TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 804449
Component
Diesel Engine
Fluid
TRC PRO-SPEC IV SYNTHETIC BLEND 15W40 (11 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Cylinder, crank, or cam shaft wear is indicated.

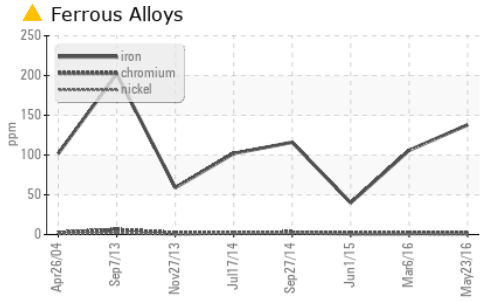
CONTAMINATION

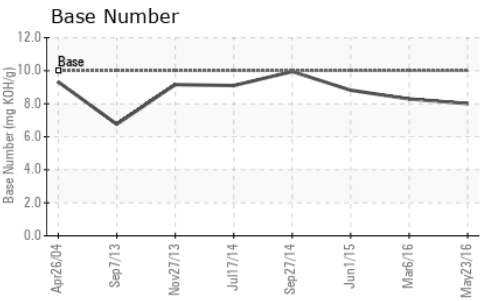
There is no indication of any contamination in the component.

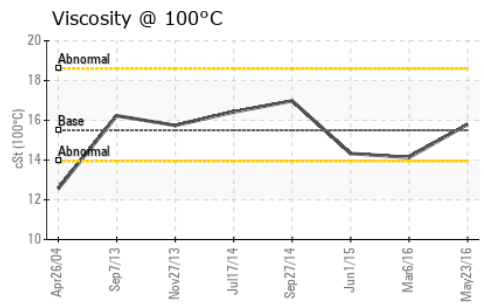
FLUID CONDITION

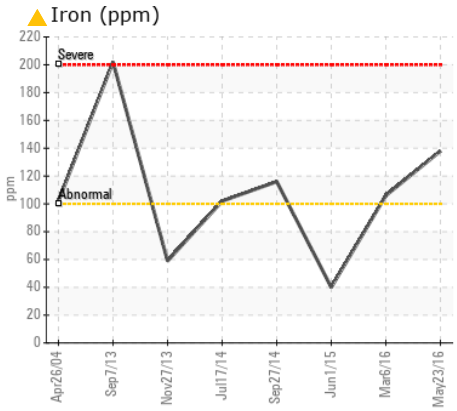
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

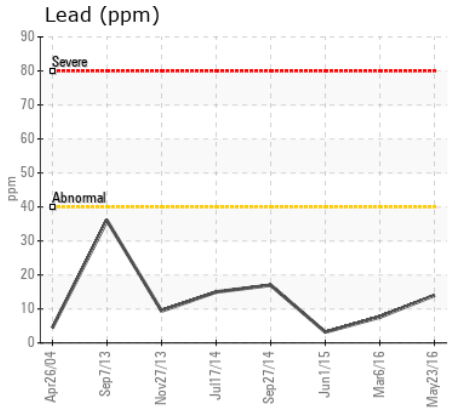
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR03991036	TR03935845	TR03753018
Sample Date		Client Info		23 May 2016	06 Mar 2016	01 Jun 2015
Machine Age	mls	Client Info		0	968477	904539
Oil Age	mls	Client Info		0	79755	15817
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	▲ 138	106	40
Chromium	ppm	ASTM D5185m	>20	2	2	2
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	4	4	4
Lead	ppm	ASTM D5185m	>40	14	8	3
Copper	ppm	ASTM D5185m	>330	44	40	93
Tin	ppm	ASTM D5185m	>15	0	3	2
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	7	7	18
Potassium	ppm	ASTM D5185m	>20	0	2	11
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	0.6	0.4	0.1
Nitration	Abs/cm	*ASTM D7624		14.	12.	9.
Sulfation	Abs/.1mm	*ASTM D7415		26.	23.	19.
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		11	8	8
Boron	ppm	ASTM D5185m		2	2	3
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		203	173	150
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		964	846	718
Calcium	ppm	ASTM D5185m	2300	1820	1695	1604
Phosphorus	ppm	ASTM D5185m		924	978	986
Zinc	ppm	ASTM D5185m	1200	1389	1179	1135
Sulfur	ppm	ASTM D5185m		3701	4628	2937
Oxidation	Abs/.1mm	*ASTM D7414		23.	19.	14.
Base Number (BN)	mg KOH/g	ASTM D2896	10	8.01	8.29	8.82
Visc @ 100°C	cSt	ASTM D445	15.5	15.8	14.13	14.33

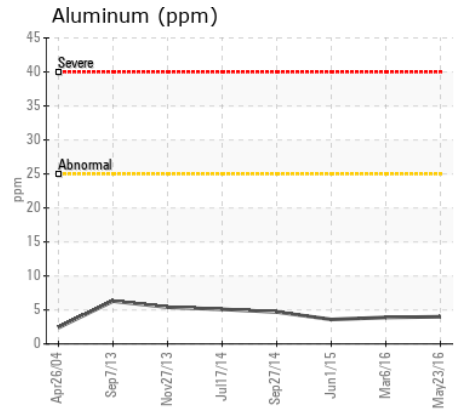


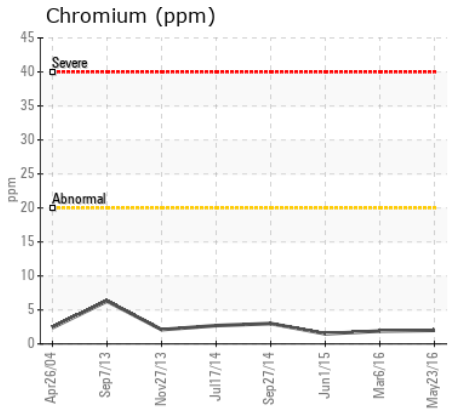


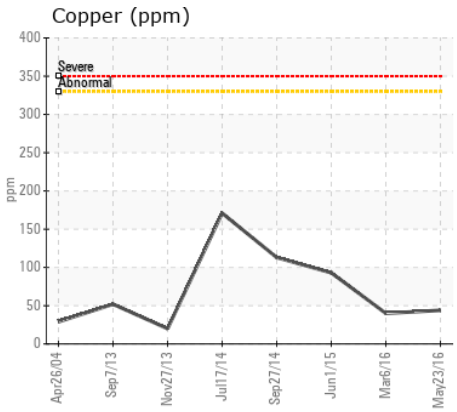


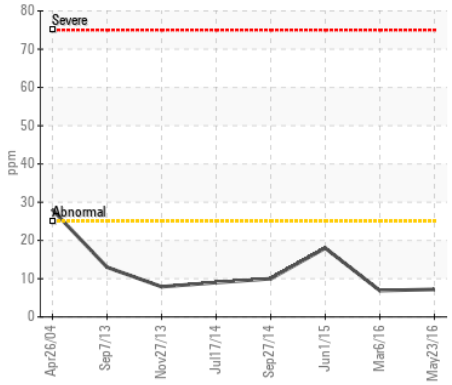


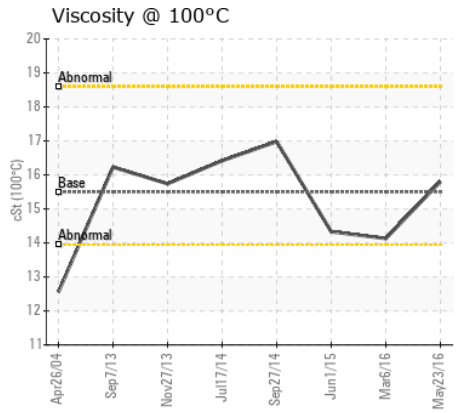


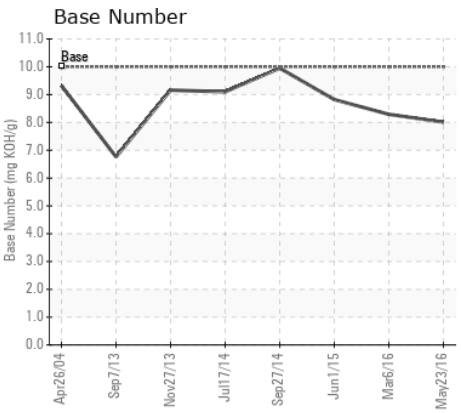












Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR03991036 **Received** : 24 May 2016
Lab Number : 03991036 **Tested** : 25 May 2016
Unique Number : 7411511 **Diagnosed** : 25 May 2016 - Don Baldridge
Test Package : MOB 2 (Additional Tests: PQ)

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)

STONE TIMBER
P.O. BOX 166
WILMER, AL
US 36587
Contact: NORMAN PITTS

T:
F: