

Area
K5 CONSTRUCTION CORPORATION - HODGKINS IL

Machine Id
4126
Component
Diesel Engine
Fluid
LEAHY WOLF PREMIUM 15W40 (38 hrs)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0122072	LW0008062	LW0007120
Sample Date		Client Info		19 Apr 2024	17 Oct 2023	14 Jun 2023
Machine Age	hrs	Client Info		6935	6391	5826
Oil Age	hrs	Client Info		544	565	440
Filter Age	hrs	Client Info		544	565	440
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	6	5
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	5	3
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	1	<1	0
Tin	ppm	ASTM D5185m	>15	0	0	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

There is no indication of any contamination in the oil.

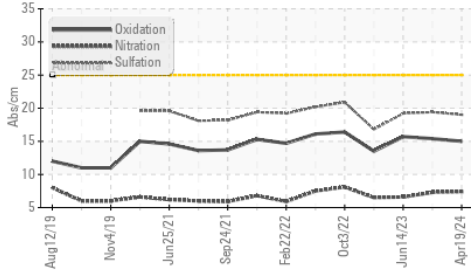
Silicon	ppm	ASTM D5185m	>25	3	3	4
Potassium	ppm	ASTM D5185m	>20	7	12	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.4	7.3	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	19.4	19.2
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

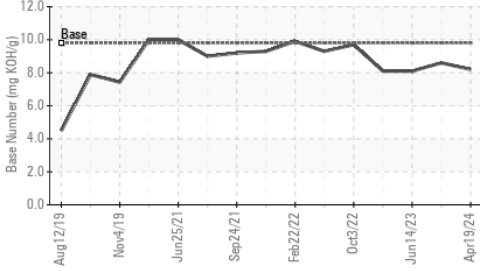
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	1	3
Boron	ppm	ASTM D5185m		2	<1	4
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		63	62	61
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		999	948	997
Calcium	ppm	ASTM D5185m		1176	1131	1250
Phosphorus	ppm	ASTM D5185m		1101	1023	1104
Zinc	ppm	ASTM D5185m		1317	1304	1378
Sulfur	ppm	ASTM D5185m		3432	3404	3933
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.0	15.4	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.2	8.6	8.1
Visc @ 100°C	cSt	ASTM D445	15.6	13.4	13.4	13.7

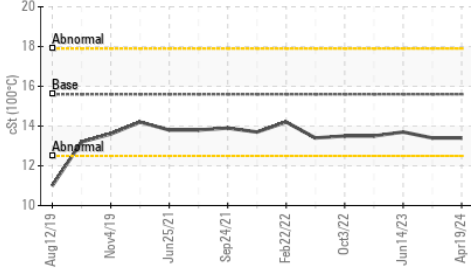
FT-IR (Direct Trend)



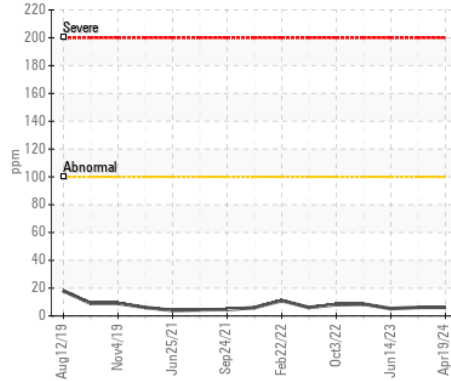
Base Number



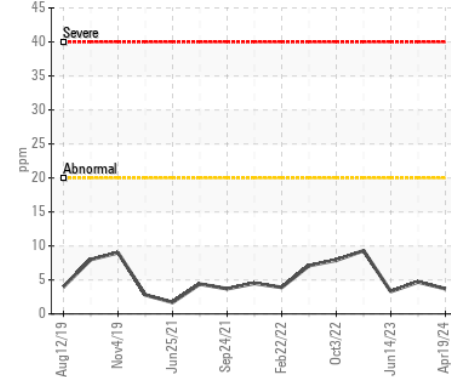
Viscosity @ 100°C



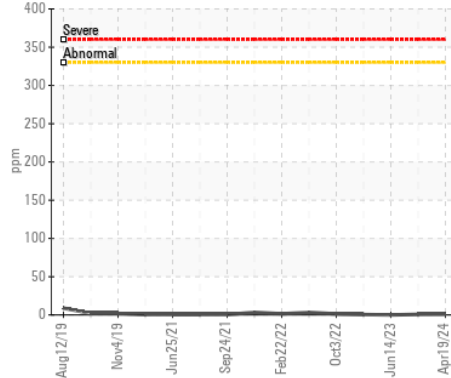
Iron (ppm)



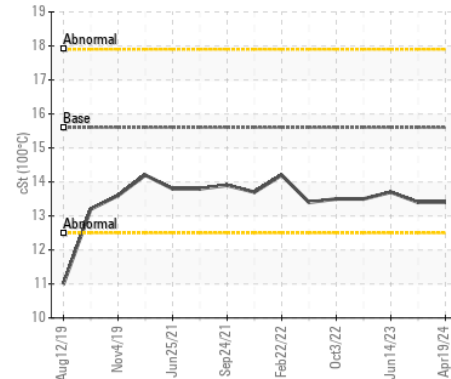
Aluminum (ppm)



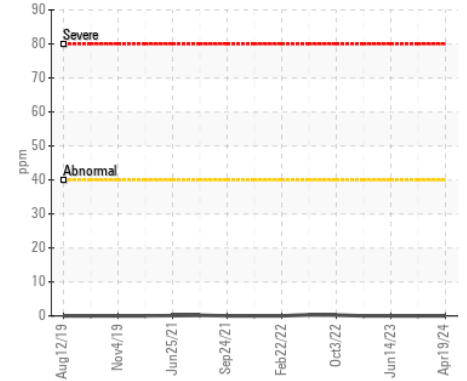
Copper (ppm)



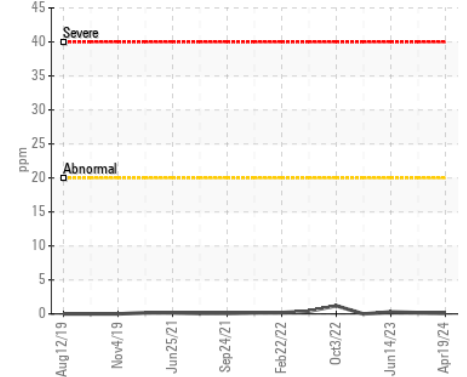
Viscosity @ 100°C



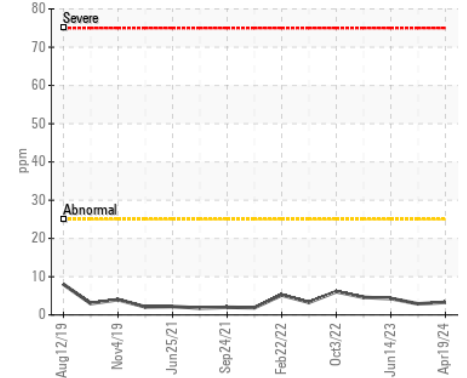
Lead (ppm)



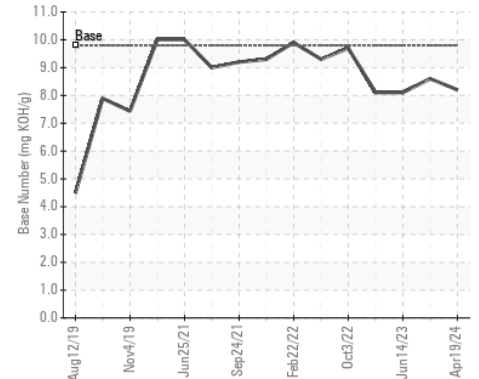
Chromium (ppm)



Silicon (ppm)



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0122072 **Received** : 24 Apr 2024
Lab Number : 06158926 **Tested** : 25 Apr 2024
Unique Number : 10994349 **Diagnosed** : 25 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

K5 CONSTRUCTION CORPORATION
 6301 S EAST AVENUE
 HODGKINS, IL
 US 60525
 Contact: FRANCISCO MUNOZ
 franciscom@k-five.net

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)

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