

## Machine Id JOHN DEERE 1025R 58000003 (S/N 1LV1025REKK184227) Component Diesel Engine

## JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

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FLUID CONDITION

Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0183677		
Sample Date		Client Info		01 Feb 2024		
Machine Age	hrs	Client Info		55		
Oil Age	hrs	Client Info		55		
Filter Age	hrs	Client Info		55		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
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Iron	ppm	ASTM D5185m	>51	13		
Chromium	ppm	ASTM D5185m	>11	<1		
Nickel	ppm	ASTM D5185m	>5	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>31	6		
Lead	ppm	ASTM D5185m	>26	<1		
Copper	ppm	ASTM D5185m	>26	13		
Tin	ppm	ASTM D5185m	>4	1		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>22	🔺 110		
Potassium	ppm	ASTM D5185m	>20	2		
Fuel	%	ASTM D3524	>2.1	1.0		
Water		WC Method	>0.21	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844	>3	0.1		
Nitration	Abs/cm	*ASTM D7624	>20	6.7		
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.21	NEG		
Sodium	ppm		>31	16		
Boron	ppm	ASTM D5185m		224		
Barium	ppm	ASTM D5185m		5		
Molybdenum	ppm	ASTM D5185m		204		
Manganese	ppm	ASTM D5185m		4		
Magnesium	ppm	ASTM D5185m		634		
Calcium	ppm	ASTM D5185m		1862		
Phosphorus	ppm	ASTM D5185m		965		
Zinc	ppm	ASTM D5185m		1095		
Sulfur	ppm	ASTM D5185m		3817		
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.1		
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.8		
Visc @ 100°C	cSt	ASTM D445	15.4	<b>10.9</b>		
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The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



