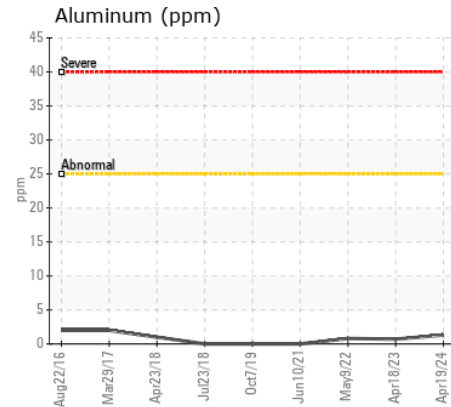
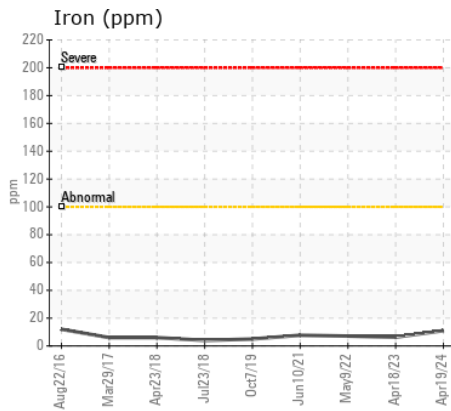
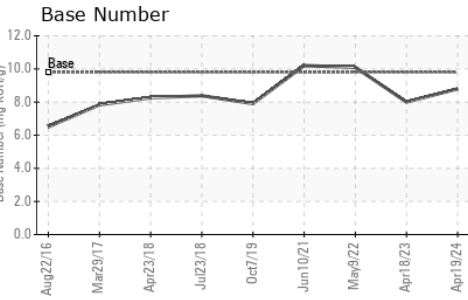
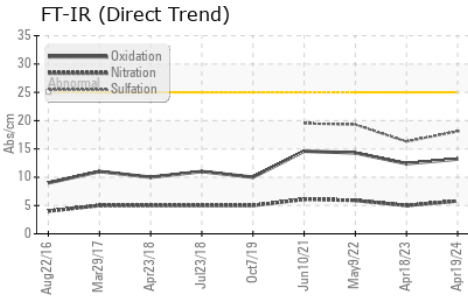
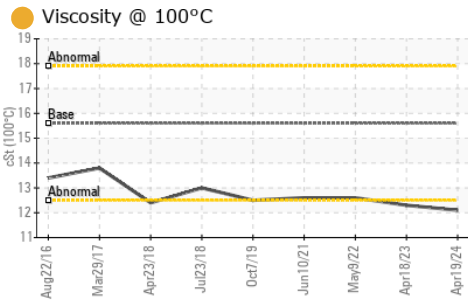
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	4	2
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Fuel		WC Method	>5	<1.0	0.5	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	5.8	5.0	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.1	16.3	19.3
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		7	1	0
Boron	ppm	ASTM D5185m		10	6	5
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		62	58	57
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		967	899	965
Calcium	ppm	ASTM D5185m		1190	1141	1152
Phosphorus	ppm	ASTM D5185m		1076	1014	1093
Zinc	ppm	ASTM D5185m		1275	1267	1298
Sulfur	ppm	ASTM D5185m		3485	3335	2586
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2	12.4	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.8	8.0	10.1
Visc @ 100°C	cSt	ASTM D445	15.6	12.1	12.3	12.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0122068 **Received** : 24 Apr 2024
Lab Number : 06158928 **Tested** : 25 Apr 2024
Unique Number : 10994351 **Diagnosed** : 26 Apr 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: TBN)

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Certificate L2367
 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)