

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



JOHN DEERE 350G C184493 (S/N 1FF350GXPMF814956)

Component

Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (29 QTS)

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

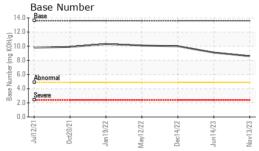
Fluid Condition

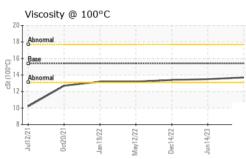
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		JR0192128	JR0182222	JR0153221
Sample Date		Client Info		13 Nov 2023	14 Jun 2023	14 Dec 2022
Machine Age	hrs	Client Info		3065	2627	2186
Oil Age	hrs	Client Info		0	0	2186
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	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	27	40	41
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	1	2
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	4	4
Lead	ppm	ASTM D5185m	>26	0	0	<1
Copper	ppm	ASTM D5185m	>26	<1	2	2
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
		AOTA DELOE		•	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	ppm	method	limit/base	current	0 history1	history2
	ppm		limit/base			
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 229	history1 210	history2 229
ADDITIVES Boron Barium	ppm	method ASTM D5185m ASTM D5185m	limit/base	current 229	history1 210 0	history2 229 0
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 229 0 253	history1 210 0 252	history2 229 0 250
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 229 0 253 <1	history1 210 0 252	history2 229 0 250 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 229 0 253 <1 867	history1 210 0 252 1 857	history2 229 0 250 <1 832
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 229 0 253 <1 867 1439	history1 210 0 252 1 857 1499	history2 229 0 250 <1 832 1499
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 229 0 253 <1 867 1439 925	history1 210 0 252 1 857 1499 906	history2 229 0 250 <1 832 1499 876
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 229 0 253 <1 867 1439 925 1150	history1 210 0 252 1 857 1499 906 1144	history2 229 0 250 <1 832 1499 876 1093
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 229 0 253 <1 867 1439 925 1150 3180	history1 210 0 252 1 857 1499 906 1144 3737	history2 229 0 250 <1 832 1499 876 1093 3567
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 229 0 253 <1 867 1439 925 1150 3180 current	history1 210 0 252 1 857 1499 906 1144 3737 history1	history2 229 0 250 <1 832 1499 876 1093 3567 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 229 0 253 <1 867 1439 925 1150 3180 current 7	history1 210 0 252 1 857 1499 906 1144 3737 history1 6	history2 229 0 250 <1 832 1499 876 1093 3567 history2 7
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >22 >31	current 229 0 253 <1 867 1439 925 1150 3180 current 7 <1	history1 210 0 252 1 857 1499 906 1144 3737 history1 6 <1	history2 229 0 250 <1 832 1499 876 1093 3567 history2 7
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >22 >31 >20	current 229 0 253 <1 867 1439 925 1150 3180 current 7 <1 1	history1 210 0 252 1 857 1499 906 1144 3737 history1 6 <1	history2 229 0 250 <1 832 1499 876 1093 3567 history2 7 1 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >22 >31 >20 limit/base >3	current 229 0 253 <1 867 1439 925 1150 3180 current 7 <1 1	history1 210 0 252 1 857 1499 906 1144 3737 history1 6 <1 2	history2 229 0 250 <1 832 1499 876 1093 3567 history2 7 1 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m	limit/base >22 >31 >20 limit/base >3	current 229 0 253 <1 867 1439 925 1150 3180 current 7 <1 1 current 0.3	history1 210 0 252 1 857 1499 906 1144 3737 history1 6 <1 2 history1 0.4	history2 229 0 250 <1 832 1499 876 1093 3567 history2 7 1 <1 history2 0.5
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m	limit/base >22 >31 >20 limit/base >3 >20	current 229 0 253 <1 867 1439 925 1150 3180 current 7 <1 1 current 0.3 8.1	history1 210 0 252 1 857 1499 906 1144 3737 history1 6 <1 2 history1 0.4 8.5	history2 229 0 250 <1 832 1499 876 1093 3567 history2 7 1 <1 history2 0.5 9.5
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method *ASTM D5185m *ASTM D5185m ASTM D5185m *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >22 >31 >20 limit/base >3 >20 >31	current 229 0 253 <1 867 1439 925 1150 3180 current 7 <1 1 current 0.3 8.1 21.7	history1 210 0 252 1 857 1499 906 1144 3737 history1 6 <1 2 history1 0.4 8.5 21.7	history2 229 0 250 <1 832 1499 876 1093 3567 history2 7 1 <1 history2 0.5 9.5 23.2



OIL ANALYSIS REPORT

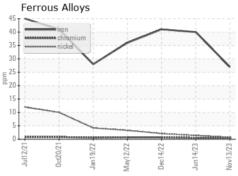


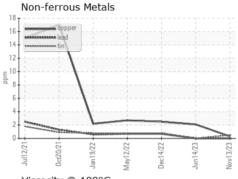


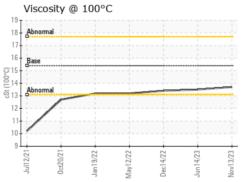
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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
Free Water	scalar	*Visual		NEG	NEG	NEG

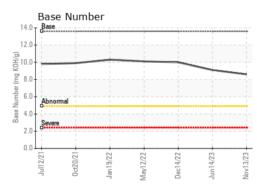
FLUID PROPERTIES		method			history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	13.5	13.4

GRAPHS













Laboratory Sample No. Lab Number

Unique Number : 10741215

: JR0192128 : 06007453

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

Diagnosed Diagnostician : Wes Davis Test Package : CONST (Additional Tests: TBN)

: 14 Nov 2023 : 15 Nov 2023

equipment@garney.com T: (816)741-4600

GARNEY CONSTRUCTION

KANSAS CITY, MO

US 64118

1333 NORTH WEST VIVION RD

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)