**WEAR** CONTAMINATION **FLUID CONDITION** 

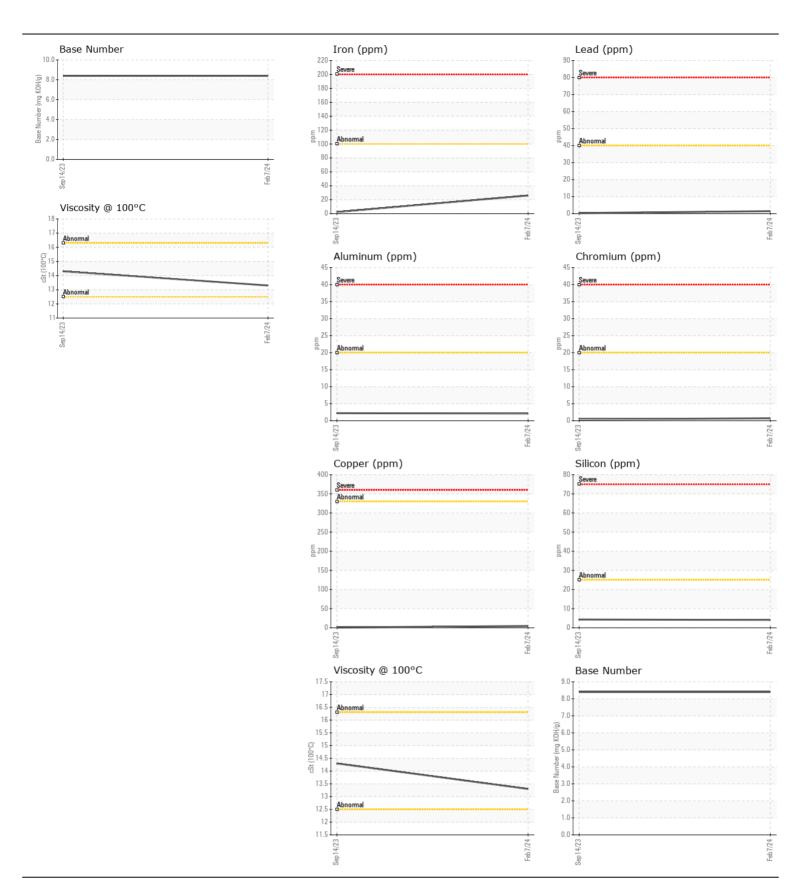
**NORMAL NORMAL NORMAL** 

## **BEELMAN**

John Deere 824K-11 (S/N 1DW824KXTFD)

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
NECOMINENDATION TO	Sample Number	OOW	Client Info	LIIIIII/ADII	LW0008295	LW0007340	
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		07 Feb 2024	14 Sep 2023	
	Machine Age	hrs	Client Info		5526	5161	
	Oil Age	hrs	Client Info		5526	5161	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed	1113	Client Info		Not Changd		
	Filter Changed		Client Info		N/A	N/A	
	Sample Status		Ollerit IIIIO		NORMAL	NORMAL	
VEAD	Iron	nnm	ASTM D5185m	. 100		2	
WEAR	Chromium	ppm			26		
All component wear rates are normal.		ppm	ASTM D5185m		<1	<1	
	Nickel	ppm	ASTM D5185m	>4	<1	0	
	Titanium	ppm	ASTM D5185m	0	<1	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		2	2	
	Lead	ppm	ASTM D5185m		1	<1	
	Copper	ppm	ASTM D5185m		5	<1	
	Tin	ppm	ASTM D5185m	>15	1	0	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	4	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	11	7	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.6	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	7.9	5.3	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	19.9	
	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		*Visual	>0.2	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m		4	3	
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		50	199	
	Barium	ppm	ASTM D5185m		13	0	
	Molybdenum	ppm	ASTM D5185m		24	<1	
	Manganese	ppm	ASTM D5185m		<1	0	
	Magnesium	ppm	ASTM D5185m		653	18	
	Calcium	ppm	ASTM D5185m		1145	2174	
	Phosphorus	ppm	ASTM D5185m		977	985	
	Zinc	ppm	ASTM D5185m		1056	1131	
	Sulfur	ppm	ASTM D5185m		3689	3700	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.4	15.9	
	Base Number (BN)				8.4	8.4	
	Visc @ 100°C	cSt	ASTM D445		13.3	14.3	







Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.

Lab Number : 06085689

: LW0008295 Unique Number : 10873134

**Tested** Diagnosed

Received

: 12 Feb 2024

: 12 Feb 2024

: 12 Feb 2024 - Wes Davis

Test Package : MOB 1 ( Additional Tests: TBN ) 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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