



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**JOHN DEERE 4455 JOHN DEERE 4455**

Component  
**Diesel Engine**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (20 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR03711973	---	---
Sample Date		Client Info		21 Mar 2015	---	---
Machine Age	hrs	Client Info		10776	---	---
Oil Age	hrs	Client Info		10	---	---
Filter Age	hrs	Client Info		10	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				NORMAL	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	12	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>31	5	---	---
Lead	ppm	ASTM D5185m	>26	0	---	---
Copper	ppm	ASTM D5185m	>26	2	---	---
Tin	ppm	ASTM D5185m	>4	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

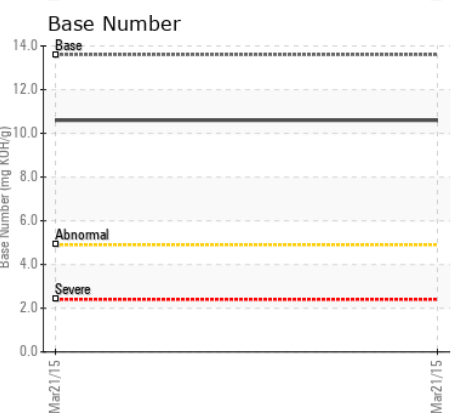
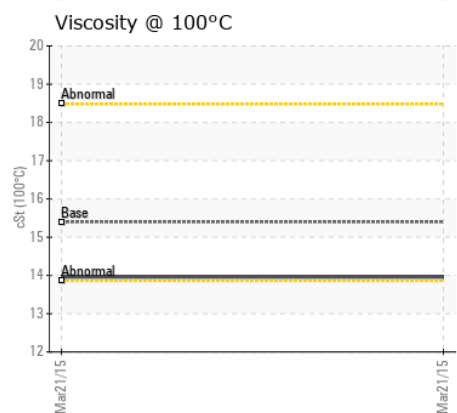
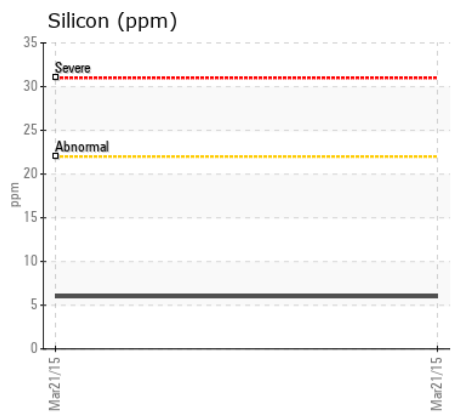
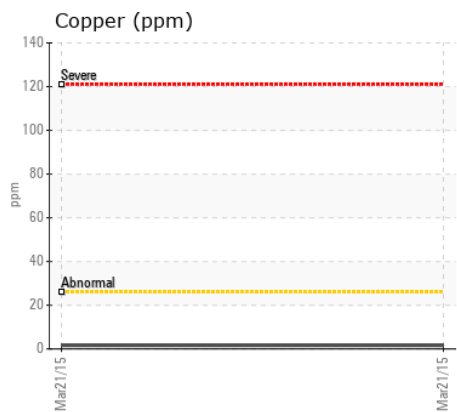
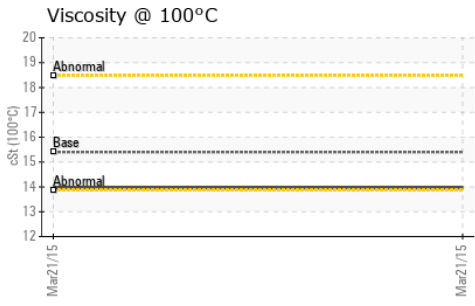
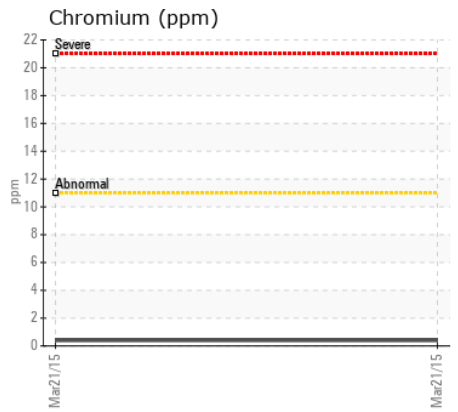
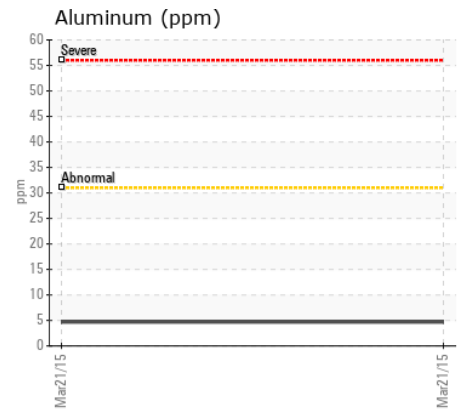
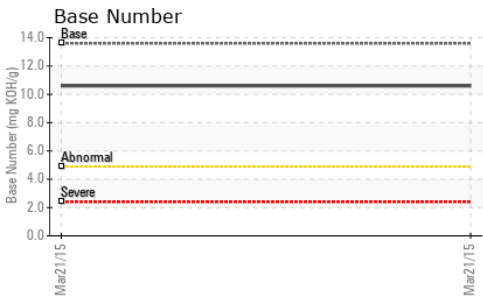
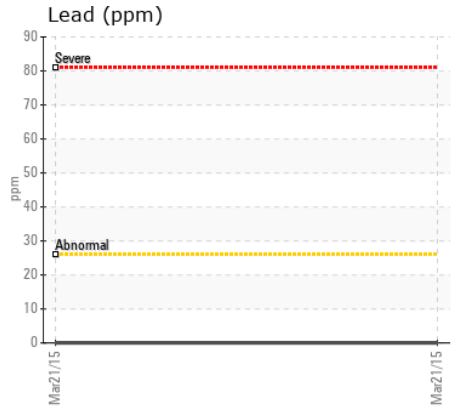
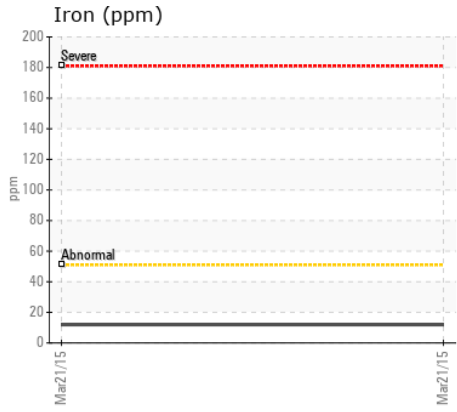
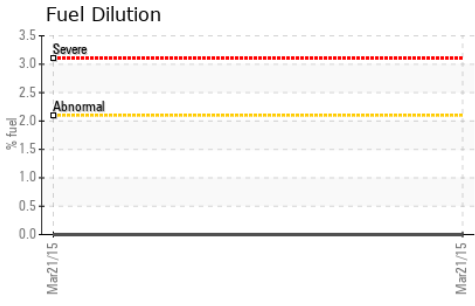
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m	>22	6	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Fuel	%	ASTM D3524	>2.1	0.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0	---	---
Nitration	Abs/cm	*ASTM D7624		6.	---	---
Sulfation	Abs/.1mm	*ASTM D7415		18.	---	---
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	---	---

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	10	---	---
Boron	ppm	ASTM D5185m		215	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		207	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		751	---	---
Calcium	ppm	ASTM D5185m		1229	---	---
Phosphorus	ppm	ASTM D5185m		885	---	---
Zinc	ppm	ASTM D5185m		943	---	---
Sulfur	ppm	ASTM D5185m		2824	---	---
Oxidation	Abs/.1mm	*ASTM D7414		13.	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	10.6	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.96	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR03711973 **Received** : 31 Mar 2015  
**Lab Number** : 03711973 **Tested** : 01 Apr 2015  
**Unique Number** : 6954973 **Diagnosed** : 01 Apr 2015 - Doug Bogart  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

**WALDON YORK**  
 PO BOX 848  
 LUSK, WY  
 US 82225  
 Contact: BOB YORK

To discuss this sample report, contact Customer Service at 1-800-827-0711.

\* - 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:  
F: