

## Machine Id **JOHN DEERE 350G 1FF350GXKHF811806** Componen **Diesel Engine** JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (28 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		JR0223384	JR0198378	JR0170831
	Sample Date		Client Info		14 Jul 2024	03 Jan 2024	11 Jul 2023
	Machine Age	hrs	Client Info		4039	3680	3368
	Oil Age	hrs	Client Info		0	462	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	Changed	Not Change
	Filter Changed		Client Info		N/A	Changed	Not Chango
	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR The iron level has decreased, but is still abnormal. All other component wear rates are normal.	Iron	ppm	ASTM D5185m	>51	<b>6</b> 6	<b>1</b> 23	<b>1</b> 41
	Chromium	ppm	ASTM D5185m	>11	3	8	12
	Nickel	ppm	ASTM D5185m		0	<1	0
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>31	5	- 7	7
	Lead	ppm	ASTM D5185m	>26	0	2	0
	Copper	ppm	ASTM D5185m	>26	3	7	<1
	Tin	ppm	ASTM D5185m	>4	0	2	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u></u>	14	<b>▲</b> 30	<b>▲</b> 35
SONTAMINATION	Potassium	ppm	ASTM D5185m		<1	1	0
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.21	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	~3	0.4	0.2	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	8.7	7.3	7.5
	Sulfation	Abs/.1mm	*ASTM D7024		22.3	21.1	21.6
	Silt		*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar		NONE	NONE	NONE	NONE
		scalar	*Visual				
	Appearance Odor	scalar	*Visual *Visual	NORML NORML	NORML NORML	NORML NORML	NORML
	Emulsified Water	scalar scalar	*Visual	>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	3	2	1
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		169	131	221
	Barium	ppm	ASTM D5185m		<1	<1	0
	Molybdenum	ppm	ASTM D5185m		257	244	246
	Manganese	ppm	ASTM D5185m		<1	1	0
	Magnesium	ppm	ASTM D5185m		839	816	872
	Calcium	ppm	ASTM D5185m		1513	1428	1416
	Phosphorus	ppm	ASTM D5185m		901	898	880
	Zinc	ppm	ASTM D5185m		1024	1020	1083
	Sulfur	ppm	ASTM D5185m		3245	2821	3501
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	15.4	16.3
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.5	8.8	9.2
		<u> </u>	LOTIL D. L				

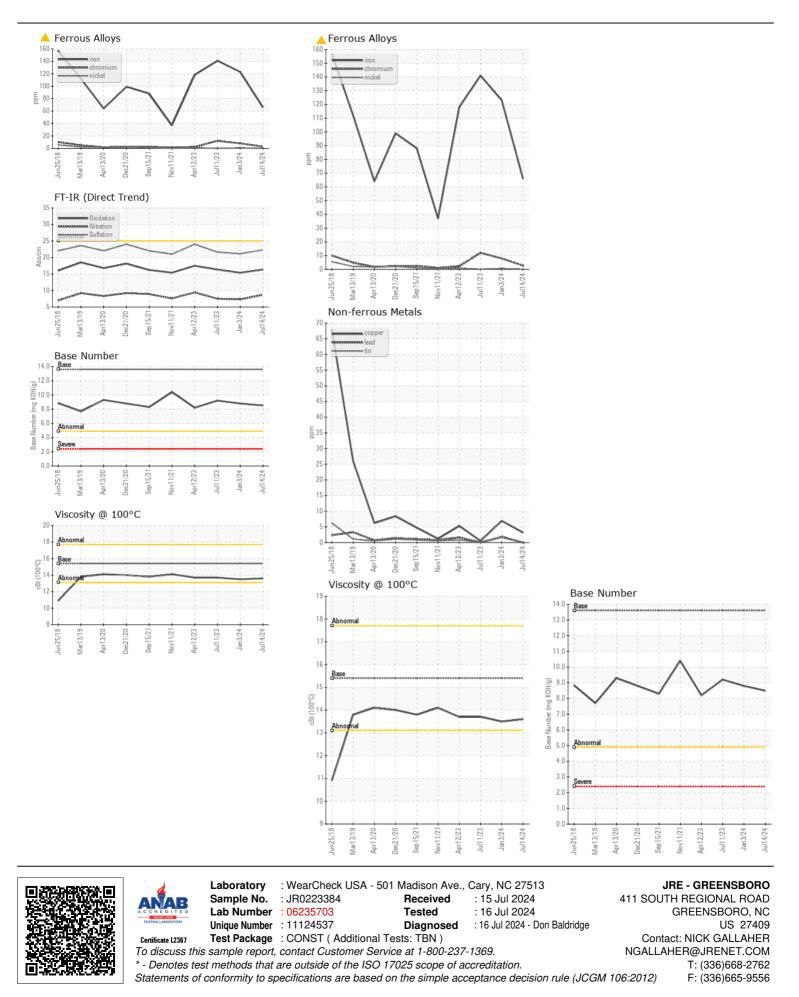
Visc @ 100°C cSt

ASTM D445 15.4

13.6

13.7

13.5



Submitted By: Ray Benson Page 2 of 2