



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**JOHN DEERE JOHN DEERE 244J**

Component  
**Diesel Engine**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (12 QTS)**

## RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR04358479	---	---
Sample Date		Client Info		30 Nov 2017	---	---
Machine Age	hrs	Client Info		4000	---	---
Oil Age	hrs	Client Info		30	---	---
Filter Age	hrs	Client Info		30	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	8	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>5	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>20	4	---	---
Lead	ppm	ASTM D5185m	>26	0	---	---
Copper	ppm	ASTM D5185m	>13	1	---	---
Tin	ppm	ASTM D5185m	>4	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

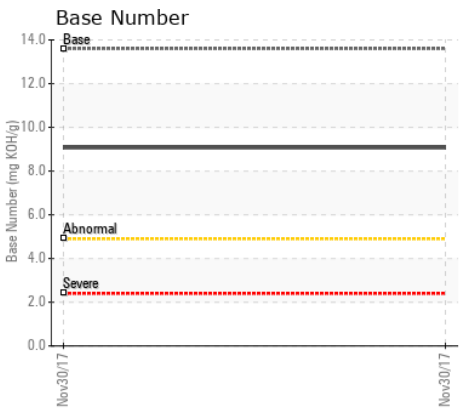
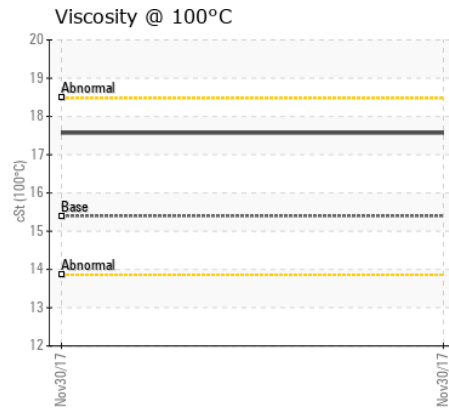
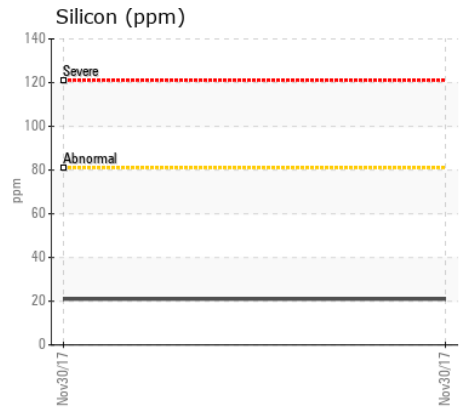
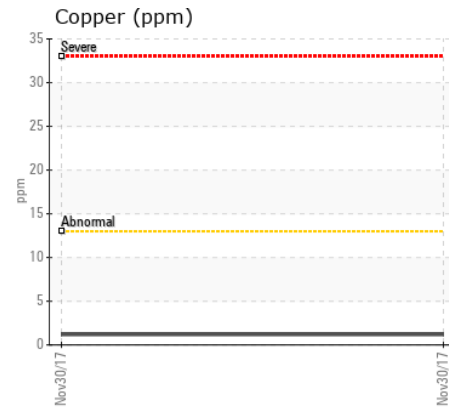
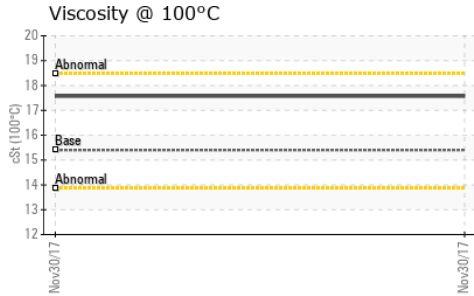
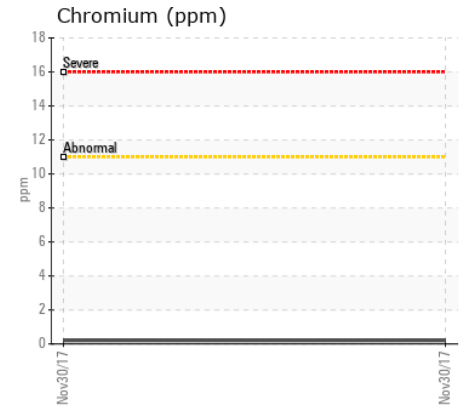
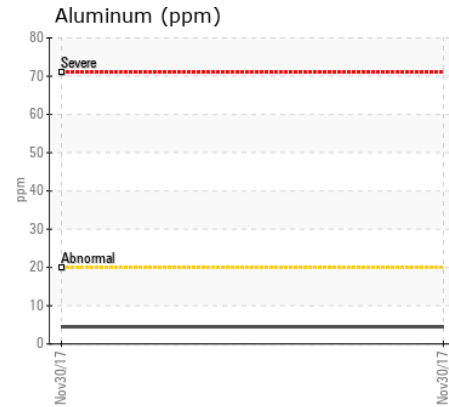
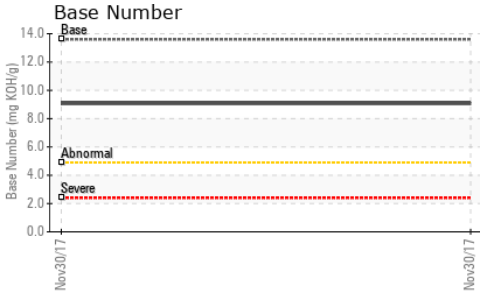
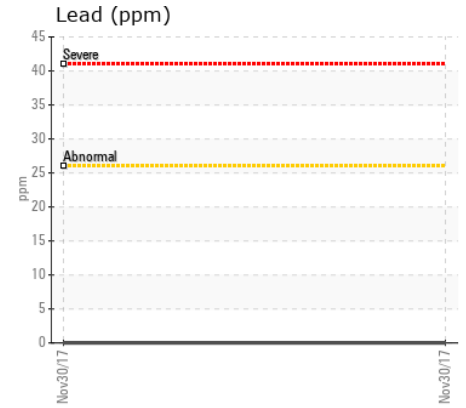
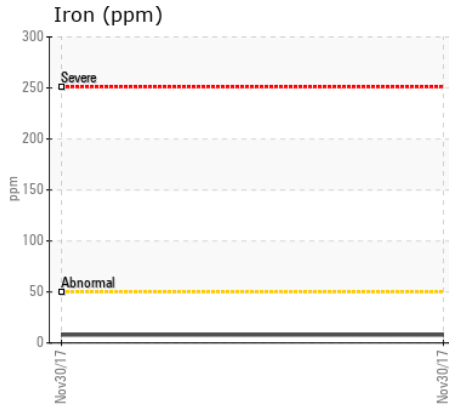
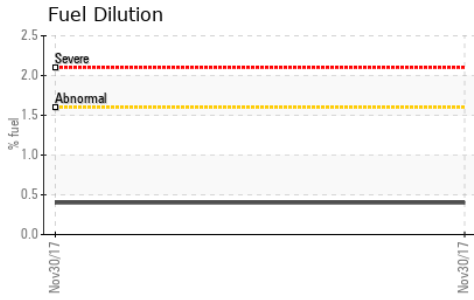
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>81	21	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Fuel	%	ASTM D3524	>1.6	0.4	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0	---	---
Nitration	Abs/cm	*ASTM D7624		4.	---	---
Sulfation	Abs/.1mm	*ASTM D7415		13.	---	---
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	4	---	---
Boron	ppm	ASTM D5185m		214	---	---
Barium	ppm	ASTM D5185m		2	---	---
Molybdenum	ppm	ASTM D5185m		219	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		675	---	---
Calcium	ppm	ASTM D5185m		1275	---	---
Phosphorus	ppm	ASTM D5185m		739	---	---
Zinc	ppm	ASTM D5185m		828	---	---
Sulfur	ppm	ASTM D5185m		1008	---	---
Oxidation	Abs/.1mm	*ASTM D7414		7.	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.07	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	17.57	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR04358479  
**Lab Number** : 04358479  
**Unique Number** : 8017104  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

**Received** : 01 Dec 2017  
**Tested** : 04 Dec 2017  
**Diagnosed** : 04 Dec 2017 - Jonathan Hester

**SAMUEL G. WALDNER**  
 EAST END COLONY 55601 RD 126 NORTH  
 HAVRE, MT  
 US 59501  
 Contact: MARK OPHEIM

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: