

1118

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

K5 CONSTRUCTION CORPORATION - HODGKINS IL

Component Diesel Engine

LEAHY WOLF PREMIUM 15W40 (3 hrs)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Description of the most section is interval to manifest	Sample Number		Client Info		PCA0122074	LW0008341	LW0007700
Resample at the next service interval to monitor.	Sample Date		Client Info		19 Apr 2024	11 Dec 2023	23 Aug 2023
	Machine Age	hrs	Client Info		4965	4719	4427
	Oil Age	hrs	Client Info		4673	292	4164
	Filter Age	hrs	Client Info		0	292	4164
	Oil Changed		Client Info		Changed	Not Changd	Changed
	Filter Changed		Client Info		Changed	Not Changd	N/A
	Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR	Iron	ppm	ASTM D5185m	>51	13	9	12
	Chromium	ppm	ASTM D5185m		<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	<1	0
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm		>3	0	0	0
	Aluminum	ppm	ASTM D5185m		3	2	5
	Lead	ppm	ASTM D5185m		0	<1	<1
	Copper	ppm	ASTM D5185m		2	1	2
	Tin	ppm	ASTM D5185m		<1	<1	<1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		16	14	2 8
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		0	3	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		0.4	0.2	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	10.0	7.5	6.3
	Sulfation	Abs/.1mm	*ASTM D7415		20.3	18.9	19.6
	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	Sodium	ppm	ASTM D5185m	>31	0	0	2
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		30	38	323
	Barium	ppm	ASTM D5185m		0	12	0
	Molybdenum	ppm	ASTM D5185m		84	85	256
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		883	866	886
	Calcium	ppm	ASTM D5185m		1107	1038	1522
	Phosphorus	ppm	ASTM D5185m		943	930	948
	Zinc	ppm	ASTM D5185m		1139	1123	1111
	Sulfur	ppm	ASTM D5185m		3123	3225	3833
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	16.3	14.8

7.3

13.3

9.5

13.8

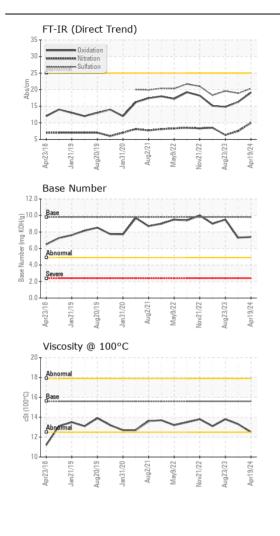
7.4

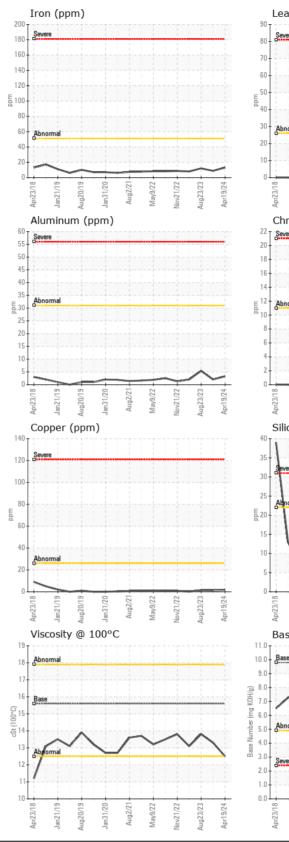
12.5

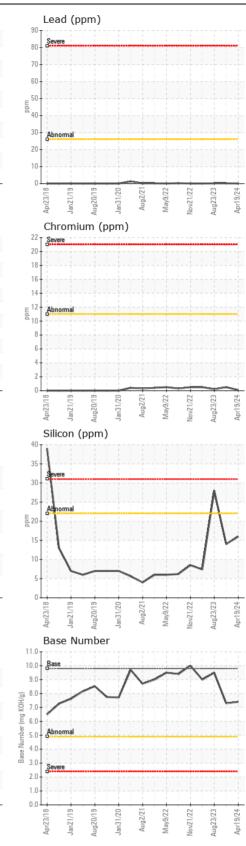
Base Number (BN) mg KOH/g ASTM D2896 9.8

ASTM D445 15.6

Visc @ 100°C cSt







Sample No. : PCA0122074 Received 6301 S EAST AVENUE : 24 Apr 2024 Lab Number : 06158925 Tested : 25 Apr 2024 Unique Number : 10994348 : 25 Apr 2024 - Wes Davis Diagnosed Test Package : MOB 1 (Additional Tests: TBN) Contact: Dave Gorski Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. daveg@k-five.net * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (630)257-5600 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Submitted By: NOELLE TERRAULT Page 2 of 2

K5 CONSTRUCTION CORPORATION

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Laboratory