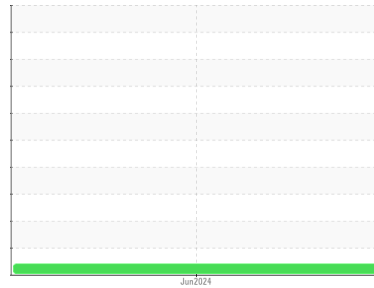


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
JOHN DEERE 160P 1FF160PACPF000369
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Fuel content negligible.

Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info		JR0211593	---	---
Sample Date	Client Info		05 Jun 2024	---	---
Machine Age	hrs	Client Info	490	---	---
Oil Age	hrs	Client Info	490	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ATTENTION	---	---

CONTAMINATION method limit/base current history1 history2

Water	WC Method	>0.21	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>51	37	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>31	10	---	---
Lead	ppm	ASTM D5185m	>26	5	---	---
Copper	ppm	ASTM D5185m	>26	53	---	---
Tin	ppm	ASTM D5185m	>4	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185m		207	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		266	---	---
Manganese	ppm	ASTM D5185m		4	---	---
Magnesium	ppm	ASTM D5185m		815	---	---
Calcium	ppm	ASTM D5185m		1418	---	---
Phosphorus	ppm	ASTM D5185m		940	---	---
Zinc	ppm	ASTM D5185m		1102	---	---
Sulfur	ppm	ASTM D5185m		3112	---	---

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>22	12	---	---
Sodium	ppm	ASTM D5185m	>31	4	---	---
Potassium	ppm	ASTM D5185m	>20	9	---	---
Fuel	%	ASTM D3524	>2.1	0.3	---	---

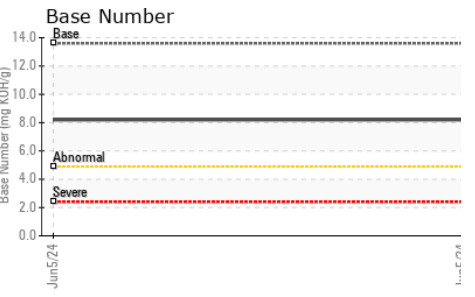
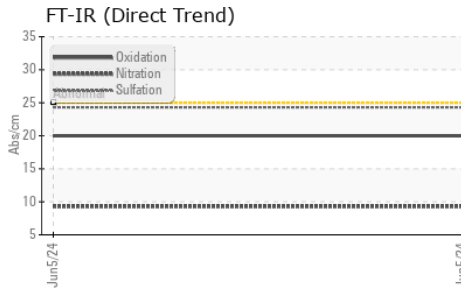
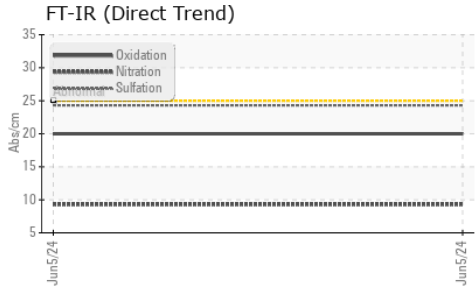
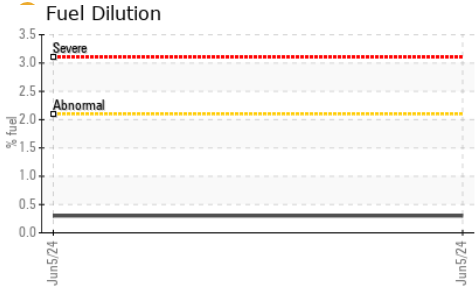
INFRA-RED method limit/base current history1 history2

Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.3	---	---

FLUID DEGRADATION method limit/base current history1 history2

Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.2	---	---

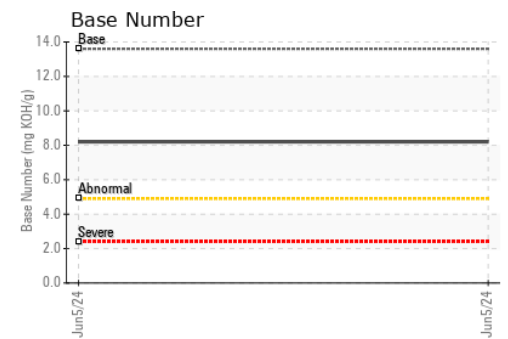
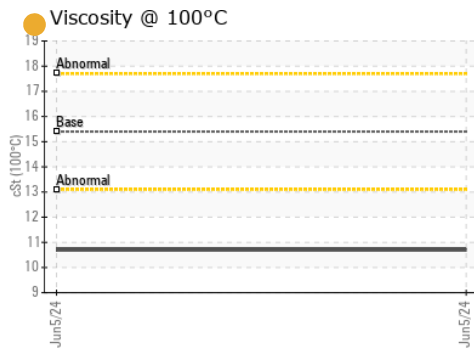
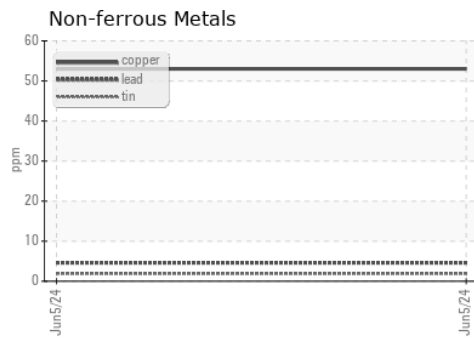
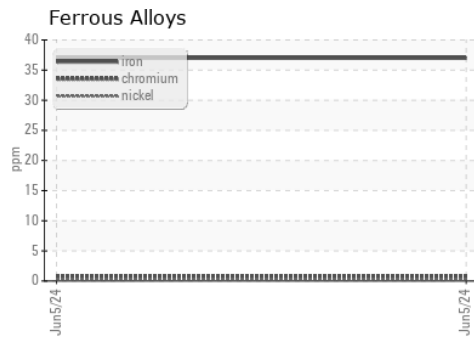
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	● 10.7	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211593 **Received** : 12 Jun 2024
Lab Number : 06207565 **Tested** : 19 Jun 2024
Unique Number : 11075026 **Diagnosed** : 19 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005
 Contact: ANGELINA CRISOSTOMI
 Angelina.Crisostomi@jamesriverequipment.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) F: (804)798-0292