



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI 190W-6 HCMLBH60V00005009

Component
Pump Drive

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0221961	JR0209226	JR0156695
Sample Date		Client Info		18 Jun 2024	10 Apr 2024	28 Dec 2022
Machine Age	hrs	Client Info		5563	5019	2553
Oil Age	hrs	Client Info		544	0	2553
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		None	None	N/A
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		15	17	10
Iron	ppm	ASTM D5185m	>500	24	191	57
Chromium	ppm	ASTM D5185m	>15	0	2	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	4	2
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m	>35	0	<1	<1
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

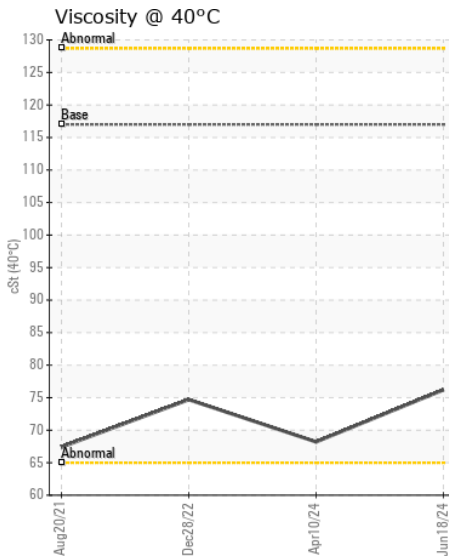
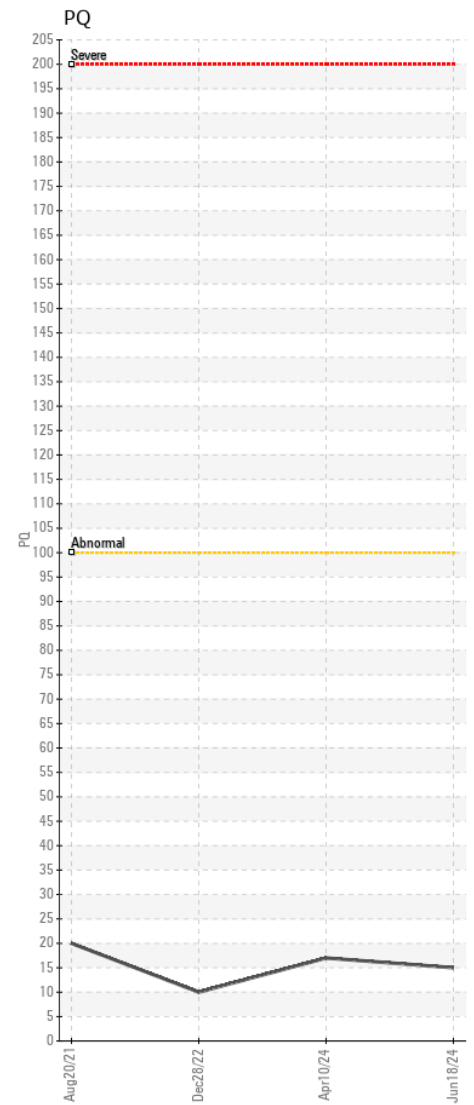
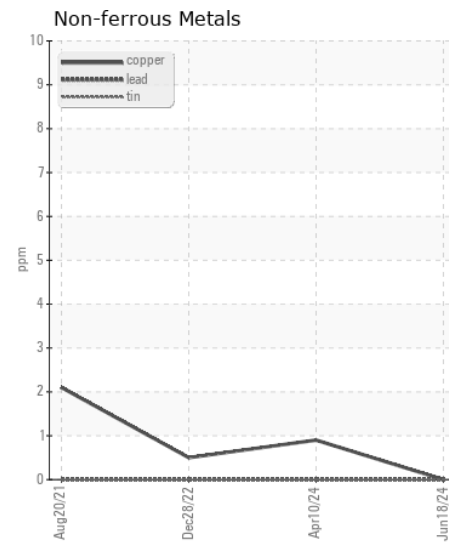
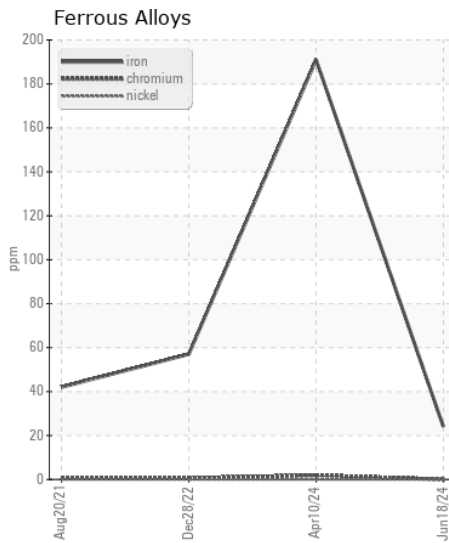
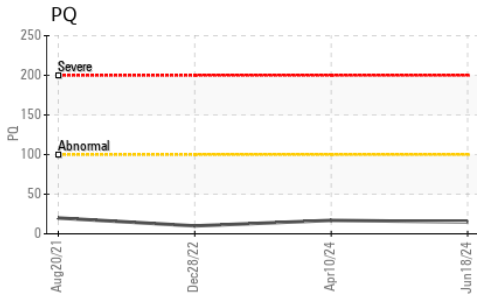
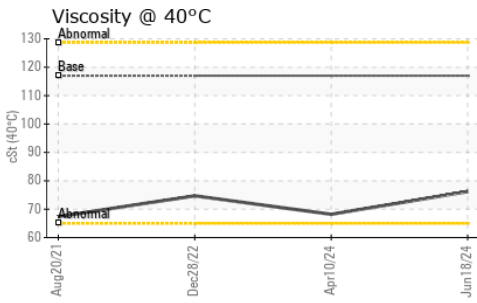
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	9	12	9
Potassium	ppm	ASTM D5185m	>20	0	3	2
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		2	<1	<1
Boron	ppm	ASTM D5185m		281	327	113
Barium	ppm	ASTM D5185m		<1	<1	2
Molybdenum	ppm	ASTM D5185m		251	250	244
Manganese	ppm	ASTM D5185m		<1	2	<1
Magnesium	ppm	ASTM D5185m		786	720	703
Calcium	ppm	ASTM D5185m		1469	1614	1562
Phosphorus	ppm	ASTM D5185m		967	1090	915
Zinc	ppm	ASTM D5185m		1044	1103	1049
Sulfur	ppm	ASTM D5185m		3890	4052	4239
Visc @ 40°C	cSt	ASTM D445	117	76.2	68.2	74.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0221961 **Received** : 20 Jun 2024
Lab Number : 06216004 **Tested** : 22 Jun 2024
Unique Number : 11088868 **Diagnosed** : 23 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529

Contact: RALEIGH SHOP
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com

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)

T: (919)614-2260
 F: (919)779-5432