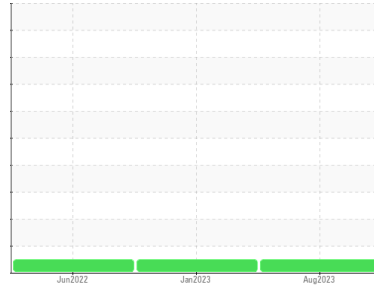


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
JOHN DEERE 210GLC E-34 (S/N MF529565)

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			JR0173416	JR05742978	JR0094327
Sample Date	Client Info			21 Aug 2023	10 Jan 2023	09 Jun 2022
Machine Age	hrs	Client Info		1487	994	526
Oil Age	hrs	Client Info		493	468	526
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>2.1		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	26	25	46
Chromium	ppm	ASTM D5185m	>11	<1	1	2
Nickel	ppm	ASTM D5185m	>5	8	7	8
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	4	3	5
Lead	ppm	ASTM D5185m	>26	0	2	2
Copper	ppm	ASTM D5185m	>26	11	51	288
Tin	ppm	ASTM D5185m	>4	<1	2	3
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0

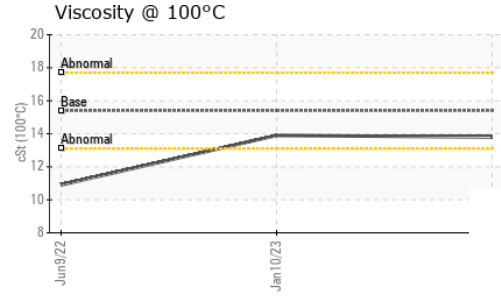
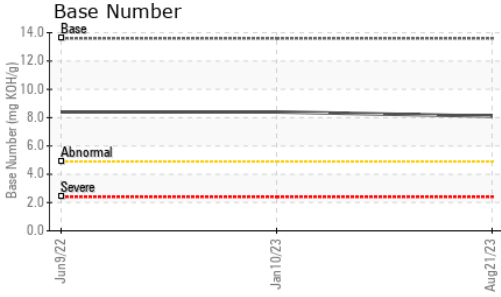
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		168	142	144
Barium	ppm	ASTM D5185m		0	0	4
Molybdenum	ppm	ASTM D5185m		297	271	267
Manganese	ppm	ASTM D5185m		<1	1	5
Magnesium	ppm	ASTM D5185m		950	917	795
Calcium	ppm	ASTM D5185m		1712	1606	1478
Phosphorus	ppm	ASTM D5185m		966	882	874
Zinc	ppm	ASTM D5185m		1201	1178	1098
Sulfur	ppm	ASTM D5185m		3706	3216	2441

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	8	8	11
Sodium	ppm	ASTM D5185m	>31	4	2	7
Potassium	ppm	ASTM D5185m	>20	0	1	4

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.1	9.9	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.5	24.3	27.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	18.8	23.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.1	8.4	8.4

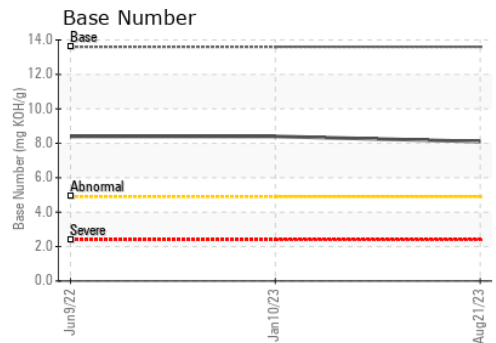
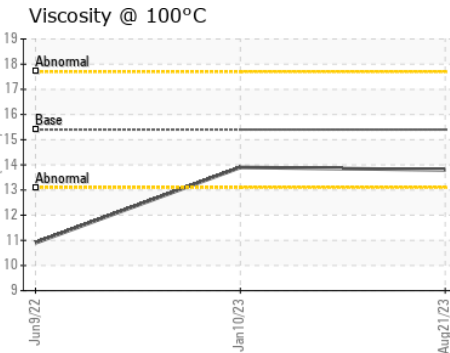
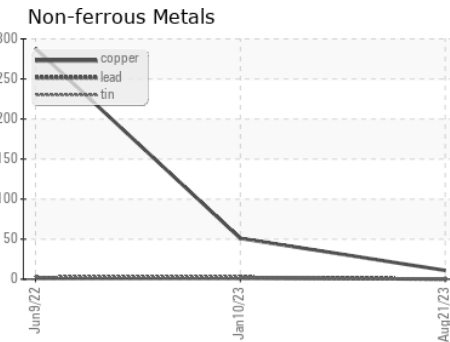
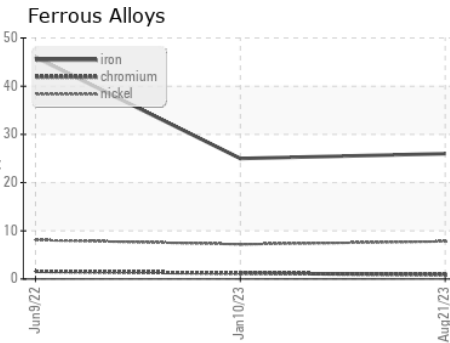
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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	scalar	*Visual	>0.21	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.9	10.9

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0173416 **Received** : 28 Aug 2023
Lab Number : 05935980 **Diagnosed** : 28 Aug 2023
Unique Number : 10621251 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

DIVERSIFIED BIO-MASS
 606 SUNYDALE DR
 WILMINGTON, NC
 US 28412
 Contact: CHRIS DAWSON
 chris@tubgrinding.com
 T: (914)279-6817
 F: (910)793-6227

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)