



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FORD 2015 EXP
 Component
Gasoline Engine
 Fluid
TRC PRO-SPEC MULTI-VIS SB 5W20 (6 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR04139962	TR03895192	---
Sample Date		Client Info		10 Jan 2017	10 Oct 2015	---
Machine Age	mls	Client Info		27747	12288	---
Oil Age	mls	Client Info		5265	4537	---
Filter Age	mls	Client Info		5265	4537	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	11	18	---
Chromium	ppm	ASTM D5185m	>20	<1	2	---
Nickel	ppm	ASTM D5185m	>5	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>40	6	2	---
Lead	ppm	ASTM D5185m	>50	0	6	---
Copper	ppm	ASTM D5185m	>155	30	3	---
Tin	ppm	ASTM D5185m	>10	3	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

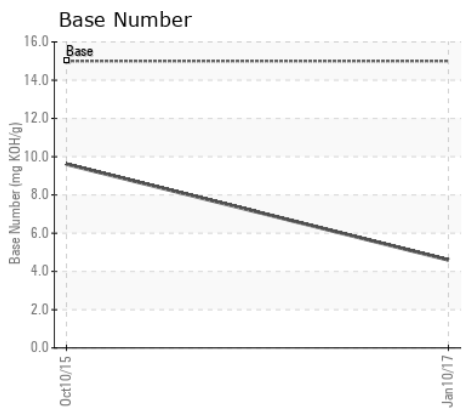
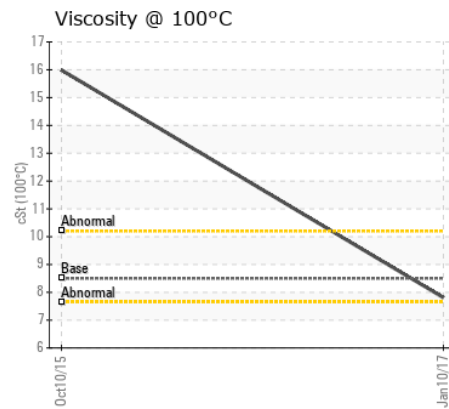
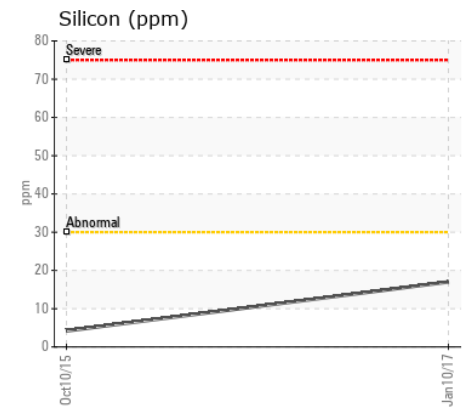
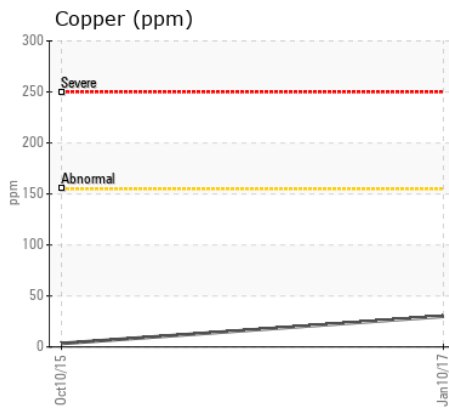
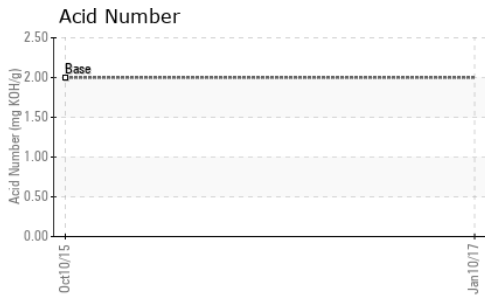
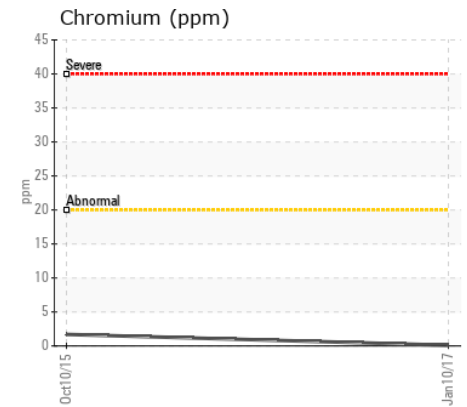
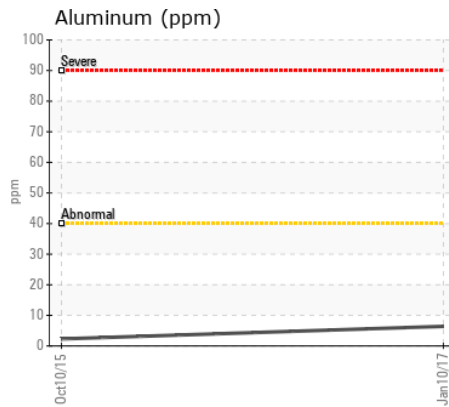
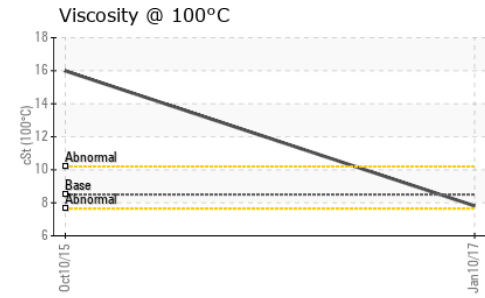
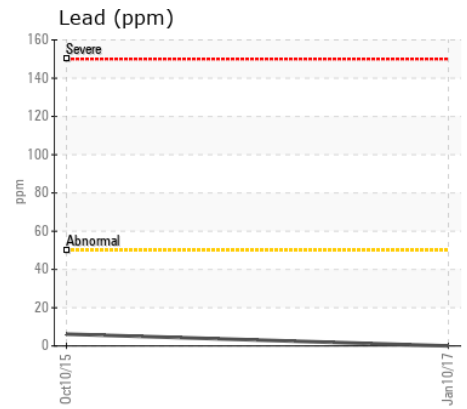
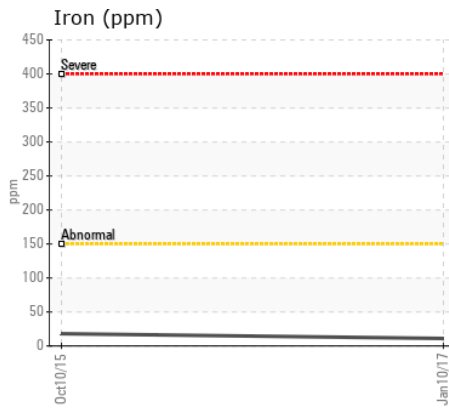
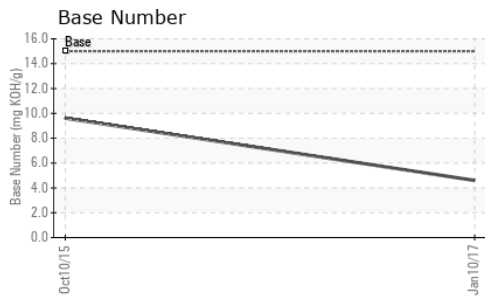
There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m	>30	17	4	---
Potassium	ppm	ASTM D5185m	>20	3	2	---
Fuel		WC Method	>4.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		0	0.1	---
Nitration	Abs/cm	*ASTM D7624		10.	8.	---
Sulfation	Abs/.1mm	*ASTM D7415		21.	14.	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	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	>400	3	4	---
Boron	ppm	ASTM D5185m		27	3	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		139	196	---
Manganese	ppm	ASTM D5185m		8	<1	---
Magnesium	ppm	ASTM D5185m		16	1015	---
Calcium	ppm	ASTM D5185m	4200	1818	1400	---
Phosphorus	ppm	ASTM D5185m	800	666	1111	---
Zinc	ppm	ASTM D5185m	800	704	1359	---
Sulfur	ppm	ASTM D5185m		1871	3484	---
Oxidation	Abs/.1mm	*ASTM D7414		16.	14.	---
Base Number (BN)	mg KOH/g	ASTM D2896	15	4.60	9.61	---
Visc @ 100°C	cSt	ASTM D445	8.5	7.81	15.99	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR04139962 **Received** : 11 Jan 2017
Lab Number : 04139962 **Tested** : 12 Jan 2017
Unique Number : 7663348 **Diagnosed** : 12 Jan 2017 - Don Baldrige
Test Package : MOB 2 (Additional Tests: TAN Man)

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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