



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
Store 4 - Fairmont
Machine Id
JOHN DEERE 648H 1DW648HXEDD655905
Component
Front Axle
Fluid
JOHN DEERE HY-GARD HYD/TRANS (7 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

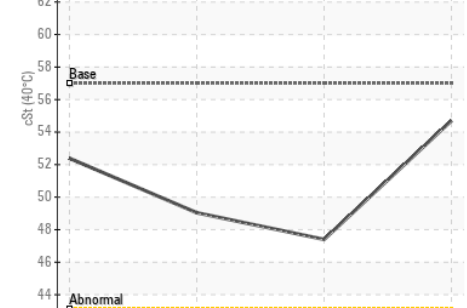
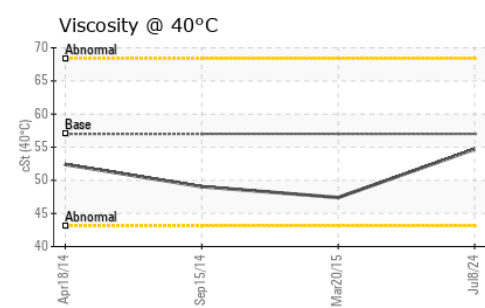
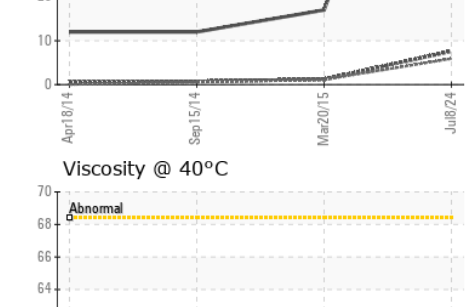
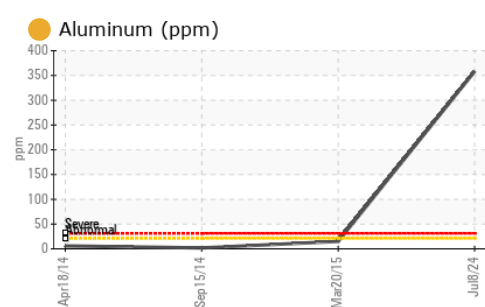
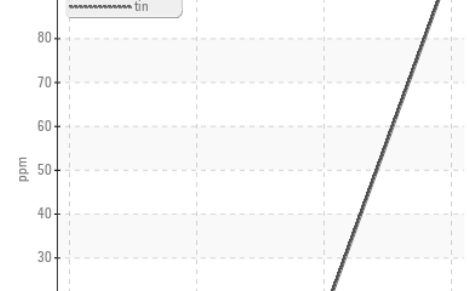
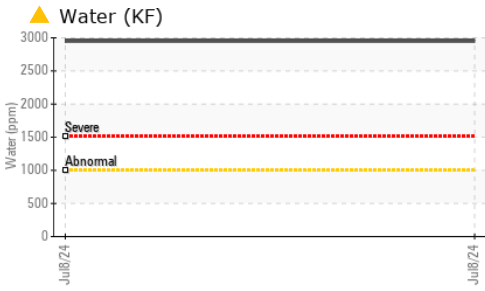
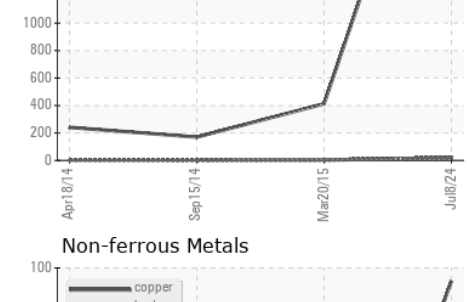
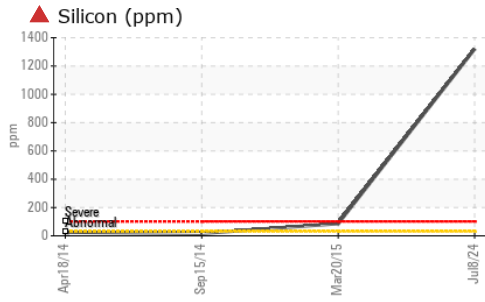
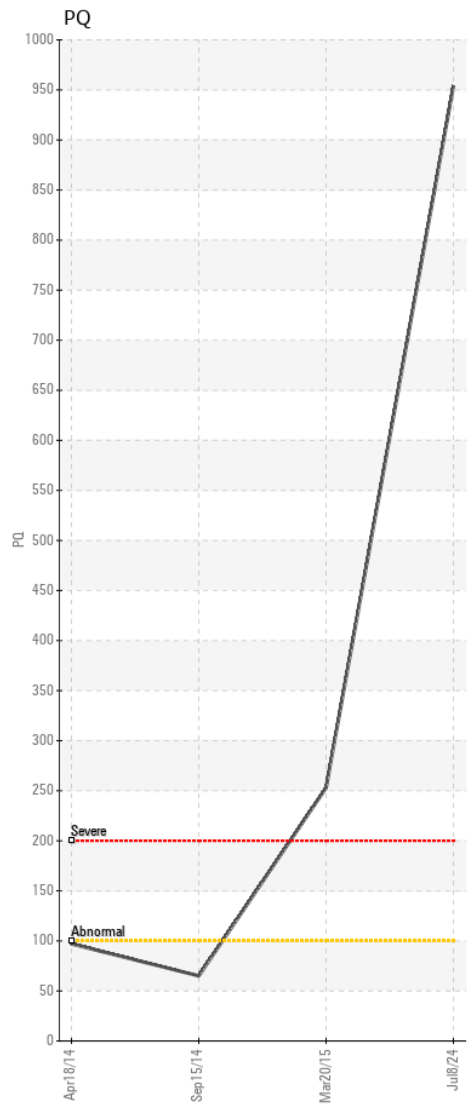
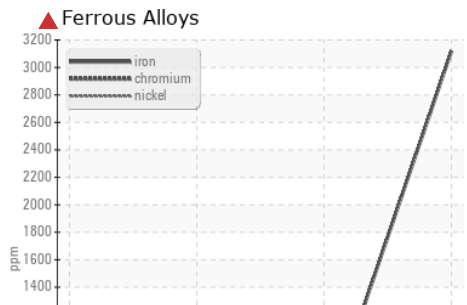
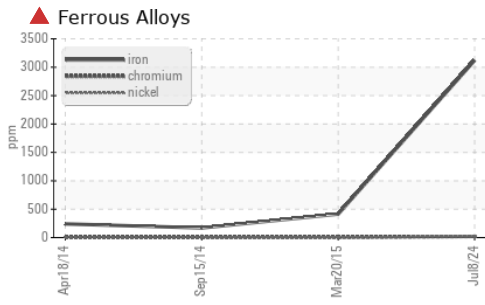
CONTAMINATION

There is a light concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0050078	LECP142125	LECP148174
Sample Date		Client Info		08 Jul 2024	20 Mar 2015	15 Sep 2014
Machine Age	hrs	Client Info		12453	2121	1149
Oil Age	hrs	Client Info		11846	0	542
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				SEVERE	ABNORMAL	NORMAL
PQ		ASTM D8184		954	253	65.0
Iron	ppm	ASTM D5185m	>750	▲ 3119	413	170
Chromium	ppm	ASTM D5185m	>11	▲ 20	2	1
Nickel	ppm	ASTM D5185m	>10	▲ 17	3	1
Titanium	ppm	ASTM D5185m		23	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>21	● 358	● 15	2
Lead	ppm	ASTM D5185m	>49	8	1	<1
Copper	ppm	ASTM D5185m	>101	97	17	12
Tin	ppm	ASTM D5185m	>10	6	1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	HEAVY	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>31	▲ 1320	▲ 86	17
Potassium	ppm	ASTM D5185m	>20	84	5	2
Water	%	ASTM D6304	>0.1	▲ 0.295	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 2950	---	---
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
Sodium	ppm	ASTM D5185m	>51	13	4	3
Boron	ppm	ASTM D5185m	6	2	3	3
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	0	5	0	<1
Manganese	ppm	ASTM D5185m		29	8	4
Magnesium	ppm	ASTM D5185m	145	93	92	95
Calcium	ppm	ASTM D5185m	3570	2509	3347	3735
Phosphorus	ppm	ASTM D5185m	1290	1024	1056	1079
Zinc	ppm	ASTM D5185m	1640	1069	1165	1231
Sulfur	ppm	ASTM D5185m		3750	1724	5276
Visc @ 40°C	cSt	ASTM D445	57.0	54.7	47.4	49.04



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0050078 **Received** : 10 Jul 2024
Lab Number : 06232562 **Tested** : 11 Jul 2024
Unique Number : 11116055 **Diagnosed** : 12 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF, PQ)

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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)