TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT T39
Component
Diesel Engine
Fluid
TRC MOLY XL PRO-SPEC SYN BLEND 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

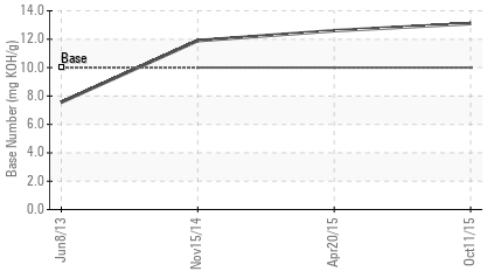
There is no indication of any contamination in the component.

FLUID CONDITION

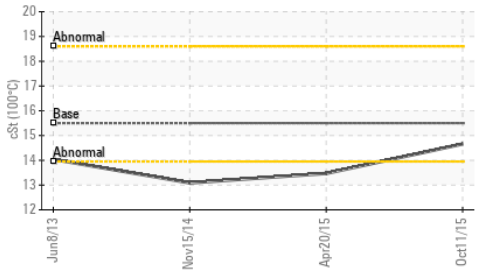
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR03840832	TR03730603	TR03630822
Sample Date		Client Info		11 Oct 2015	20 Apr 2015	15 Nov 2014
Machine Age	mls	Client Info		267413	1230610	1202611
Oil Age	mls	Client Info		36768	28000	33601
Filter Age	mls	Client Info		36768	28000	33601
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	22	20	32
Chromium	ppm	ASTM D5185m	>20	<1	1	2
Nickel	ppm	ASTM D5185m	>2	<1	2	4
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	4	5
Lead	ppm	ASTM D5185m	>40	1	<1	3
Copper	ppm	ASTM D5185m	>330	13	6	7
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	4	7	8
Potassium	ppm	ASTM D5185m	>20	2	9	10
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.2
Nitration	Abs/cm	*ASTM D7624		7.	7.	8.
Sulfation	Abs/.1mm	*ASTM D7415		19.	20.	22.
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		6	2	2
Boron	ppm	ASTM D5185m		216	239	238
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		146	166	163
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		410	493	483
Calcium	ppm	ASTM D5185m	2300	2818	3631	3466
Phosphorus	ppm	ASTM D5185m		857	1070	1029
Zinc	ppm	ASTM D5185m	1200	978	1116	1213
Sulfur	ppm	ASTM D5185m		4357	3704	3803
Oxidation	Abs/.1mm	*ASTM D7414		13.	13.	15.
Base Number (BN)	mg KOH/g	ASTM D2896	10	13.1	12.6	11.9
Visc @ 100°C	cSt	ASTM D445	15.5	14.66	13.47	13.09

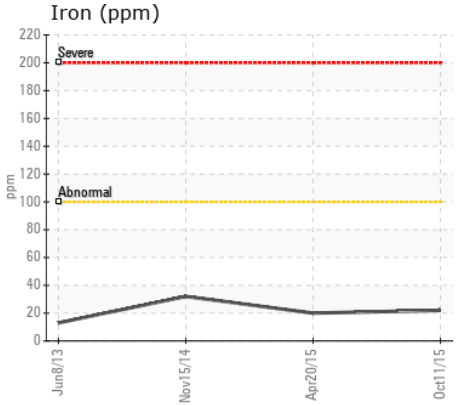
Base Number



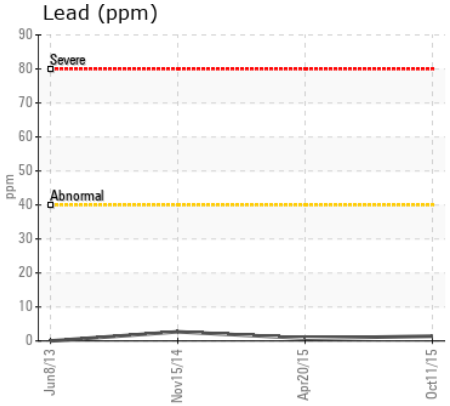
Viscosity @ 100°C



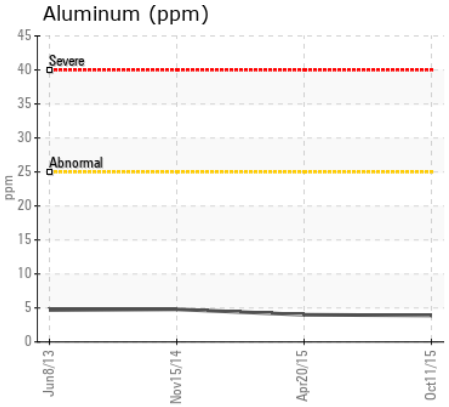
Iron (ppm)



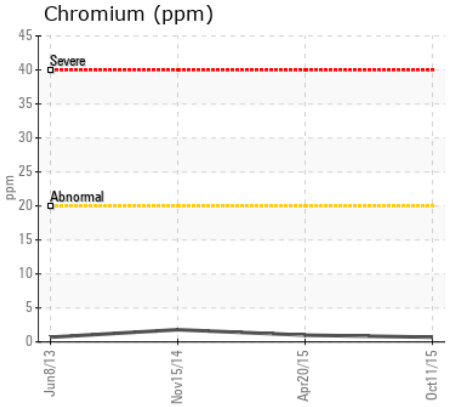
Lead (ppm)



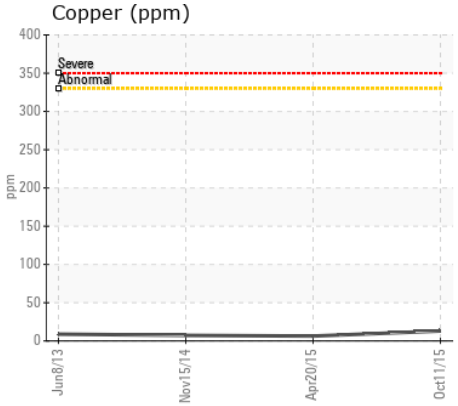
Aluminum (ppm)



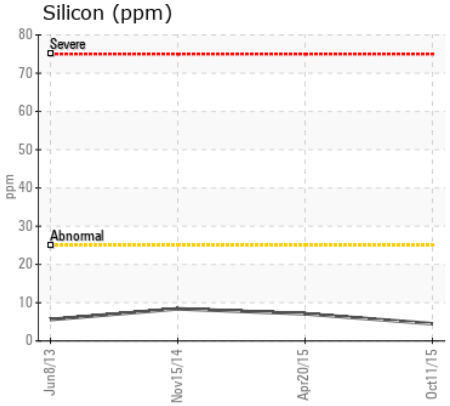
Chromium (ppm)



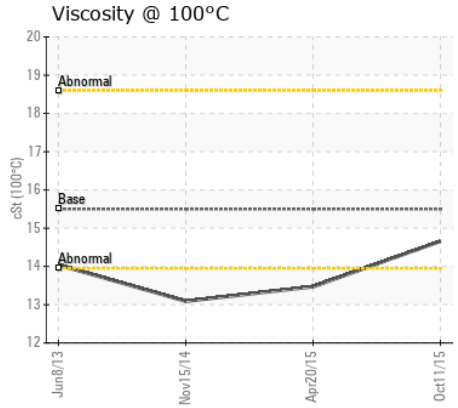
Copper (ppm)



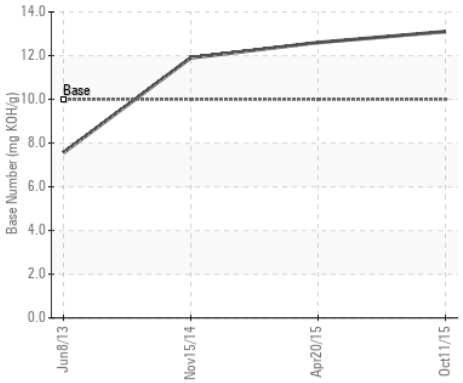
Silicon (ppm)



Viscosity @ 100°C



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR03840832
Lab Number : 03840832
Unique Number : 7166028
Test Package : MOB 2

Received : 12 Oct 2015
Tested : 14 Oct 2015
Diagnosed : 14 Oct 2015 - Jonathan Hester

LK2
134 N 1600 W
OREM, UT
US 84057
Contact: JOHN AGGARD

T: (801)225-3830
F: (801)225-3841

Certificate L2367

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)