

## Machine Id JOHN DEERE 844L 1DW844LXANL715628 Component Diesel Engine Fluid JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		WE0007458	WE0005383	WE0005416
	Sample Date		Client Info		11 Jun 2024	13 Nov 2023	21 Sep 2023
	Machine Age	hrs	Client Info		4989	3525	3091
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR The lead level is abnormal. All other component wear rates are normal.	Iron	ppm	ASTM D5185m	>51	41	9	13
	Chromium	ppm	ASTM D5185m	>11	<1	0	<1
	Nickel	ppm	ASTM D5185m		<1	0	<1
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>31	9	4	3
	Lead	ppm	ASTM D5185m		<b>6</b> 7	3	10
	Copper	ppm	ASTM D5185m	>26	11	7	6
	Tin	ppm	ASTM D5185m	>4	2	1	2
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u>~22</u>	7	8	6
	Potassium	ppm	ASTM D5185m		4	<1	2
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.6	0.3	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	12.1	9.1	9.3
	Sulfation	Abs/.1mm	*ASTM D7415	>30	29.5	22.9	23.2
	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	<u>\</u> 31	13	5	4
	Boron	ppm	ASTM D5185m	201	22	216	126
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		0	<1	0
	Molybdenum	ppm	ASTM D5185m		261	260	268
	Manganese	ppm	ASTM D5185m		2	<1	<1
	Magnesium	ppm	ASTM D5185m		886	914	838
	Calcium	ppm	ASTM D5185m		1461	1422	1376
	Phosphorus	ppm	ASTM D5185m		837	988	838
	Zinc	ppm	ASTM D5185m		1033	1212	1036
	Sulfur	ppm	ASTM D5185m		3491	3355	3194
	Oxidation	Abs/.1mm	*ASTM D7414	>25	24.9	17.2	17.8
	Base Number (BN)		ASTM D2896		6.2	9.3	7.6
		oC+		1 - 4	10.1	10.7	10.7

Visc @ 100°C cSt

13.7

13.7

13.1

ASTM D445 15.4

