

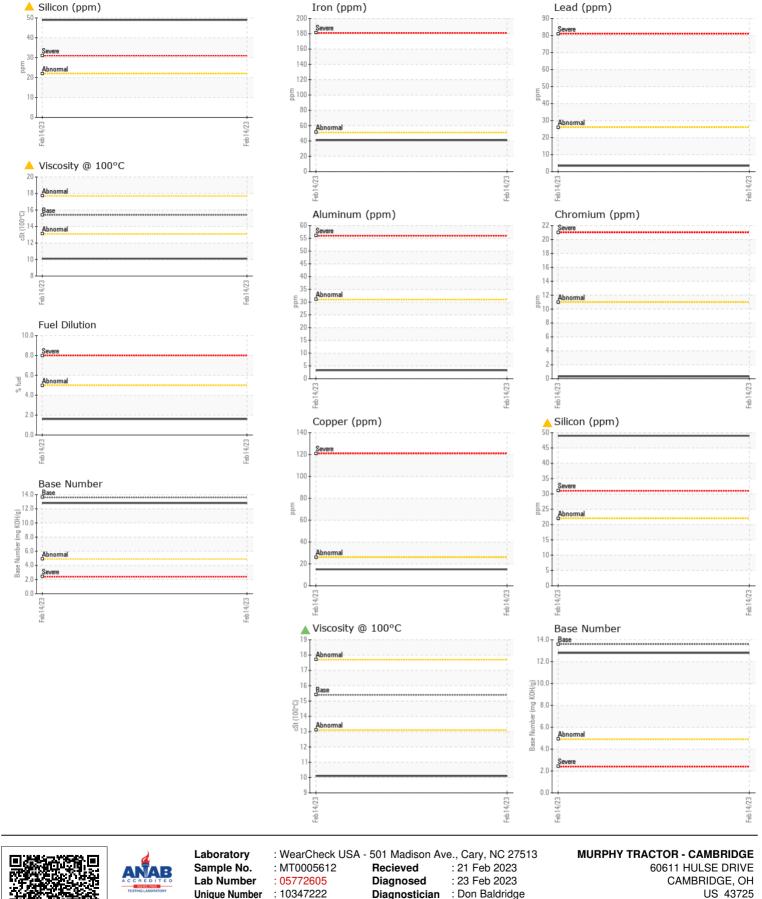
## Machine Id JOHN DEERE 35G 293202 Component Diesel Engine Fluid JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

JOHN DEERE ENGINE OIL PLUS 50		_						
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		Sample Number		Client Info		MT0005612		
		Sample Date		Client Info		14 Feb 2023		
service interval to monitor.		Machine Age	hrs	Client Info		502		
		Oil Age	hrs	Client Info		0		
		Filter Age	hrs	Client Info		0		
		Oil Changed		Client Info		Changed		
		Filter Changed		Client Info		Changed		
		Sample Status				ABNORMAL		
WEAR		Iron	nnm	ASTM D5185m	<u>51</u>	41		
		Chromium	ppm ppm	ASTM D5185m		<1		
All component wear rates are normal.		Nickel	ppm	ASTM D5185m		0		
		Titanium	ppm	ASTM D5185m	20	<1		
		Silver	ppm	ASTM D5185m	-3	0		
		Aluminum	ppm	ASTM D5185m		3		
		Lead		ASTM D5185m		3		
		Copper	ppm ppm	ASTM D5185m		15		
		Tin	ppm	ASTM D5185m		-13 <1		
		Vanadium	ppm	ASTM D5185m		0		
		White Metal	scalar	*Visual	NONE	NONE		
		Yellow Metal	scalar	*Visual	NONE	NONE		
			304141	Visual	NONE			
CONTAMINATION		Silicon	ppm	ASTM D5185m	>22	<b>4</b> 9		
Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.		Potassium	ppm	ASTM D5185m	>20	3		
	ove normal	Fuel	%	ASTM D3524	>5	1.6		
		Water		WC Method	>0.21	NEG		
		Glycol		WC Method		NEG		
		Soot %	%	*ASTM D7844	>3	0.2		
		Nitration	Abs/cm	*ASTM D7624	>20	8.3		
		Sulfation	Abs/.1mm	*ASTM D7415	>30	16.9		
		Silt	scalar	*Visual	NONE	NONE		
		Debris	scalar	*Visual	NONE	LIGHT		
		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	17		
		Boron	ppm	ASTM D5185m		78		
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		13		
	il type.	Molybdenum	ppm	ASTM D5185m		129		
		Manganese	ppm	ASTM D5185m		2		
		Magnesium	ppm	ASTM D5185m		106		
		Calcium	ppm	ASTM D5185m		3832		
		Phosphorus	ppm	ASTM D5185m		1117		
		Zinc	ppm	ASTM D5185m		1292		
		Sulfur	ppm	ASTM D5185m		6135		
		Oxidation	Abs/.1mm	*ASTM D3103/11	>25	10.7		
		Base Number (BN)		ASTM D7414 ASTM D2896		12.8		
			0 0			10.1		

Visc @ 100°C cSt

ASTM D445 15.4

10.1



Contact/Location: DUSTIN DAILEY - MURCAM

T: