



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI 345LC-6 HCMDD560T00010281
 Component
Pump Drive
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (2 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218454	JR0200764	JR0172887
Sample Date		Client Info		14 Jun 2024	17 Jan 2024	09 May 2023
Machine Age	hrs	Client Info		1967	1458	966
Oil Age	hrs	Client Info		1967	492	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		None	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		16	20	17
Iron	ppm	ASTM D5185m	>500	57	43	89
Chromium	ppm	ASTM D5185m	>15	<1	<1	2
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	<1
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m	>35	3	<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

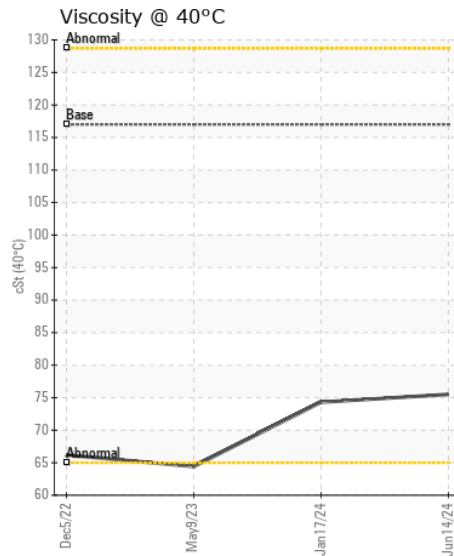
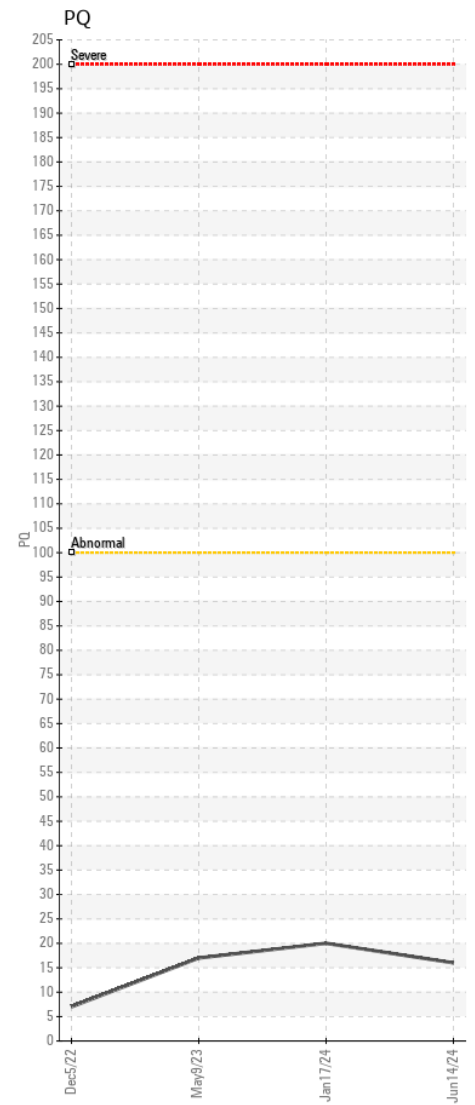
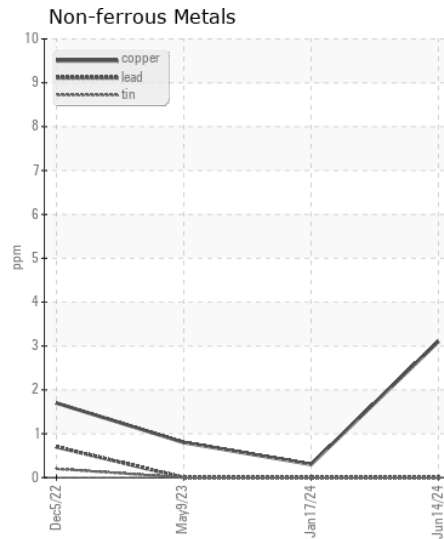
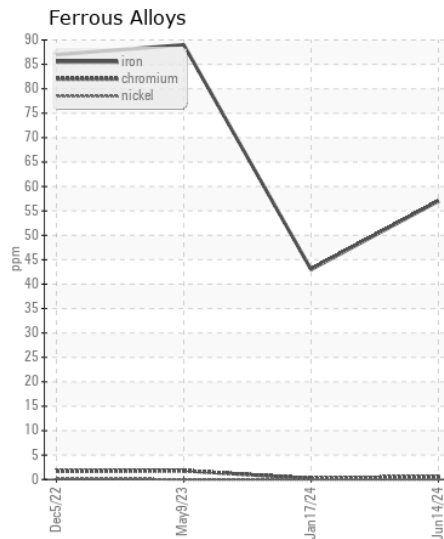
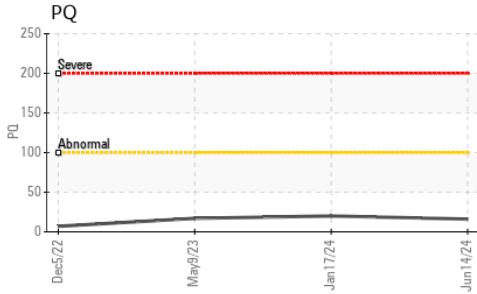
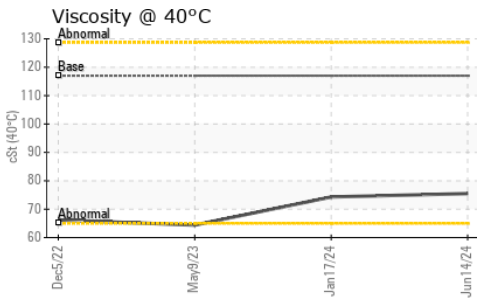
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	9	8	10
Potassium	ppm	ASTM D5185m	>20	2	2	0
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		0	0	3
Boron	ppm	ASTM D5185m		242	276	64
Barium	ppm	ASTM D5185m		2	2	7
Molybdenum	ppm	ASTM D5185m		211	230	104
Manganese	ppm	ASTM D5185m		<1	0	2
Magnesium	ppm	ASTM D5185m		618	664	18
Calcium	ppm	ASTM D5185m		1494	1639	4012
Phosphorus	ppm	ASTM D5185m		939	1044	1179
Zinc	ppm	ASTM D5185m		984	1039	1377
Sulfur	ppm	ASTM D5185m		5403	5403	10227
Visc @ 40°C	cSt	ASTM D445	117	75.5	74.3	64.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0218454

Lab Number : 06213833

Unique Number : 11086697

Test Package : CONST (Additional Tests: PQ)

Received : 18 Jun 2024

Tested : 20 Jun 2024

Diagnosed : 20 Jun 2024 - Wes Davis

JRE - MANASSAS PARK

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US 20111

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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)