

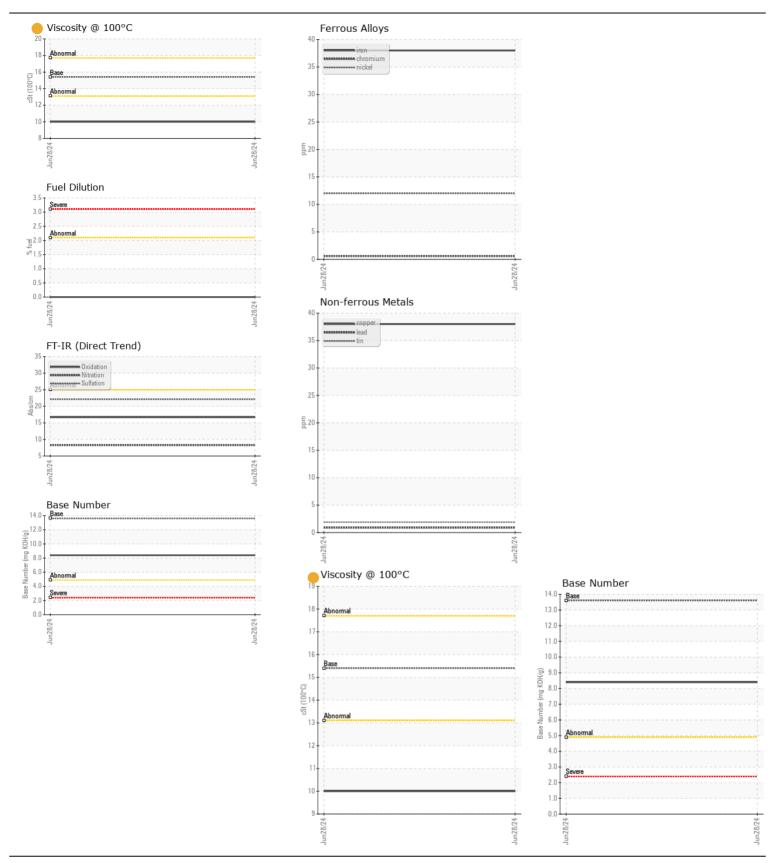
Machine Id JOHN DEERE 948L 1DW948LBVPL718661 Component Diesel Engine Fluid JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

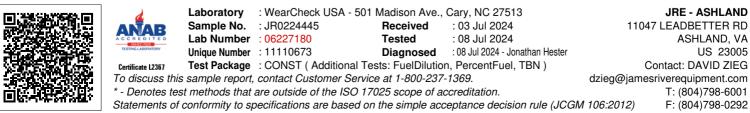
,	·····/						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		JR0224445		
	Sample Date		Client Info		28 Jun 2024		
	Machine Age	hrs	Client Info		483		
	Oil Age	hrs	Client Info		483		
	Filter Age	hrs	Client Info		483		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAR	Iron	ppm	ASTM D5185m	>51	38		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>11	<1		
	Nickel	ppm	ASTM D5185m		12		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m		8		
	Lead	ppm	ASTM D5185m		- <1		
	Copper	ppm	ASTM D5185m		38		
	Tin	ppm	ASTM D5185m		2		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	0.11						
	Silicon Potassium	ppm	ASTM D5185m ASTM D5185m		10 23		
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	ppm %	ASTM D310311		0.0		
	Water	70	WC Method		NEG		
	Glycol		WC Method	20.L1	NEG		
	Soot %	%	*ASTM D7844	~3	0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	8.3		
	Sulfation	Abs/.1mm	*ASTM D7024		22.1		
	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		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	7		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		170		
	Barium	ppm	ASTM D5185m		1		
	Molybdenum	ppm	ASTM D5185m		236		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m		786		
	Calcium	ppm	ASTM D5185m		1433		
	Phosphorus	ppm	ASTM D5185m		933		
	Zinc	ppm	ASTM D5185m		1086		
	Sulfur	ppm	ASTM D5185m		3512		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7		
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.4		
	Visc @ 100°C	0°t	ASTM D445	15 /	10.0		

Visc @ 100°C cSt

ASTM D445 15.4

10.0





Contact/Location: DAVID ZIEG - JAMASH Page 2 of 2