

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

## K5 CONSTRUCTION CORPORATION - HODGKINS IL

4634

Component Diesel Engine

## LEAHY WOLF PREMIUM 15W40 (4 GAL)

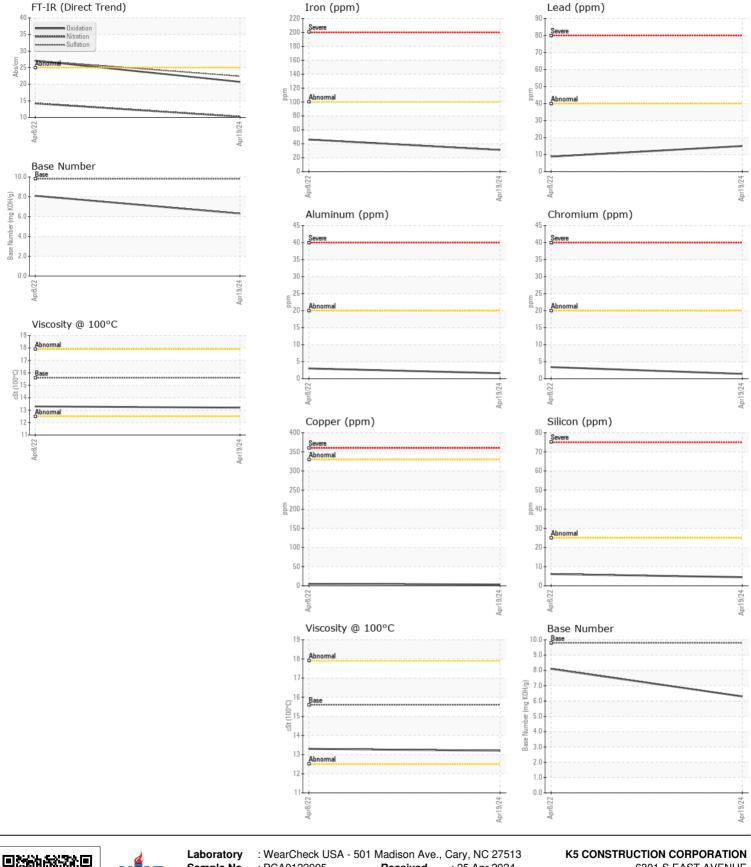
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		PCA0122005	LW0004468	
	Sample Date		Client Info		19 Apr 2024	08 Apr 2022	
	Machine Age	hrs	Client Info		6424	3131	
	Oil Age	hrs	Client Info		3293	275	
	Filter Age	hrs	Client Info		0	275	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	31	46	
	Chromium	ppm	ASTM D5185m	>20	1	3	
	Nickel	ppm	ASTM D5185m	>4	0	<1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m	>3	0	<1	
	Aluminum	ppm	ASTM D5185m		2	3	
	Lead	ppm	ASTM D5185m		- 15	9	
	Copper	ppm	ASTM D5185m		3	5	
	Tin	ppm	ASTM D5185m		0	2	
	Vanadium	ppm	ASTM D5185m	210	0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon		ASTM D5185m	. 05	4	6	
	Potassium	ppm	ASTM D5185m		4 <1	<1	
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method			<1.0	
					<1.0		
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	0/	WC Method	0	NEG	NEG	
	Soot %	%	*ASTM D7844		0.4	1.3	
	Nitration	Abs/cm	*ASTM D7624		10.2	14.2	
	Sulfation	Abs/.1mm	*ASTM D7415		22.4	27.1	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		5	6	
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		2	4	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		62	58	
	Manganese	ppm	ASTM D5185m		0	<1	
	Magnesium	ppm	ASTM D5185m		1059	1002	
	Calcium	ppm	ASTM D5185m		1254	1209	
	Phosphorus	ppm	ASTM D5185m		1094	1038	
	Zinc	ppm	ASTM D5185m		1373	1211	
	Sulfur	ppm	ASTM D5185m		3725	2788	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	27.1	
	Base Number (BN)				6.3	8.1	
				4.5.0		10.0	

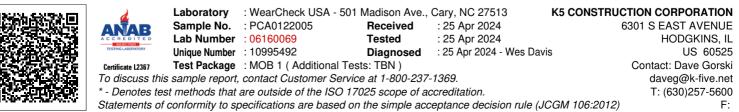
Visc @ 100°C cSt

ASTM D445 15.6

13.3

13.2





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