



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**FORD 2014 F350**  
 Component  
**Gasoline Engine**  
 Fluid  
**TRC PRO-SPEC MULTI-VIS SB 5W20 (7 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		TR04139964	---	---
Sample Date		Client Info		01 Dec 2016	---	---
Machine Age	mls	Client Info		19224	---	---
Oil Age	mls	Client Info		5626	---	---
Filter Age	mls	Client Info		5626	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	50	---	---
Chromium	ppm	ASTM D5185m	>20	1	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>40	10	---	---
Lead	ppm	ASTM D5185m	>50	<1	---	---
Copper	ppm	ASTM D5185m	>155	5	---	---
Tin	ppm	ASTM D5185m	>10	4	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

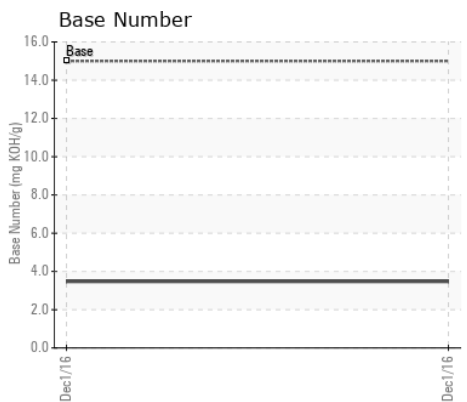
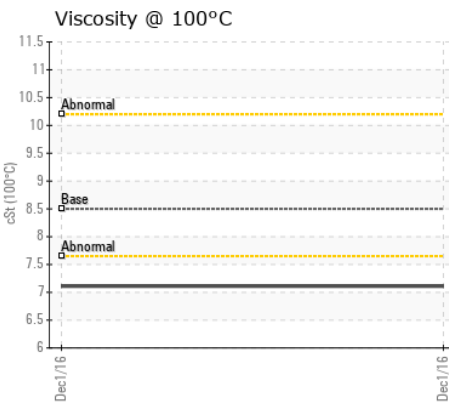
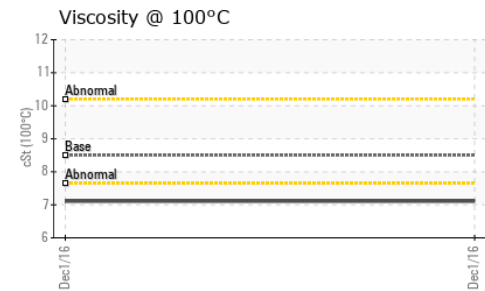
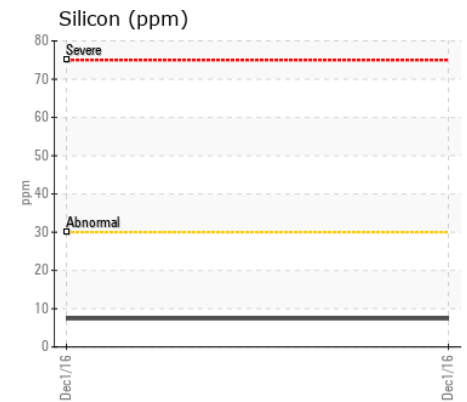
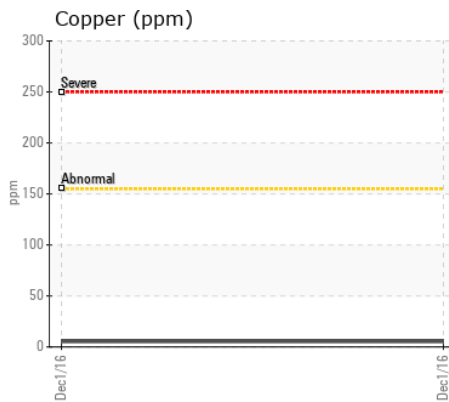
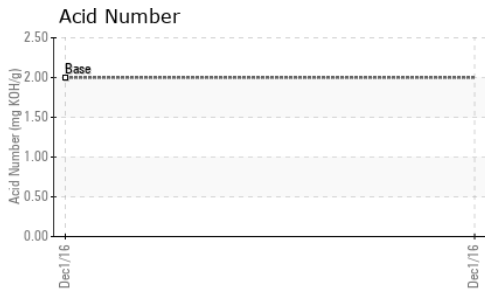
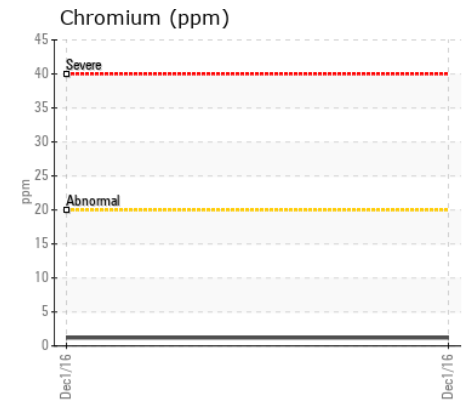
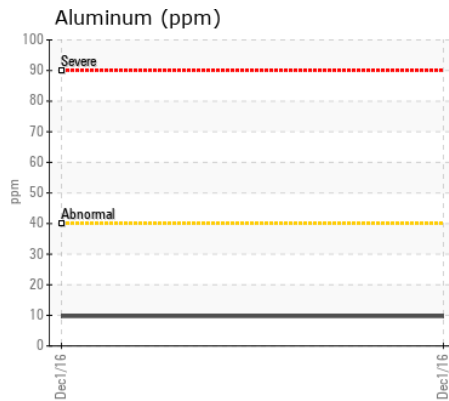
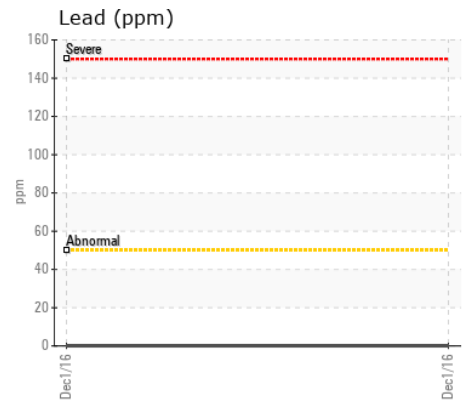
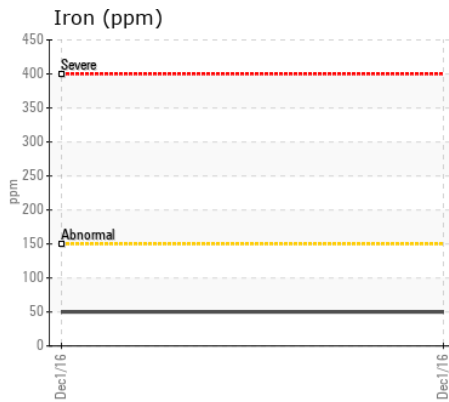
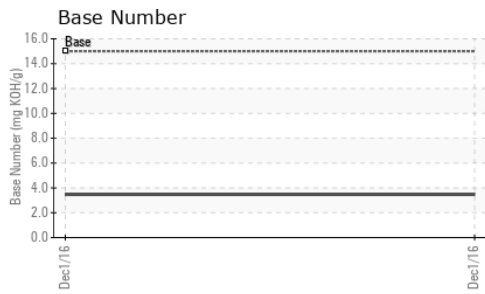
There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m	>30	7	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---
Fuel	%	ASTM D3524	>4.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0	---	---
Nitration	Abs/cm	*ASTM D7624		12.	---	---
Sulfation	Abs/.1mm	*ASTM D7415		25.	---	---
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	>0.2	NEG	---	---

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>400	7	---	---
Boron	ppm	ASTM D5185m		25	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		120	---	---
Manganese	ppm	ASTM D5185m		7	---	---
Magnesium	ppm	ASTM D5185m		16	---	---
Calcium	ppm	ASTM D5185m	4200	1776	---	---
Phosphorus	ppm	ASTM D5185m	800	608	---	---
Zinc	ppm	ASTM D5185m	800	646	---	---
Sulfur	ppm	ASTM D5185m		2005	---	---
Oxidation	Abs/.1mm	*ASTM D7414		20.	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	15	3.48	---	---
Visc @ 100°C	cSt	ASTM D445	8.5	7.11	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR04139964  
**Lab Number** : 04139964  
**Unique Number** : 7663350  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, TAN Man )

**Received** : 11 Jan 2017  
**Tested** : 13 Jan 2017  
**Diagnosed** : 13 Jan 2017 - Doug Bogart

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)

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