

## Machine Id JOHN DEERE 624 P 1DW624PAANLZ15749 Component Diesel Engine Fluid JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

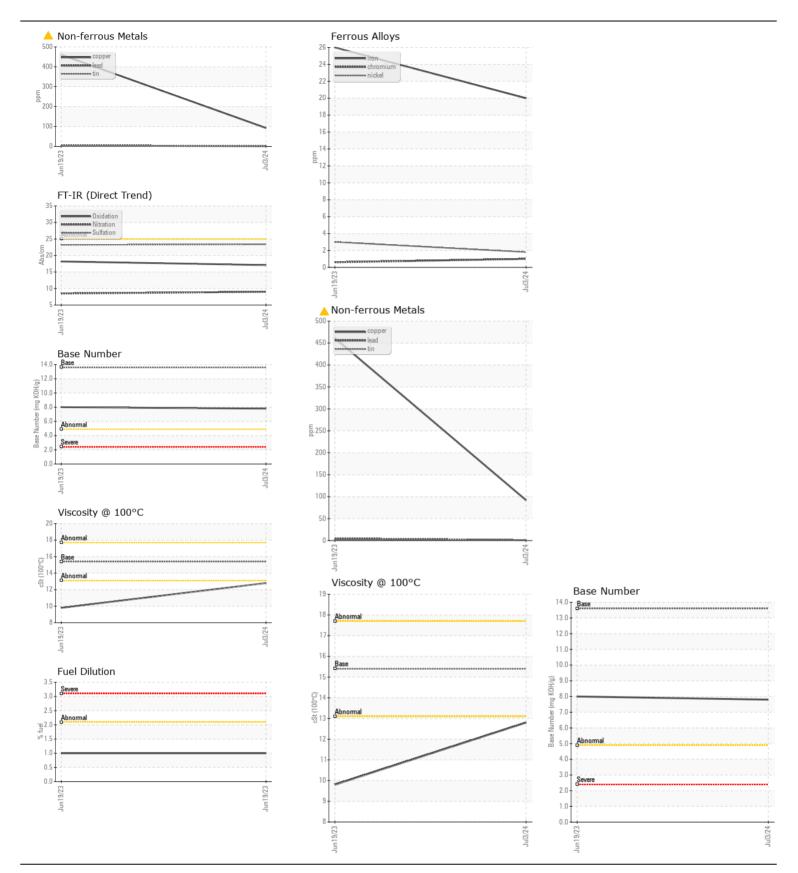
RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		JR0224485	JR0164729	
	Sample Date		Client Info		03 Jul 2024	19 Jun 2023	
	Machine Age	hrs	Client Info		952	442	
	Oil Age	hrs	Client Info		0	442	
	Filter Age	hrs	Client Info		0	442	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ABNORMAL	ABNORMAL	
WEAR The copper level has decreased, but is still abnormal. All other component wear rates are normal.	Iron	ppm	ASTM D5185m	>51	20	26	
	Chromium	ppm	ASTM D5185m	>11	1	<1	
	Nickel	ppm	ASTM D5185m		2	3	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		5	4	
	Lead	ppm	ASTM D5185m		<1	5	
	Copper	ppm	ASTM D5185m		▲ 92	<b>▲</b> 461	
	Tin	ppm	ASTM D5185m		1	2	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m		8	10	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		3	2	
	Fuel	%	ASTM D3524		<1.0	1.0	
	Water		WC Method	>0.21	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844		0.3	0.3	
	Nitration	Abs/cm	*ASTM D7624		9.0	8.5	
	Sulfation	Abs/.1mm	*ASTM D7415		23.4	23.2	
	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	5	6	
	Boron	ppm	ASTM D5185m		226	202	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		266	236	
	Manganese	ppm	ASTM D5185m		1	4	
	Magnesium	ppm	ASTM D5185m		857	762	
	Calcium	ppm	ASTM D5185m		1485	1439	
	Phosphorus	ppm	ASTM D5185m		935	839	
	Zinc	ppm	ASTM D5185m		1135	1022	
	Sulfur	ppm	ASTM D5185m		3440	3238	
	Oxidation	Abs/.1mm	*ASTM D5105/11	>25	17.1	18.2	
	Base Number (BN)				7.8	8.0	
				10.0	1.0	0.0	

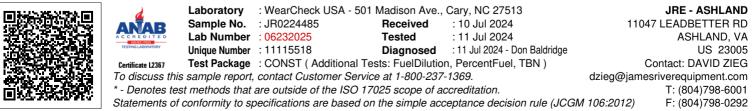
Visc @ 100°C cSt

ASTM D445 15.4

9.8

12.8





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