



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 3038E 1LV3038EPLL130885
 Component
Hydraulic System
 Fluid
JOHN DEERE HY-GARD HYD/TRANS LOW VIS (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0191551	JR0144748	JR0115298
Sample Date		Client Info		22 Apr 2024	02 Jun 2023	07 Jun 2022
Machine Age	hrs	Client Info		410	369	318
Oil Age	hrs	Client Info		410	0	318
Filter Age	hrs	Client Info		0	0	318
Oil Changed		Client Info		Not Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

The iron level is abnormal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	▲ 27	20	30
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		1	<1	<1
Aluminum	ppm	ASTM D5185m	>10	4	2	4
Lead	ppm	ASTM D5185m	>10	3	1	2
Copper	ppm	ASTM D5185m	>75	20	17	18
Tin	ppm	ASTM D5185m	>10	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

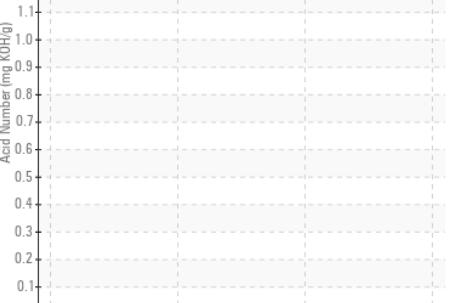
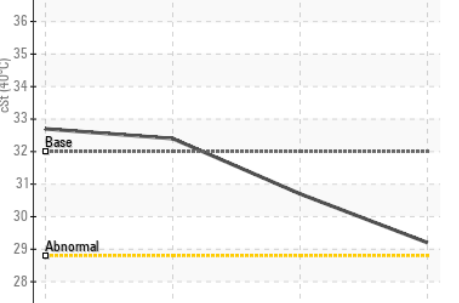
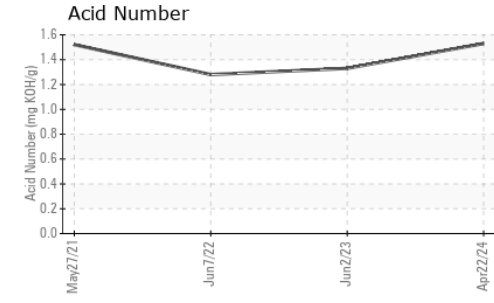
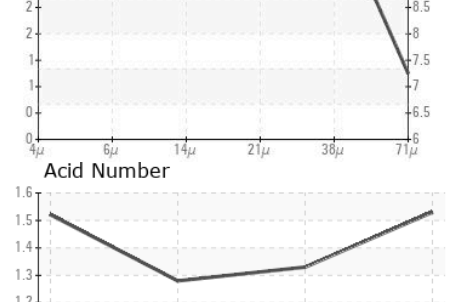
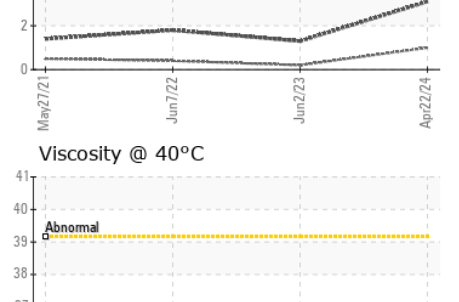
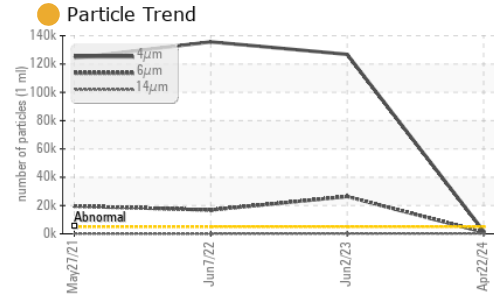
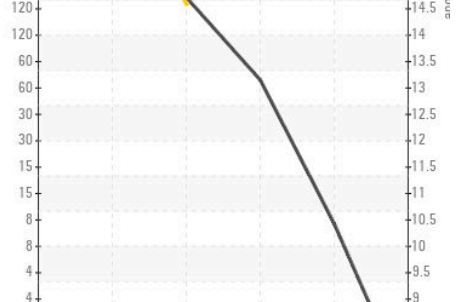
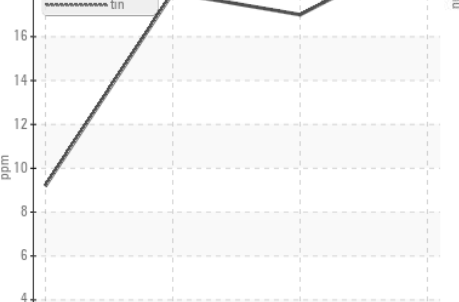
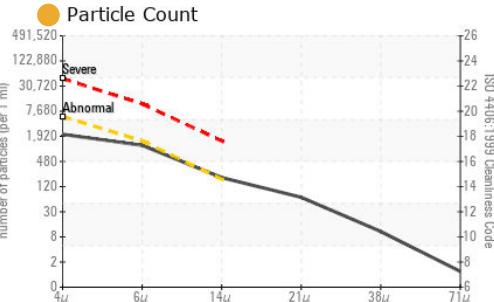
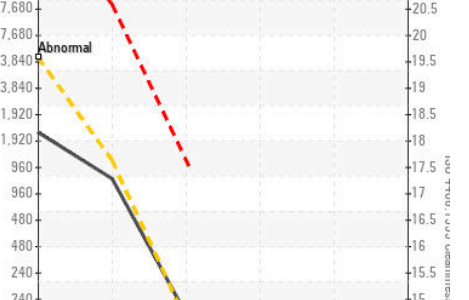
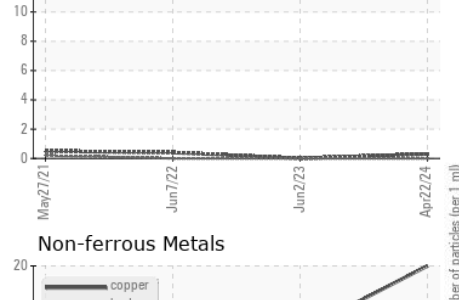
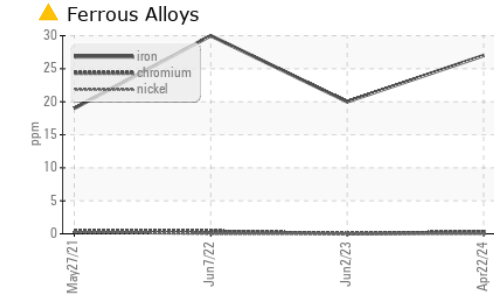
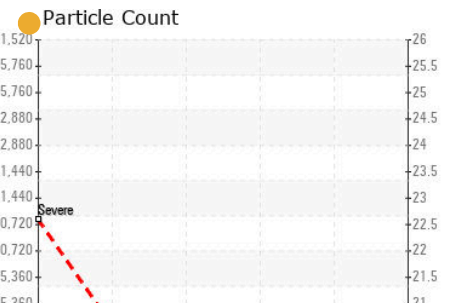
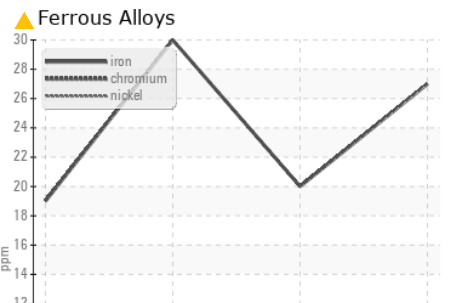
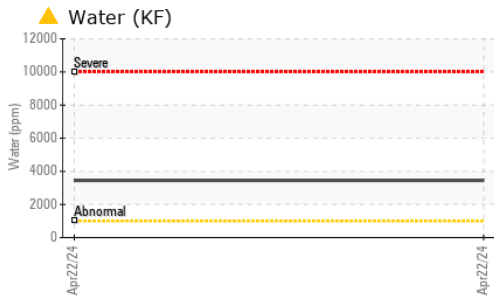
There is a moderate amount of particulates present in the oil. There is a moderate concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>20	8	7	8
Potassium	ppm	ASTM D5185m	>20	5	4	3
Water	%	ASTM D6304	>0.1	▲ 0.345	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 3450	---	---
Particles >4µm		ASTM D7647	>5000	1879	▲ 126811	▲ 135630
Particles >6µm		ASTM D7647	>1300	1024	▲ 26382	▲ 16847
Particles >14µm		ASTM D7647	>160	● 174	155	67
Particles >21µm		ASTM D7647	>40	● 59	26	12
Particles >38µm		ASTM D7647	>10	9	3	1
Particles >71µm		ASTM D7647	>3	1	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	● 18/17/15	▲ 24/22/14	▲ 24/21/13
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	>0.1	0.2%	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		3	0	4
Boron	ppm	ASTM D5185m		<1	0	6
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		2	1	2
Magnesium	ppm	ASTM D5185m		110	91	95
Calcium	ppm	ASTM D5185m		3621	3522	3661
Phosphorus	ppm	ASTM D5185m		1085	1017	1042
Zinc	ppm	ASTM D5185m		1364	1213	1317
Sulfur	ppm	ASTM D5185m		4631	3646	3787
Acid Number (AN)	mg KOH/g	ASTM D8045		1.53	1.33	1.28
Visc @ 40°C	cSt	ASTM D445	32	29.2	30.7	32.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0191551 **Received** : 25 Apr 2024
Lab Number : 06160925 **Tested** : 01 May 2024
Unique Number : 10996348 **Diagnosed** : 01 May 2024 - Jonathan Hester
Test Package : MOBCE (Additional Tests: KF, PQ)

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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