

## Machine Id **JOHN DEERE 700L 1T0700LXANF427081** Componen **Diesel Engine** JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

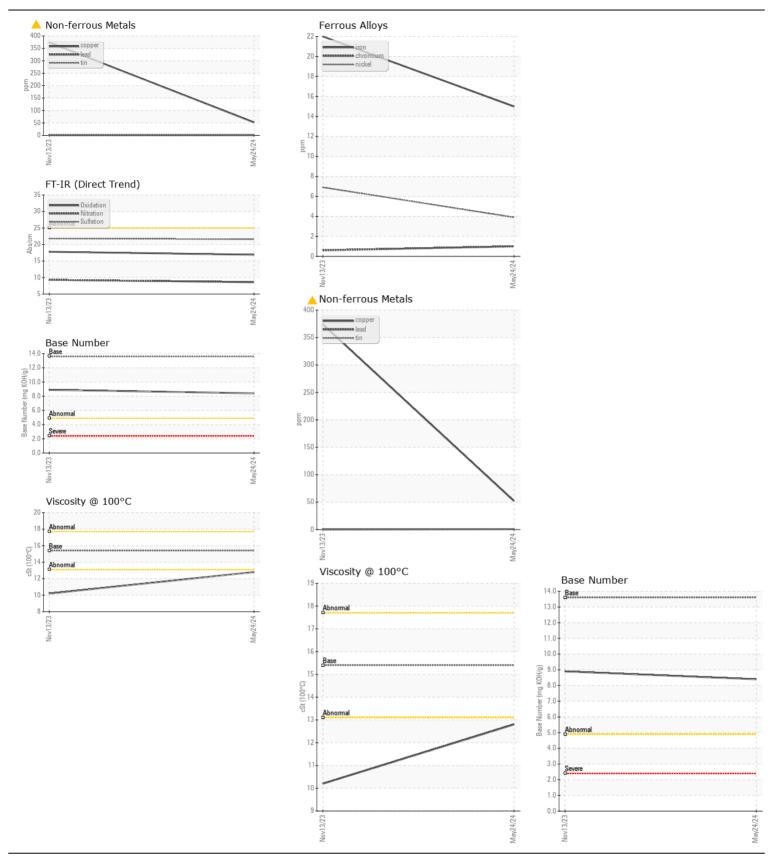
RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		JR0207836	JR0191230	
	Sample Date		Client Info		24 May 2024	13 Nov 2023	
	Machine Age	hrs	Client Info		1003	503	
	Oil Age	hrs	Client Info		500	503	
	Filter Age	hrs	Client Info		500	503	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ABNORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m	>51	15	22	
	Chromium	ppm	ASTM D5185m	>11	1	<1	
The copper level has decreased, but is still abnormal. All other component wear rates are normal.	Nickel	ppm	ASTM D5185m		4	7	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	1	<1	
	Aluminum	ppm	ASTM D5185m	>31	5	5	
	Lead	ppm	ASTM D5185m		<1	<1	
	Copper	ppm	ASTM D5185m		<b>5</b> 2	<b>3</b> 74	
	Tin	ppm	ASTM D5185m		1	1	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
ONTAMINATION	Silicon	ppm	ASTM D5185m	>22	8	8	
CONTAMINATION	Potassium	ppm	ASTM D5185m		4	2	
There is no indication of any contamination in the oil.	Fuel	%	ASTM D3103III		- <1.0	<1.0	
	Water	/0	WC Method		NEG	NEG	
	Glycol		WC Method	20.21	NEG	NEG	
	Soot %	%	*ASTM D7844	<u>\</u> 2	0.2	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	8.6	9.3	
	Sulfation	Abs/.1mm	*ASTM D7024		21.6	21.8	
	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		*Visual	>0.21	NEG	NEG	
FLUID CONDITION						_	
	Sodium	ppm	ASTM D5185m	>31	3	5	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		230	217	
	Barium	ppm	ASTM D5185m		2	<1	
	Molybdenum	ppm	ASTM D5185m		233	222	
	Manganese	ppm	ASTM D5185m		1	3	
	Magnesium	ppm	ASTM D5185m		793	788	
	Calcium	ppm	ASTM D5185m		1447	1393	
	Phosphorus	ppm	ASTM D5185m		894	901	
	Zinc	ppm	ASTM D5185m		1076	1081	
	Sulfur	ppm	ASTM D5185m		3058	2932	
	Oxidation	Abs/.1mm	*ASTM D7414		16.9	17.8	
			ASTM D2896	126	8.4	8.9	

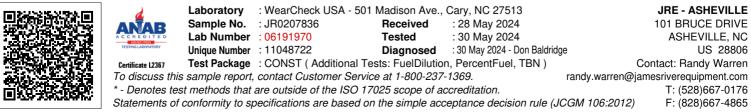
Visc @ 100°C cSt

ASTM D445 15.4

10.2

12.8





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