

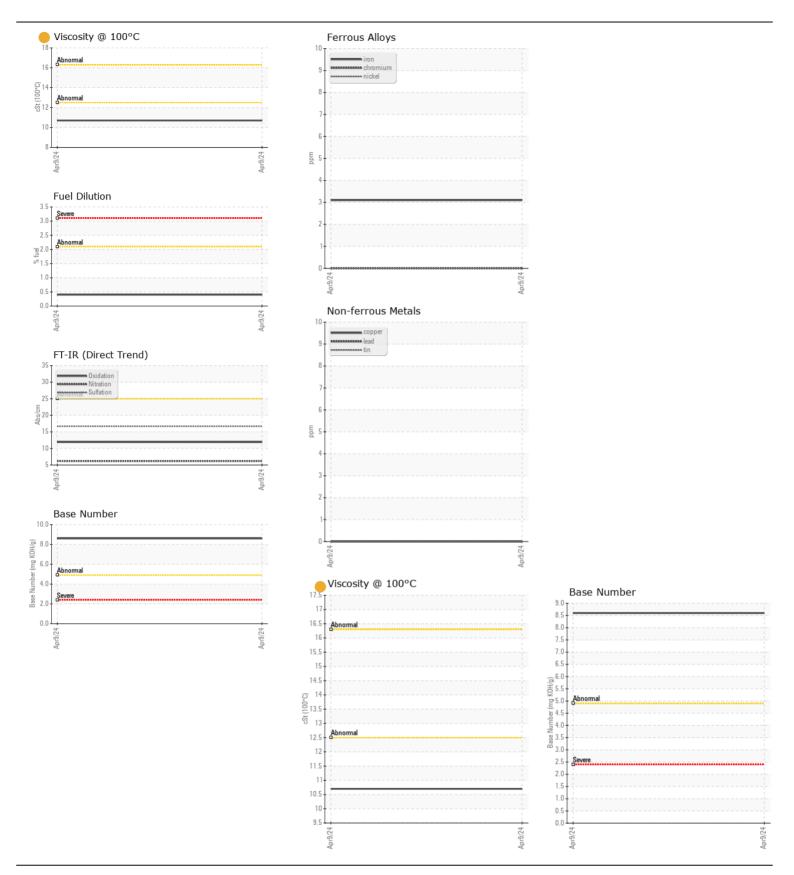
Machine Id JOHN DEERE 524L 1DW524LTPKF694269 Component Diesel Engine Fluid SHELL 15W40 (--- GAL)

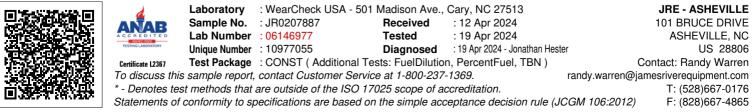
SILLE 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		JR0207887		
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		09 Apr 2024		
	Machine Age	hrs	Client Info		3040		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAR	Iron	ppm	ASTM D5185m		3		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0		
	Nickel	ppm	ASTM D5185m	>5	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		0		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		0		
	Tin	ppm	ASTM D5185m	>4	0		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	2		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	<1		
	Fuel	%	ASTM D3524	>2.1	0.4		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	6.2		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	16.7		
	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	nnm	ASTM D5185m	> 150	1		
FLUID CONDITION	Boron	ppm	ASTM D5185m	>150	8		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm ppm	ASTM D5185m		38		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m		577		
	Calcium	ppm	ASTM D5185m		1907		
	Phosphorus	ppm	ASTM D5185m		1087		
	Zinc	ppm	ASTM D5185m		1247		
	Sulfur	ppm	ASTM D5185m		4337		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	11.9		
	Base Number (BN)			- 20	8.6		
		- Ot					

Visc @ 100°C cSt

ASTM D445

10.7





Contact/Location: Randy Warren - VANASH Page 2 of 2