



Machine Id
HITACHI 85USB-5 HCMDEF60J00023328
 Component
Right Final Drive
 Fluid
JOHN DEERE GL-5 80W90 (2 QTS)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218042	JR0199039	JR0173042
Sample Date		Client Info		20 Jun 2024	04 Jan 2024	22 May 2023
Machine Age	hrs	Client Info		1426	1002	457
Oil Age	hrs	Client Info		1426	1002	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

Gear wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		781	850	500
Iron	ppm	ASTM D5185m	>500	▲ 1071	▲ 784	347
Chromium	ppm	ASTM D5185m	>10	▲ 14	▲ 10	5
Nickel	ppm	ASTM D5185m	>10	8	5	2
Titanium	ppm	ASTM D5185m		4	3	2
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>25	● 47	11	10
Lead	ppm	ASTM D5185m	>25	<1	<1	0
Copper	ppm	ASTM D5185m	>50	3	3	<1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	▲ HEAVY	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

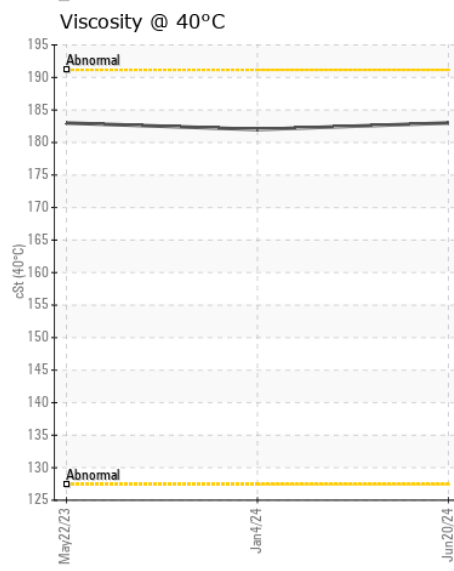
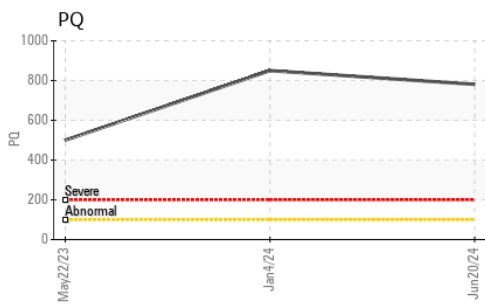
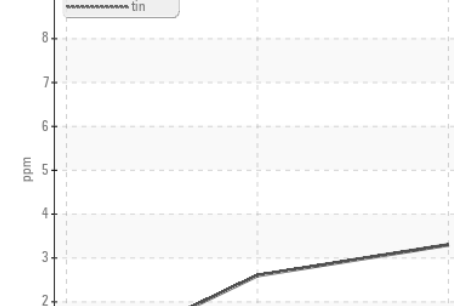
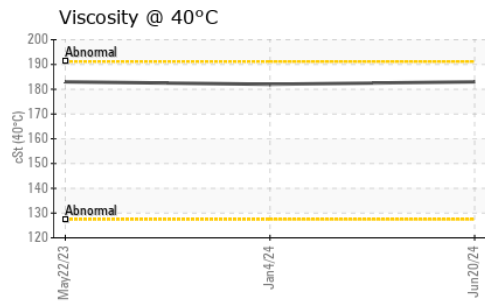
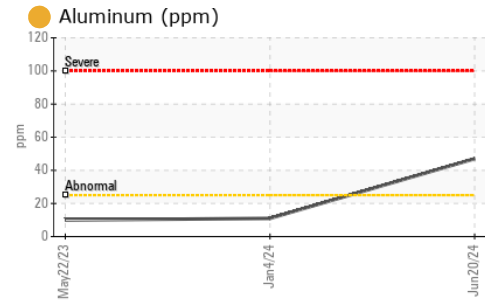
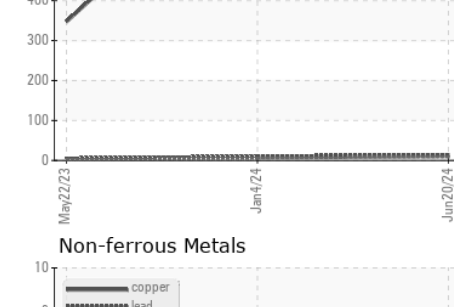
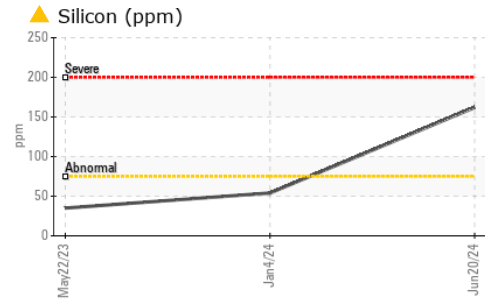
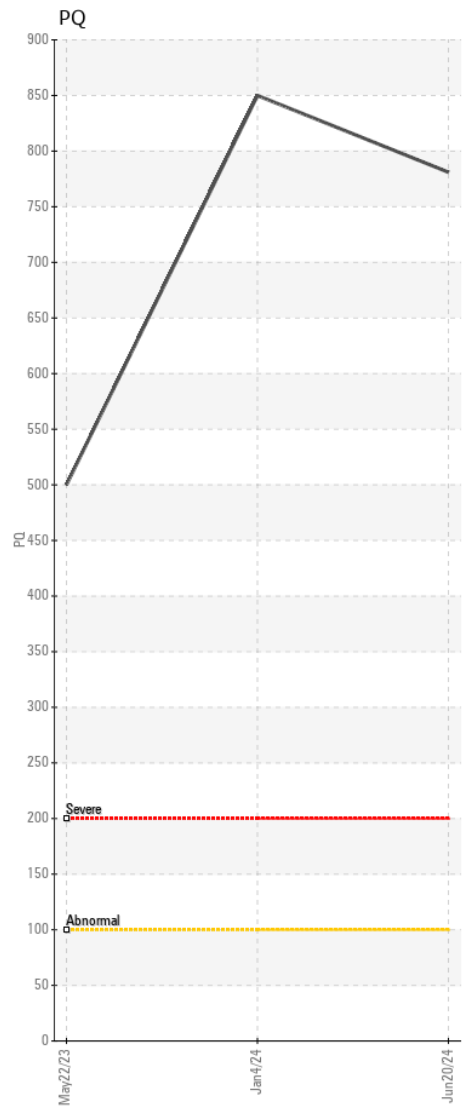
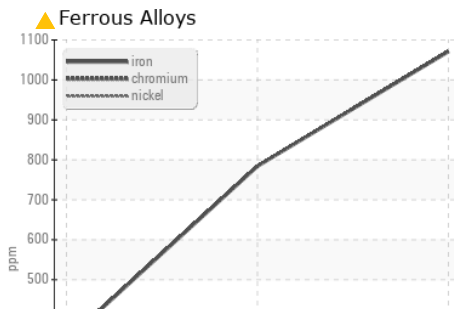
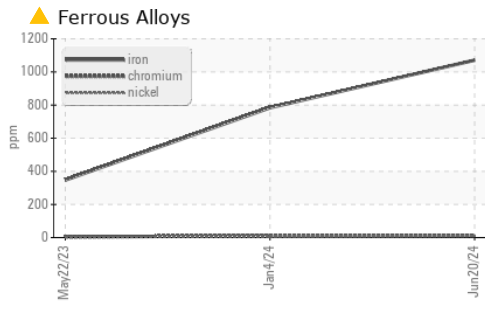
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 162	54	35
Potassium	ppm	ASTM D5185m	>20	11	4	3
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	MODER	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	0	3
Boron	ppm	ASTM D5185m		58	64	69
Barium	ppm	ASTM D5185m		88	103	89
Molybdenum	ppm	ASTM D5185m		1	<1	<1
Manganese	ppm	ASTM D5185m		13	10	6
Magnesium	ppm	ASTM D5185m		8	2	2
Calcium	ppm	ASTM D5185m		107	29	28
Phosphorus	ppm	ASTM D5185m		515	494	507
Zinc	ppm	ASTM D5185m		152	118	76
Sulfur	ppm	ASTM D5185m		15361	15865	19146
Visc @ 40°C	cSt	ASTM D445		183	182	183



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218042 **Received** : 24 Jun 2024
Lab Number : 06218552 **Tested** : 25 Jun 2024
Unique Number : 11096749 **Diagnosed** : 26 Jun 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)