



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 331G 1T0331GKEKF368074

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0215734	JR0114905	JR0101911
Sample Date		Client Info		17 May 2024	21 Apr 2022	04 Oct 2021
Machine Age	hrs	Client Info		2634	2356	238
Oil Age	hrs	Client Info		2356	500	0
Filter Age	hrs	Client Info		0	500	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	19	22	23
Chromium	ppm	ASTM D5185m	>11	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	4
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	1	<1	<1
Aluminum	ppm	ASTM D5185m	>31	8	5	4
Lead	ppm	ASTM D5185m	>26	<1	0	2
Copper	ppm	ASTM D5185m	>26	34	6	34
Tin	ppm	ASTM D5185m	>4	2	<1	3
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

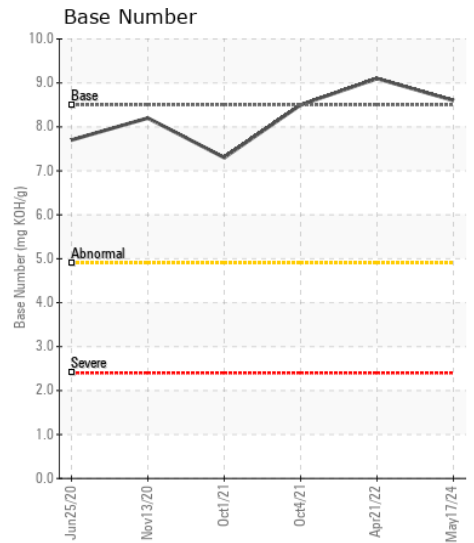
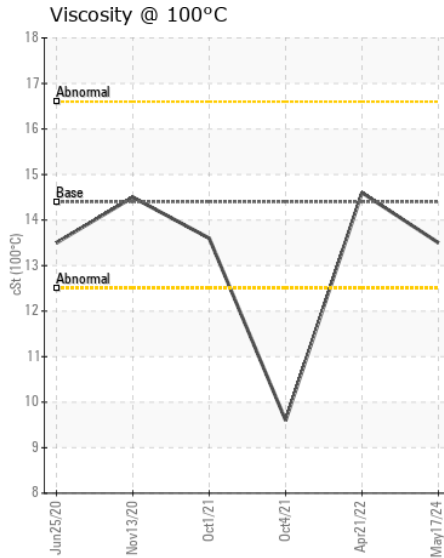
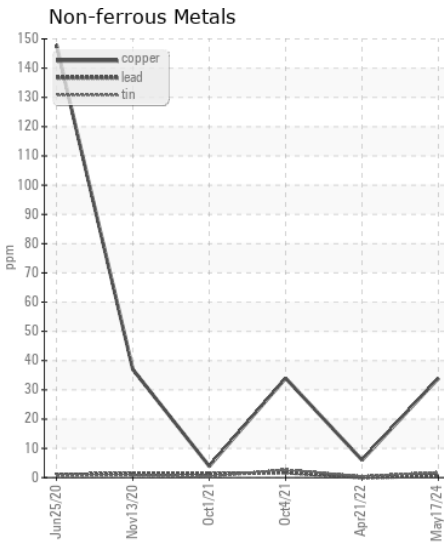
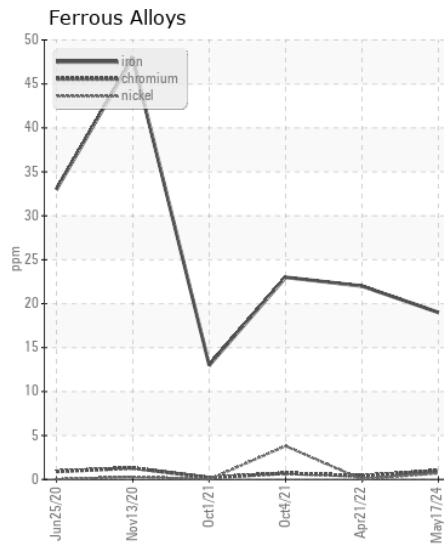
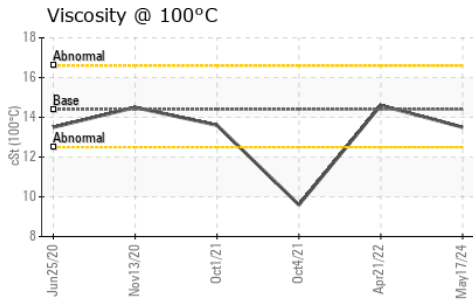
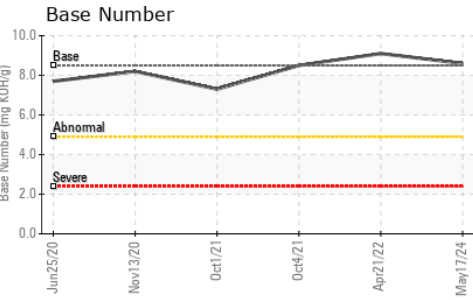
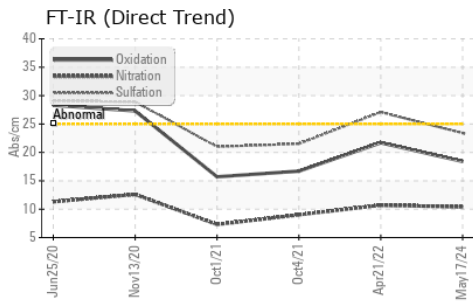
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	18	13	10
Potassium	ppm	ASTM D5185m	>20	3	3	2
Fuel		WC Method	>2.1	<1.0	<1.0	0.1
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.5	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.4	10.7	9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	27.1	21.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	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	>0.21	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	2	0	5
Boron	ppm	ASTM D5185m	250	235	218	225
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	243	224	278
Manganese	ppm	ASTM D5185m		1	<1	4
Magnesium	ppm	ASTM D5185m	450	779	759	780
Calcium	ppm	ASTM D5185m	3000	1435	1605	1453
Phosphorus	ppm	ASTM D5185m	1150	951	1002	827
Zinc	ppm	ASTM D5185m	1350	1075	1247	1018
Sulfur	ppm	ASTM D5185m	4250	3281	2693	2611
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	21.7	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.6	9.1	8.5
Visc @ 100°C	cSt	ASTM D445	14.4	13.5	14.6	9.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0215734 **Received** : 21 May 2024
Lab Number : 06185950 **Tested** : 22 May 2024
Unique Number : 11042702 **Diagnosed** : 23 May 2024 - Angela Borella
Test Package : CONST (Additional Tests: TBN)

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To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - 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)