



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 544L 1DW544LZPMF709516

Component
Diesel Engine

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

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0129540	JR0070577	JR0070616
Sample Date		Client Info		05 Aug 2022	21 Jan 2022	03 Sep 2021
Machine Age	hrs	Client Info		2621	1266	523
Oil Age	hrs	Client Info		0	700	523
Filter Age	hrs	Client Info		0	700	523
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	MARGINAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	6	17	33
Chromium	ppm	ASTM D5185m	>11	<1	<1	1
Nickel	ppm	ASTM D5185m	>5	0	1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>31	3	2	3
Lead	ppm	ASTM D5185m	>26	<1	<1	6
Copper	ppm	ASTM D5185m	>26	1	▲ 90	▲ 585
Tin	ppm	ASTM D5185m	>4	<1	1	2
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

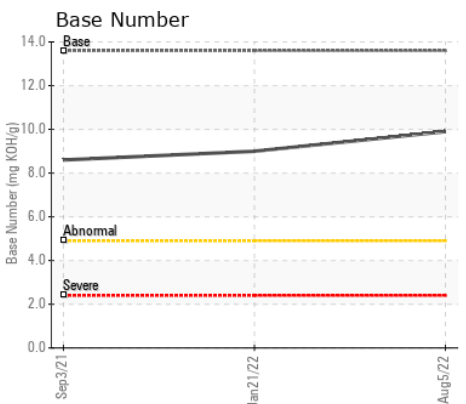
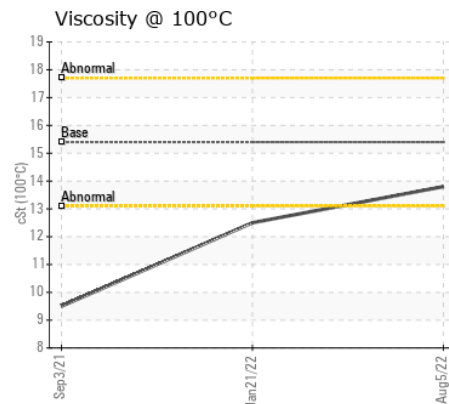
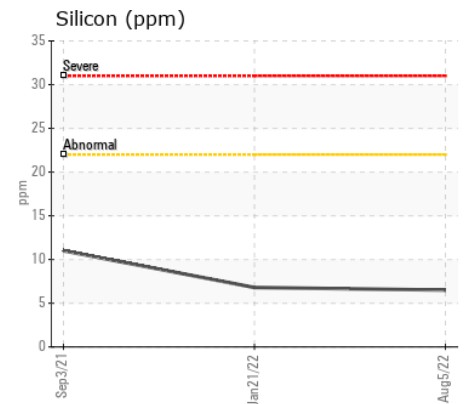
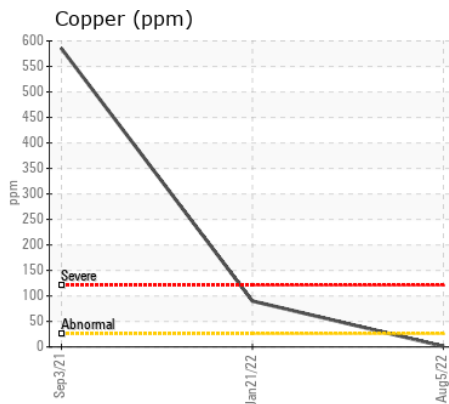
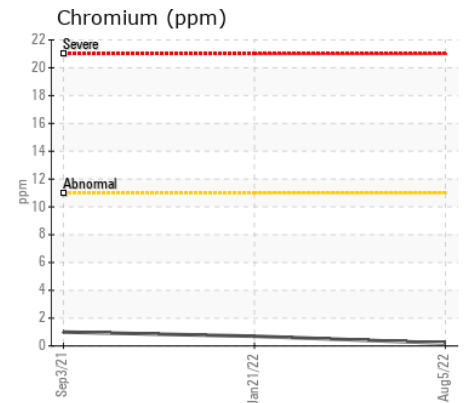
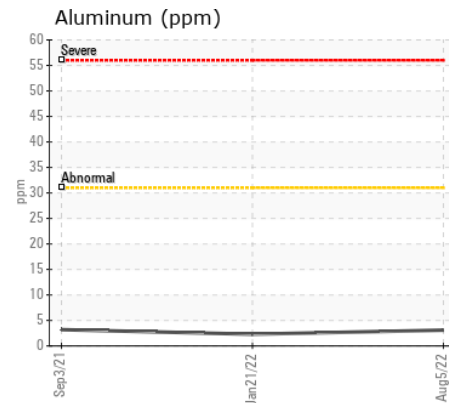
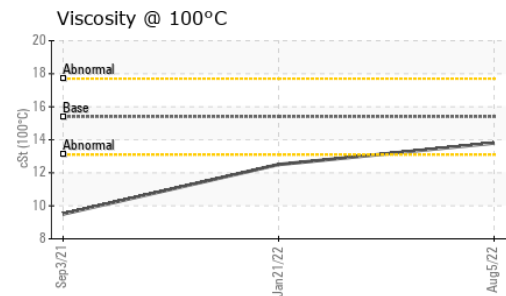
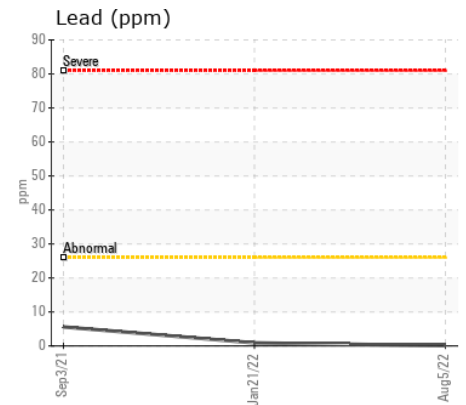
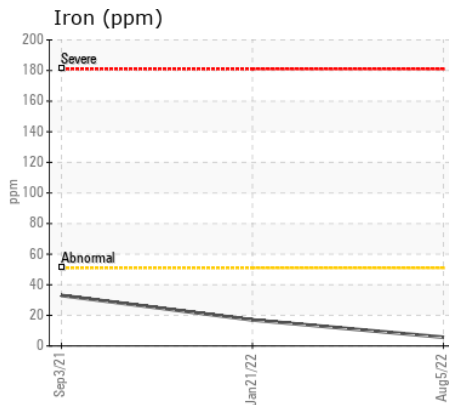
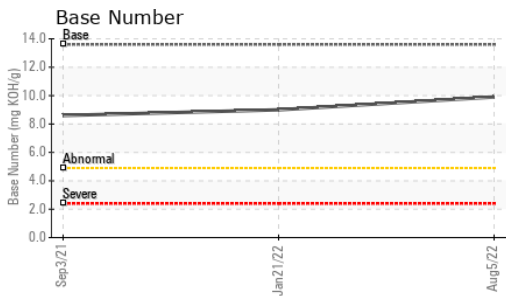
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	6	7	11
Potassium	ppm	ASTM D5185m	>20	1	1	<1
Fuel		WC Method	>2.1	<1.0	<1.0	1.5
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.8	9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	24.7	22
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	>31	<1	3	6
Boron	ppm	ASTM D5185m		287	216	94
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		246	256	256
Manganese	ppm	ASTM D5185m		<1	<1	4
Magnesium	ppm	ASTM D5185m		737	789	849
Calcium	ppm	ASTM D5185m		1309	1474	1394
Phosphorus	ppm	ASTM D5185m		839	893	939
Zinc	ppm	ASTM D5185m		1027	1079	1044
Sulfur	ppm	ASTM D5185m		2788	3004	2663
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	19.4	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.9	9.0	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	12.5	▲ 9.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0129540 **Received** : 09 Aug 2022
Lab Number : 05613095 **Diagnosed** : 10 Aug 2022
Unique Number : 10087589 **Diagnostician** : Wes Davis
Test Package : MOBCE (Additional Tests: TBN)

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)

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