



Area
[W51105]
 Machine Id
JOHN DEERE 160G 1FF160GXVGF056499
 Component
Pump Drive
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

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		JR0199574	JR0019075	JRMC438263
Sample Date		Client Info		09 Apr 2024	12 Sep 2019	07 Mar 2018
Machine Age	hrs	Client Info		3973	1985	988
Oil Age	hrs	Client Info		1000	1000	988
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		ASTM D8184		22	22	25
Iron	ppm	ASTM D5185m	>151	▲ 209	86	84
Chromium	ppm	ASTM D5185m	>11	3	1	2
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		2	1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>21	● 13	7	5
Lead	ppm	ASTM D5185m	>51	2	0	0
Copper	ppm	ASTM D5185m	>51	<1	<1	1
Tin	ppm	ASTM D5185m	>4	1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

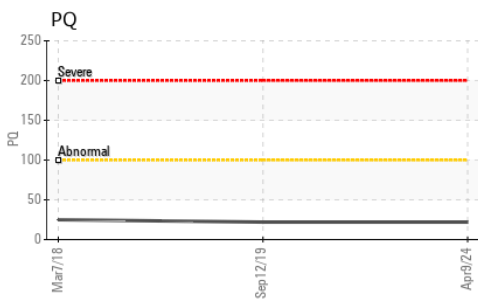
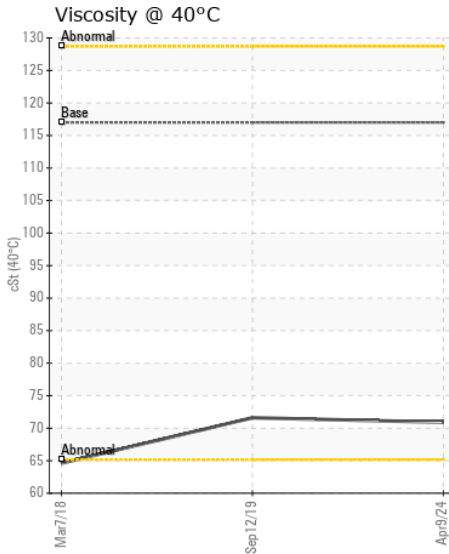
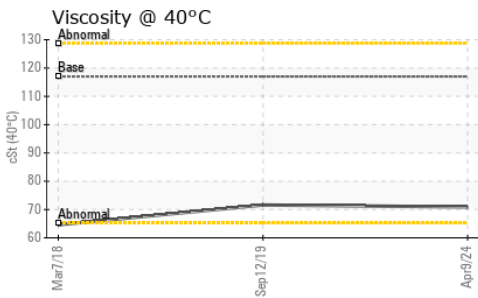
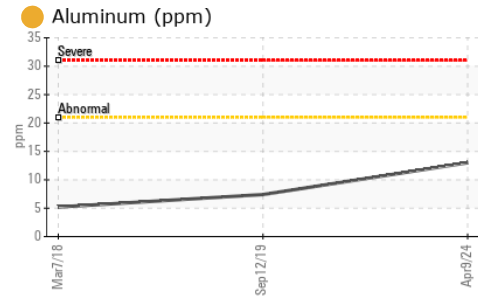
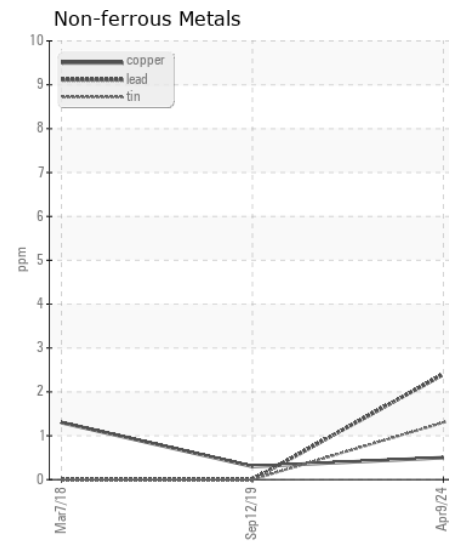
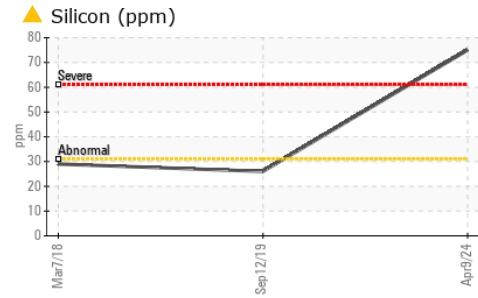
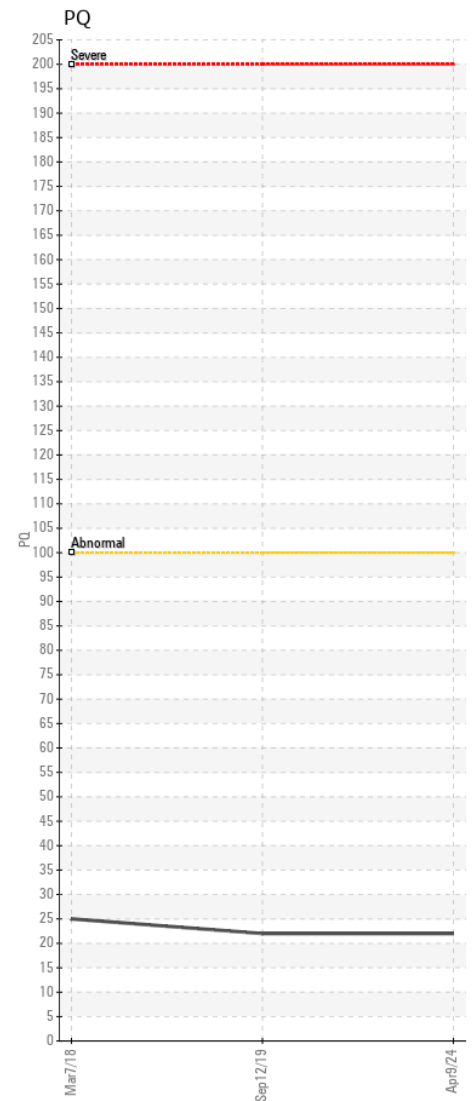
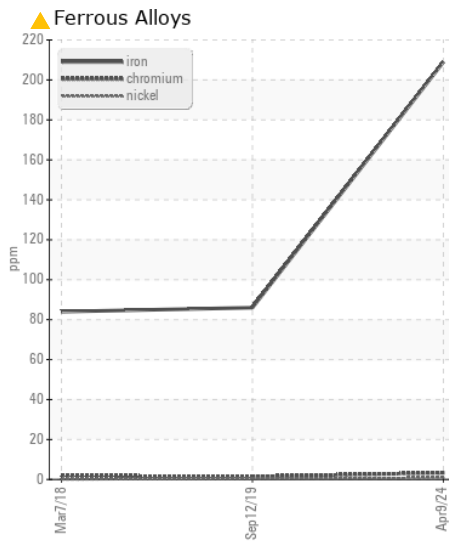
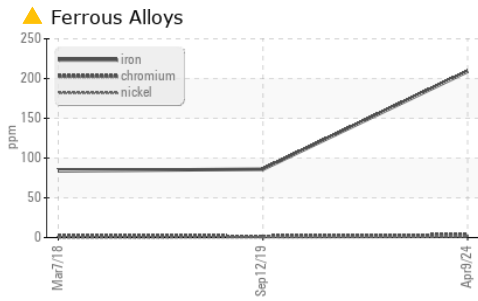
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>31	▲ 75	26	29
Potassium	ppm	ASTM D5185m	>20	6	1	2
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>51	4	10	4
Boron	ppm	ASTM D5185m		262	249	48
Barium	ppm	ASTM D5185m		0	0	4
Molybdenum	ppm	ASTM D5185m		248	242	102
Manganese	ppm	ASTM D5185m		3	1	2
Magnesium	ppm	ASTM D5185m		866	834	8
Calcium	ppm	ASTM D5185m		1608	1801	3820
Phosphorus	ppm	ASTM D5185m		1103	1027	1120
Zinc	ppm	ASTM D5185m		1175	1168	1166
Sulfur	ppm	ASTM D5185m		4067	4538	7972
Visc @ 40°C	cSt	ASTM D445	117	70.9	71.6	64.62



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0199574 **Received** : 12 Apr 2024
Lab Number : 06147592 **Tested** : 15 Apr 2024
Unique Number : 10977670 **Diagnosed** : 16 Apr 2024 - Don Baldrige
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)