



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1 GENERATOR (S/N PE6068L263058)

Component
Right Diesel Engine

Fluid
TRC MOLY XL PRO-SPEC IV 15W40 (5 GAL)

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		TR04153348	---	---
Sample Date		Client Info		17 Jan 2017	---	---
Machine Age	hrs	Client Info		2700	---	---
Oil Age	hrs	Client Info		1400	---	---
Filter Age	hrs	Client Info		1400	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	46	---	---
Chromium	ppm	ASTM D5185m	>11	1	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>31	5	---	---
Lead	ppm	ASTM D5185m	>26	3	---	---
Copper	ppm	ASTM D5185m	>26	48	---	---
Tin	ppm	ASTM D5185m	>4	2	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

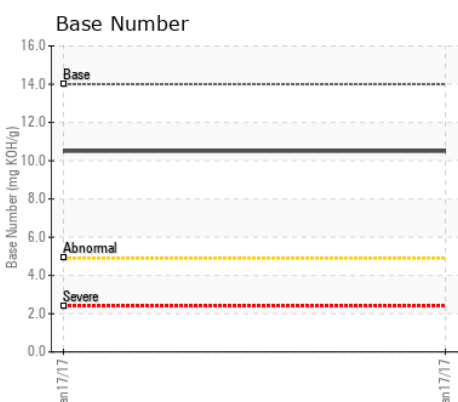
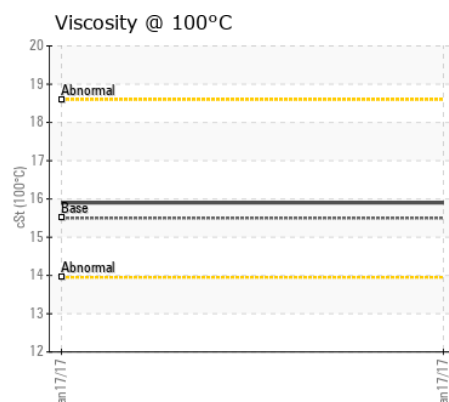
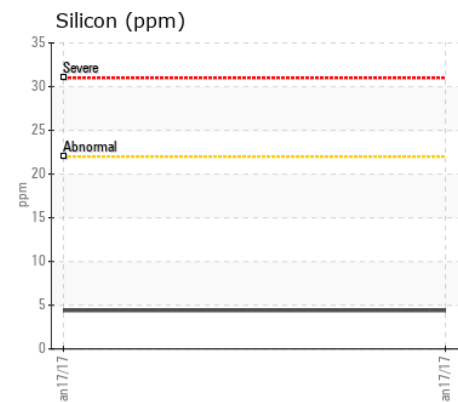
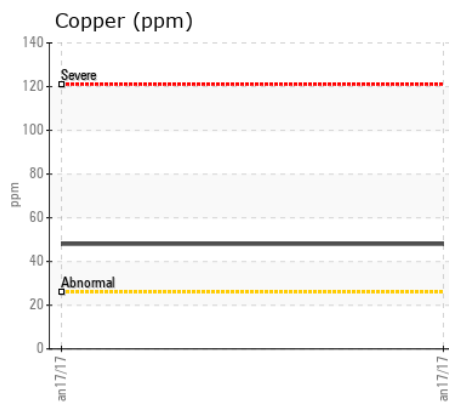
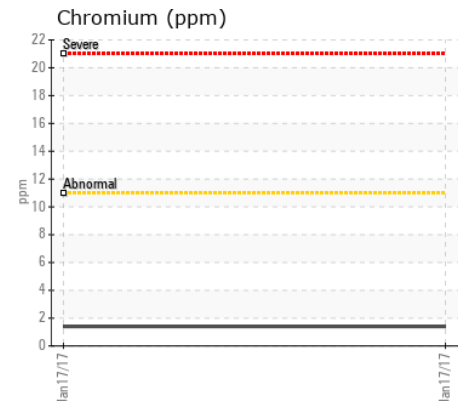
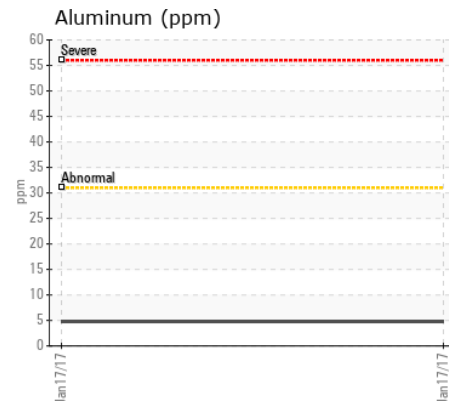
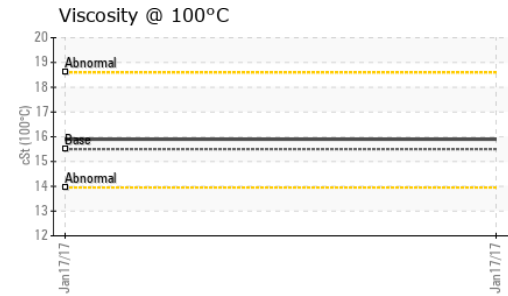
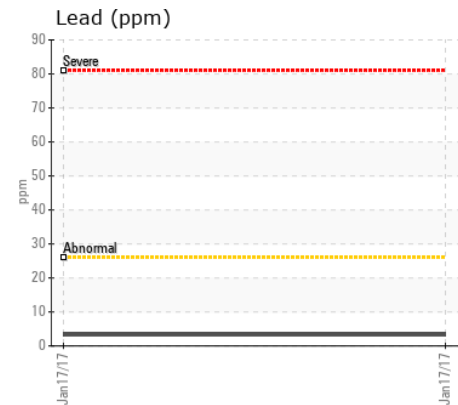
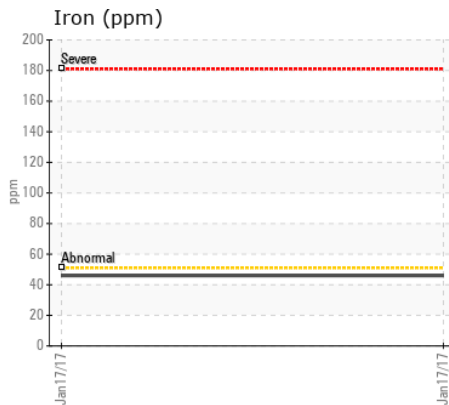
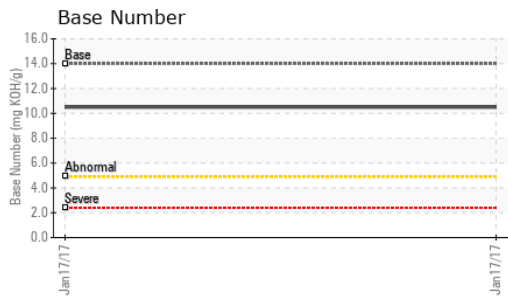
There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m	>22	4	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Fuel		WC Method	>2.1	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624		9.	---	---
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	5	---	---
Boron	ppm	ASTM D5185m		4	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		180	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		921	---	---
Calcium	ppm	ASTM D5185m	1300	1737	---	---
Phosphorus	ppm	ASTM D5185m		1072	---	---
Zinc	ppm	ASTM D5185m	1300	1234	---	---
Sulfur	ppm	ASTM D5185m		2807	---	---
Oxidation	Abs/.1mm	*ASTM D7414		14.	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	14	10.5	---	---
Visc @ 100°C	cSt	ASTM D445	15.5	15.9	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR04153348 **Received** : 31 Jan 2017
Lab Number : 04153348 **Diagnosed** : 02 Feb 2017
Unique Number : 7681751 **Diagnostician** : Doug Bogart
Test Package : MOB 2

BOSTON MARINE TRANSPORT
 44 SOUTHSORE DR
 PELHAM, NH
 US 03076
 Contact: FRANK MORTON

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: