

Machine Id JOHN DEERE 650K-II 1TO Component Diesel Engine Fluid {not provided} ( GAL)	650KKTNF	4330	22				
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0212966	JR0194581	
	Sample Date		Client Info		14 Apr 2024	01 Jan 2024	
	Machine Age	hrs	Client Info		2157	1592	
	Oil Age	hrs	Client Info		2157	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	N/A	
	Filter Changed		Client Info		Changed	N/A	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m	>51	16	34	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	1	
	Nickel	ppm	ASTM D5185m		0	<1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>31	6	7	
	Lead	ppm	ASTM D5185m	>26	22	<b>1</b> 15	
	Copper	ppm	ASTM D5185m	>26	5	14	
	Tin	ppm	ASTM D5185m	>4	<1	2	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
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CONTAMINATION	Silicon	ppm	ASTM D5185m		7	9	
There is no indication of any contamination in the component.	Potassium	ppm	ASTM D5185m		4	2	
	Fuel		WC Method		<1.0 NEG	<1.0 NEG	
	Water Glycol		WC Method WC Method	>0.21	NEG	NEG	
	Soot %	%	*ASTM D7844	13	0.5	0.8	
	Nitration	Abs/cm	*ASTM D7624	>20	10.1	11.5	
	Sulfation	Abs/.1mm	*ASTM D7024		24.5	27.2	
	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	>0.21	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	1	4	
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		153	69	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		244	237	
	Manganese	ppm	ASTM D5185m		0	2	
	Magnesium	ppm	ASTM D5185m		750	806	
	Calcium	ppm	ASTM D5185m		1648	1666	
	Phosphorus	ppm	ASTM D5185m		1044	984	
	Zinc	ppm	ASTM D5185m		1192	1242	

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m

Base Number (BN) mg KOH/g ASTM D2896

Abs/.1mm \*ASTM D7414 >25

ASTM D445

3058

23.4

7.7

14.3

3141

20.0

8.4

13.9



