WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Area

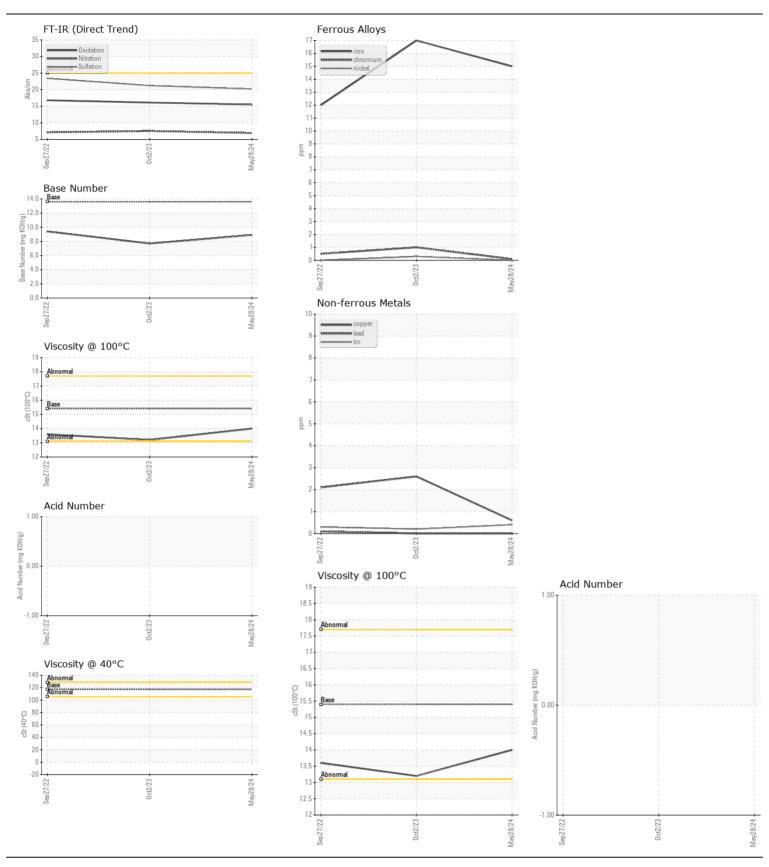
[W67079]

CASE TV370B JAFTV370PLM487166

Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (3 GAL)

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (3 GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TIEGOWIWIENDATION	Sample Number	00.01	Client Info	Littleyton	JR0215654	JR0188579	JR0142430
Resample at the next service interval to monitor. (Customer Sample Comment: W67079)	Sample Date		Client Info		28 May 2024	02 Oct 2023	27 Sep 2022
	Machine Age	hrs	Client Info		2575	2062	1432
	Oil Age	hrs	Client Info		513	630	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Not Changd	Changed	Changed
	Filter Changed		Client Info		Not Changd	Changed	Changed
	Sample Status				NORMAL	MARGINAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	15	17	12
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	1	<1
	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		4	11	4
	Lead	ppm	ASTM D5185m		0	0	<1
	Copper	ppm	ASTM D5185m		<1	3	2
	Tin	ppm	ASTM D5185m		<1	<1	<1
	Vanadium	ppm	ASTM D5185m	7.0	0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6	13	8
	Potassium	ppm	ASTM D5185m	>20	1	2	2
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	0.0	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.2	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	6.9	7.5	7.1
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	21.2	23.4
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	<u> </u>	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	2	0
	Boron	ppm	ASTM D5185m		141	316	318
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	0
	Molybdenum	ppm	ASTM D5185m		83	131	122
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		789	674	588
	Calcium	ppm	ASTM D5185m		1180	1585	1567
	Phosphorus	ppm	ASTM D5185m		963	932	845
	Zinc	ppm	ASTM D5185m		1140	1144	1001
	Sulfur	ppm	ASTM D5185m		3359	3127	3257
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	16.1	16.8
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.9	7.7	9.4
	Visc @ 100°C	cSt	ASTM D445	15.4	14.0	13.2	13.6





Certificate L2367

Laboratory Sample No.

: JR0215654 Lab Number : 06195292

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Tested Unique Number : 11057415 Diagnosed

Received : 30 May 2024 : 03 Jun 2024

: 03 Jun 2024 - Jonathan Hester

JRE - CHARLOTTE 9550 STATESVILLE ROAD CHARLOTTE, NC

Test Package : CONST (Additional Tests: FT-IR, ICP, KV100, KV40, PQ, PrtCount, SCREEN, TANCWata, at BIC HARLOTTE SHOP To discuss this sample report, contact Customer Service at 1-800-237-1369.

myoung@jamesriverequipment.com T: (704)597-0211

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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US 28269