



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>MARGINAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id

**#1**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (10 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		<b>TR02296842</b>	TR02295314	---
Sample Date		Client Info		<b>09 Nov 2008</b>	04 Nov 2008	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>250</b>	350	---
Filter Age	hrs	Client Info		<b>250</b>	350	---
Oil Changed		Client Info		<b>Changed</b>	Not Changd	---
Filter Changed		Client Info		<b>Changed</b>	Not Changd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m		<b>17</b>	24	---
Chromium	ppm	ASTM D5185m		<b>1</b>	2	---
Nickel	ppm	ASTM D5185m		<b>1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	---
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m		<b>8</b>	16	---
Lead	ppm	ASTM D5185m		<b>2</b>	<1	---
Copper	ppm	ASTM D5185m		<b>3</b>	<1	---
Tin	ppm	ASTM D5185m		<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

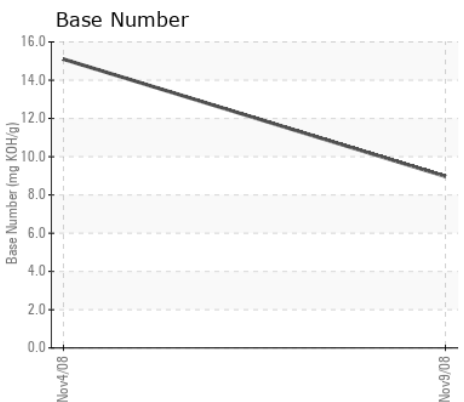
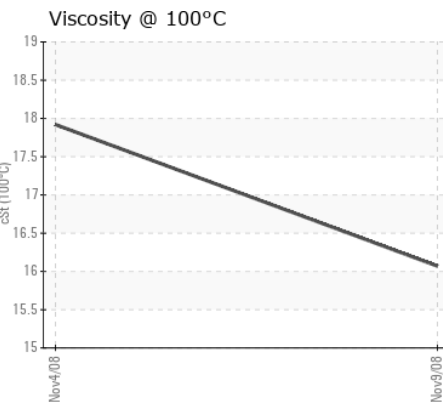
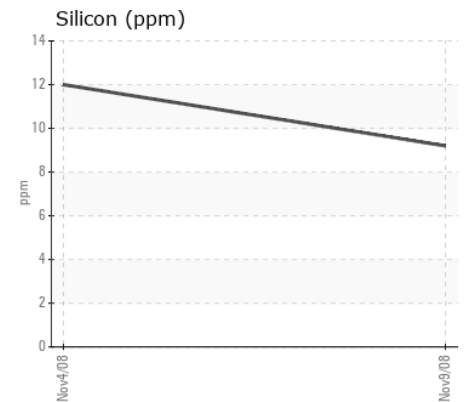
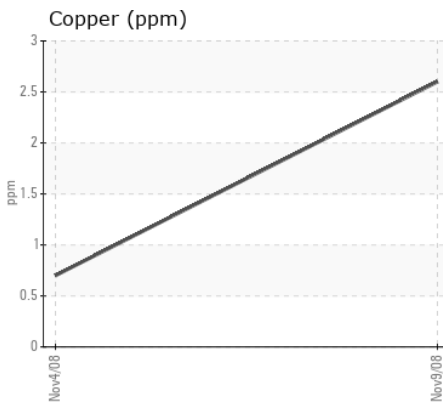
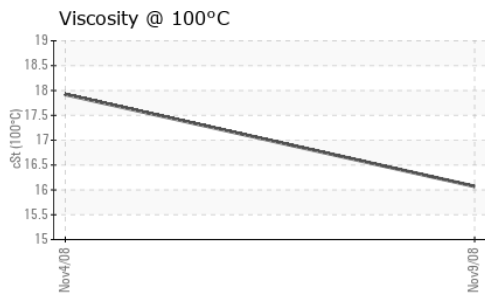
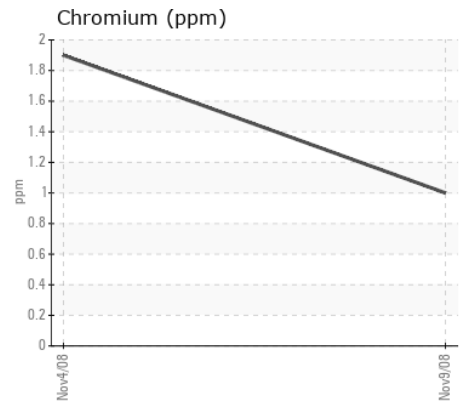
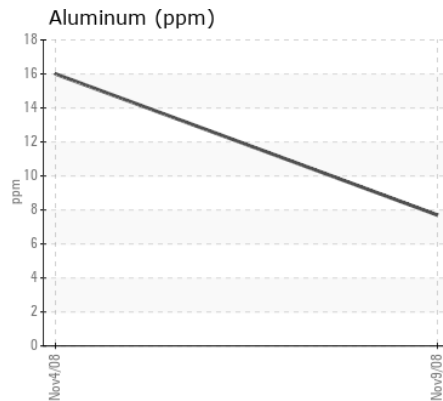
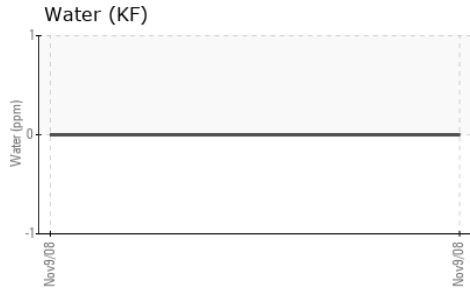
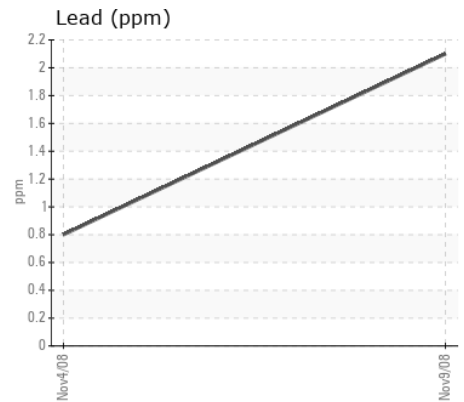
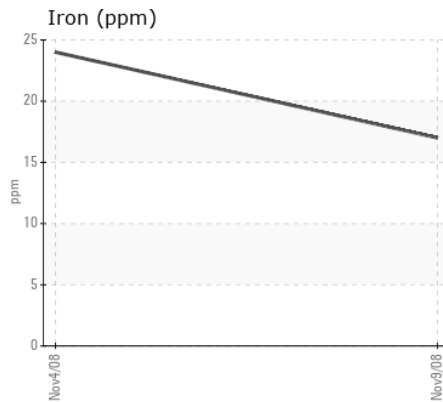
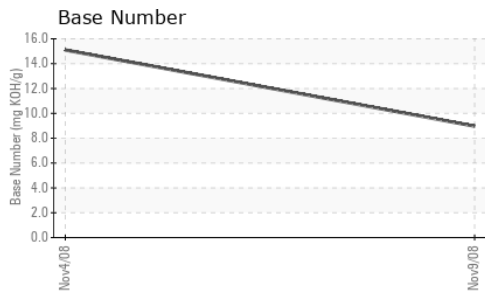
There is a trace of moisture present in the oil.

Silicon	ppm	ASTM D5185m		<b>9</b>	12	---
Potassium	ppm	ASTM D5185m		<b>0</b>	0	---
Fuel		WC Method		<b>&lt;1.0</b>	<1.0	---
Water	%	ASTM D6304		<b>▲ 0.151</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844		<b>0</b>	0	---
Nitration	Abs/cm	*ASTM D7624		<b>12.</b>	7.	---
Sulfation	Abs/.1mm	*ASTM D7415		<b>25.</b>	18.	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual		<b>NEG</b>	NEG	---

## FLUID CONDITION

The condition of oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>7</b>	7	---
Boron	ppm	ASTM D5185m		<b>22</b>	5	---
Barium	ppm	ASTM D5185m		<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m		<b>116</b>	14	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>14</b>	28	---
Calcium	ppm	ASTM D5185m		<b>3915</b>	5950	---
Phosphorus	ppm	ASTM D5185m		<b>1261</b>	1108	---
Zinc	ppm	ASTM D5185m		<b>1504</b>	1409	---
Sulfur	ppm	ASTM D5185m		<b>4781</b>	9495	---
Oxidation	Abs/.1mm	*ASTM D7414		<b>18.</b>	11.	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.97</b>	15.1	---
Visc @ 100°C	cSt	ASTM D445		<b>16.07</b>	17.92	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR02296842 **Received** : 21 Nov 2008  
**Lab Number** : 02296842 **Tested** : 24 Nov 2008  
**Unique Number** : 4651432 **Diagnosed** : 24 Nov 2008 - Doug Bogart  
**Test Package** : MOB 2 ( Additional Tests: KF )

**PAWLIK FARMS**  
 P.O. BOX 4467  
 MCALLEN, TX  
 US 78502  
 Contact: STEVE SMITH

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: