



WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
EPIROC D60 G18SED0760
 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. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0202772	JR0197307	JR0186401
Sample Date		Client Info		20 Feb 2024	16 Jan 2024	08 Sep 2023
Machine Age	hrs	Client Info		9966	9736	9172
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				SEVERE	NORMAL	SEVERE

WEAR

Bearing and/or bushing wear is indicated. Gear wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		968	8	546
Iron	ppm	ASTM D5185m	>500	▲ 1340	0	▲ 797
Chromium	ppm	ASTM D5185m	>10	▲ 12	0	7
Nickel	ppm	ASTM D5185m	>10	6	0	3
Titanium	ppm	ASTM D5185m		13	0	8
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	▲ 164	0	▲ 102
Lead	ppm	ASTM D5185m	>25	▲ 95	0	▲ 83
Copper	ppm	ASTM D5185m	>50	▲ 128	<1	▲ 95
Tin	ppm	ASTM D5185m	>10	2	0	2
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

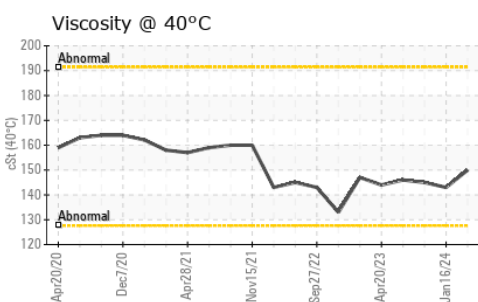
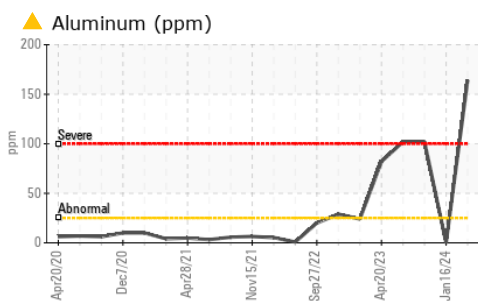
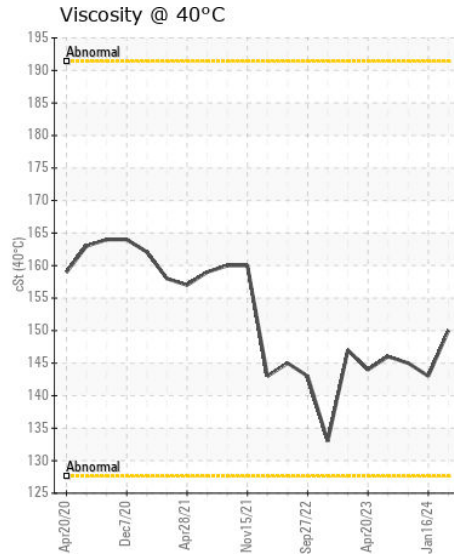
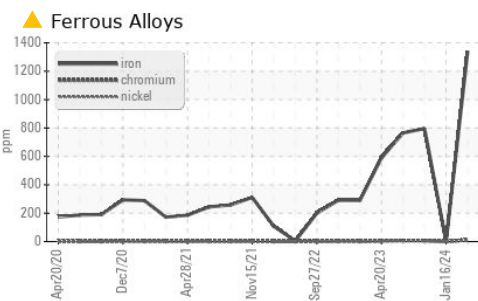
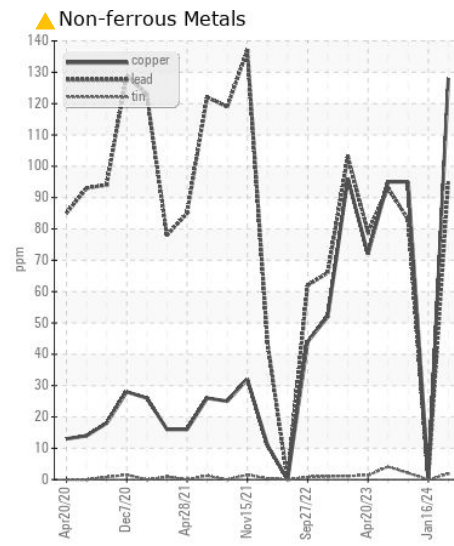
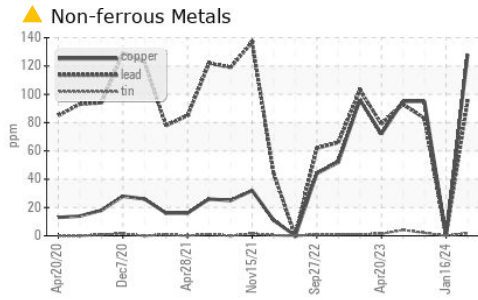
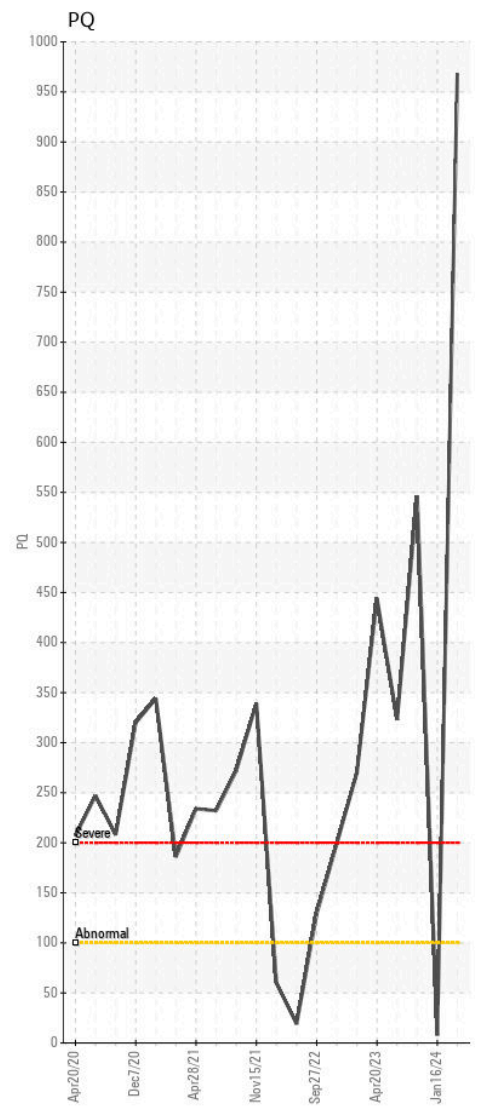
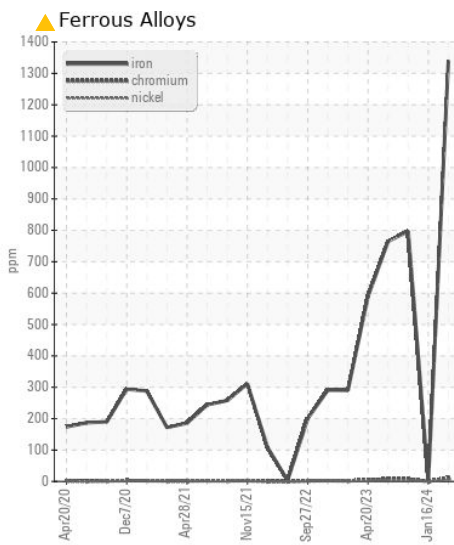
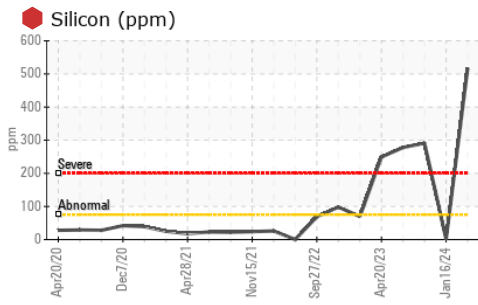
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	◆ 517	1	◆ 291
Potassium	ppm	ASTM D5185m	>20	36	<1	18
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		42	<1	25
Boron	ppm	ASTM D5185m		13	0	11
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		12	0	8
Magnesium	ppm	ASTM D5185m		39	0	26
Calcium	ppm	ASTM D5185m		120	3	89
Phosphorus	ppm	ASTM D5185m		2237	318	2132
Zinc	ppm	ASTM D5185m		123	0	75
Sulfur	ppm	ASTM D5185m		26859	18932	25056
Visc @ 40°C	cSt	ASTM D445		150	143	145



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0202772 **Received** : 22 Feb 2024
Lab Number : 06097246 **Tested** : 23 Feb 2024
Unique Number : 10890099 **Diagnosed** : 23 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

RDU - MARTIN MARIETTA
 PO BOX 30013
 RALEIGH, NC
 US 27622
 Contact: Chad Franks
 chad.franks@martinmarietta.com
 T:
 F:

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)