



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI 225LC-3 HCM1U400H00221269

Component
Right Final Drive

Fluid
JOHN DEERE GL-5 80W90 (--- 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. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0200479	JRMC448292	JRMC375414
Sample Date		Client Info		29 Feb 2024	28 Jun 2018	14 May 2015
Machine Age	hrs	Client Info		5951	4164	1896
Oil Age	hrs	Client Info		0	2000	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Gear wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		780	157	131
Iron	ppm	ASTM D5185m	>500	▲ 994	245	246
Chromium	ppm	ASTM D5185m	>10	▲ 12	5	6
Nickel	ppm	ASTM D5185m	>10	5	2	<1
Titanium	ppm	ASTM D5185m		4	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	● 31	5	8
Lead	ppm	ASTM D5185m	>25	0	<1	5
Copper	ppm	ASTM D5185m	>50	2	<1	<1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	HEAVY
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

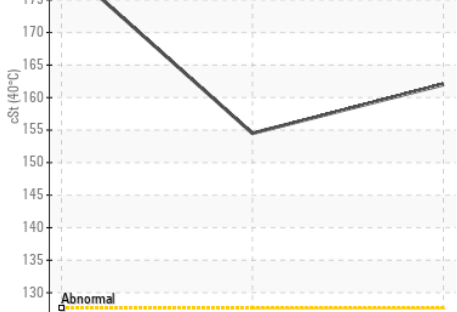
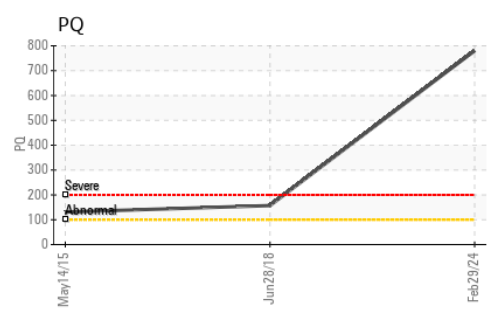
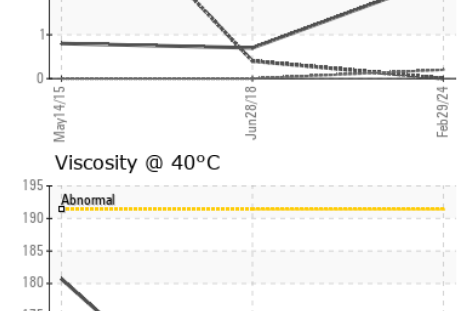
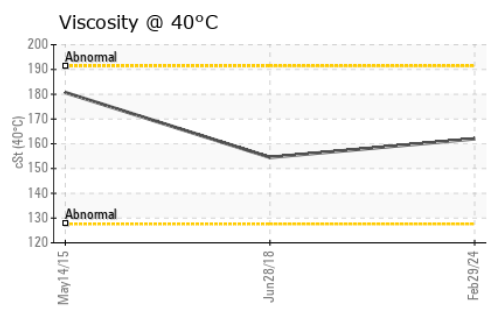
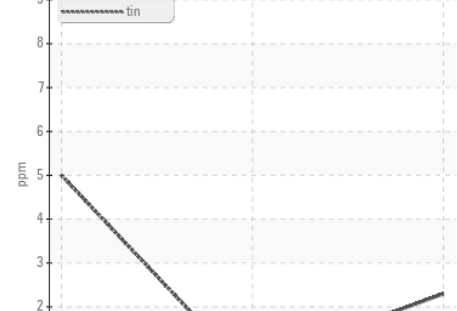
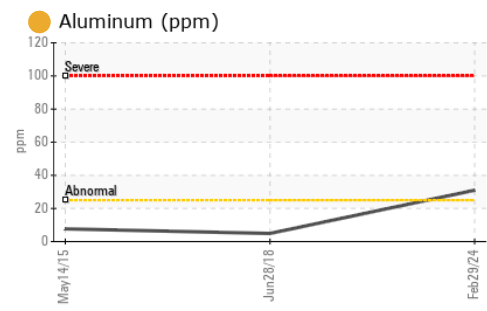
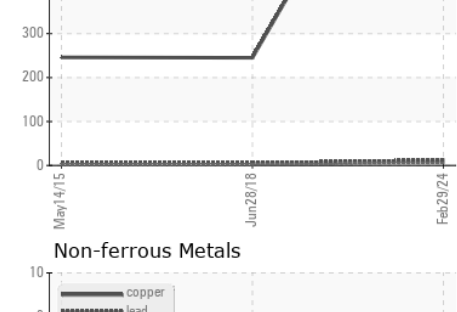
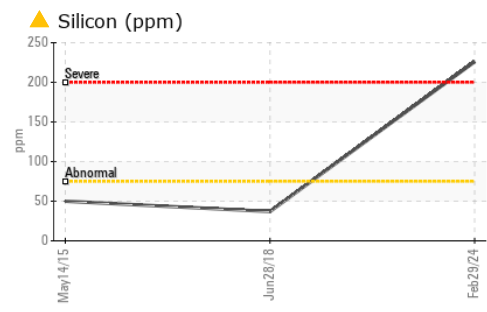
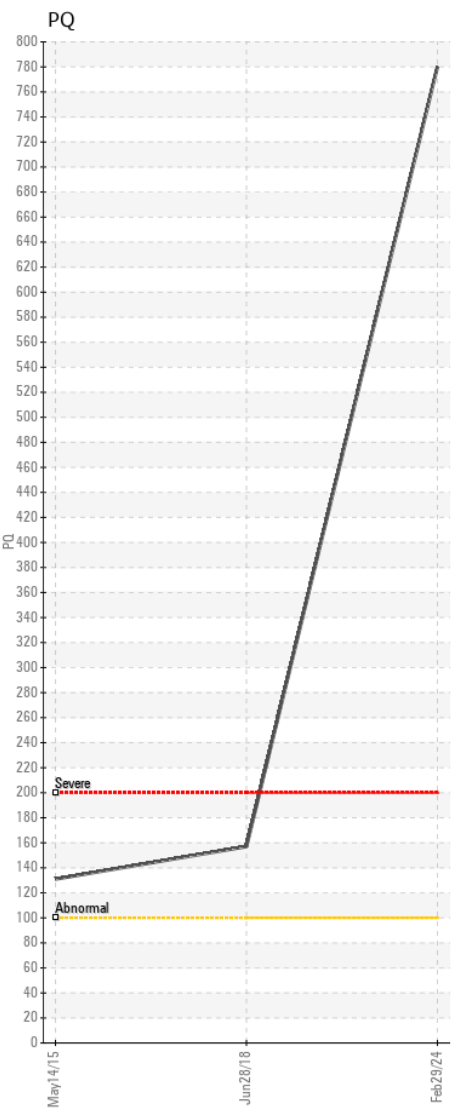
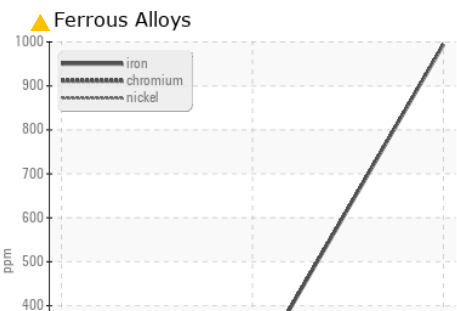
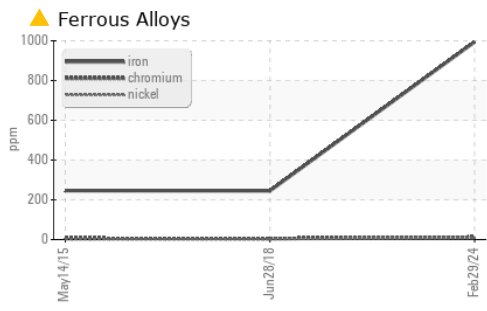
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 226	37	50
Potassium	ppm	ASTM D5185m	>20	10	8	12
Water		WC Method	>0.2	NEG	NEG	NEG
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		4	3	2
Boron	ppm	ASTM D5185m		13	26	46
Barium	ppm	ASTM D5185m		0	<1	3
Molybdenum	ppm	ASTM D5185m		0	2	3
Manganese	ppm	ASTM D5185m		11	8	11
Magnesium	ppm	ASTM D5185m		4	9	0
Calcium	ppm	ASTM D5185m		16	45	45
Phosphorus	ppm	ASTM D5185m		2176	1633	531
Zinc	ppm	ASTM D5185m		21	51	40
Sulfur	ppm	ASTM D5185m		26938	20556	14012
Visc @ 40°C	cSt	ASTM D445		162	154.5	180.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0200479 **Received** : 01 Mar 2024
Lab Number : 06106348 **Tested** : 04 Mar 2024
Unique Number : 10909845 **Diagnosed** : 05 Mar 2024 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

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Certificate L2367
 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)