



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 51
 Component
Diesel Engine
 Fluid
TRC MOLY XL PROSPEC III 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06157130	TR06006555	TR05873984
Sample Date		Client Info		13 Mar 2024	27 Sep 2023	08 May 2023
Machine Age	mls	Client Info		2432417	2420015	2395250
Oil Age	mls	Client Info		12400	24765	18853
Filter Age	mls	Client Info		12400	24765	18853
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	12	26	7
Chromium	ppm	ASTM D5185m	>10	1	3	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	3	2	<1
Lead	ppm	ASTM D5185m	>30	0	<1	0
Copper	ppm	ASTM D5185m	>30	0	2	1
Tin	ppm	ASTM D5185m	>4	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

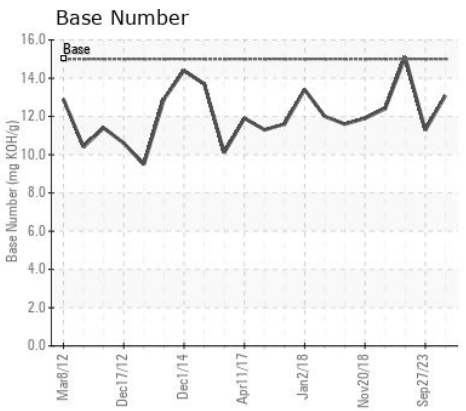
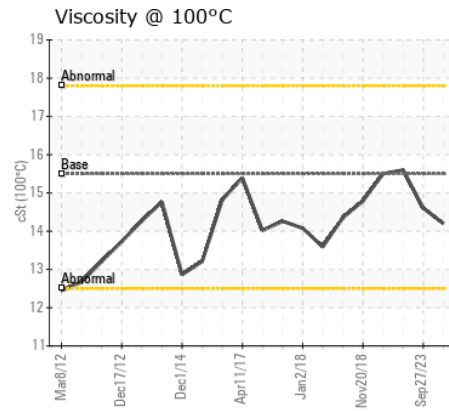
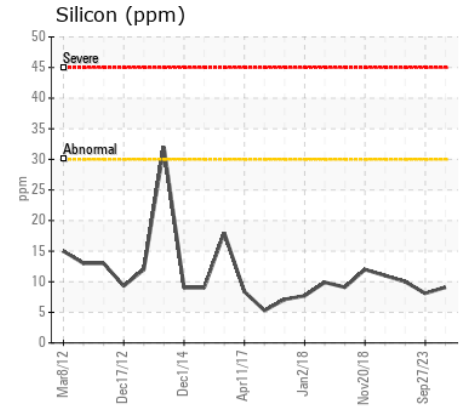
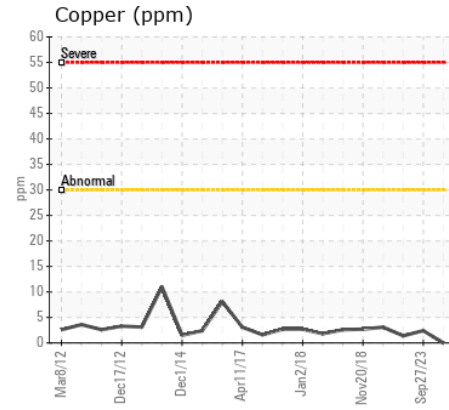
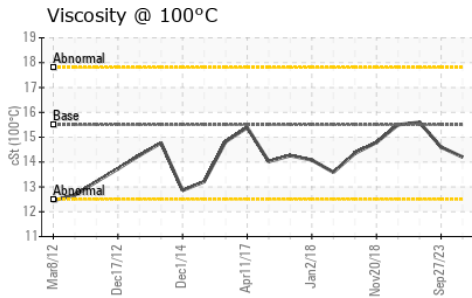
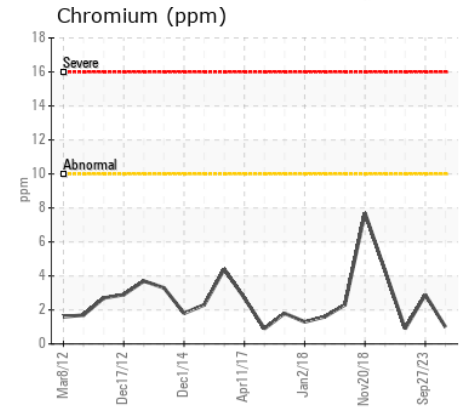
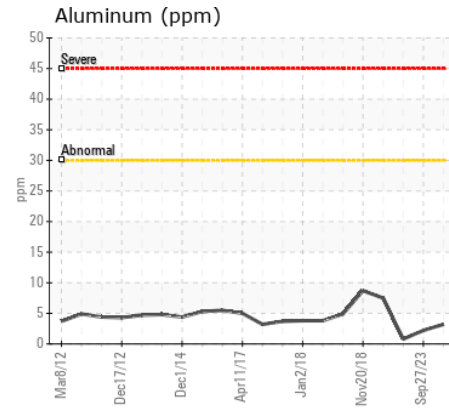
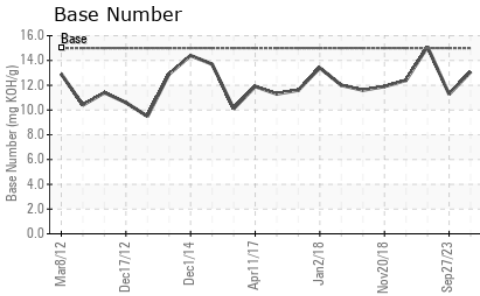
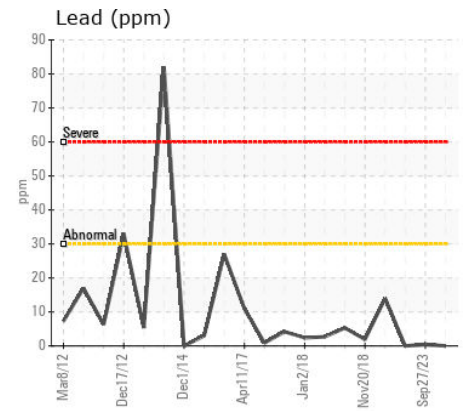
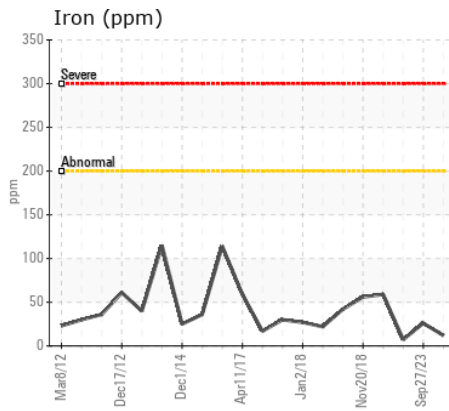
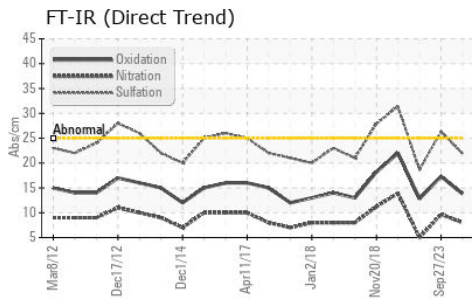
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	9	8	10
Potassium	ppm	ASTM D5185m	>20	0	<1	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1	1.8	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.0	9.7	5.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	26.3	18.7
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

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		3	2	2
Boron	ppm	ASTM D5185m		225	197	212
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		206	193	205
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		453	446	396
Calcium	ppm	ASTM D5185m	4500	4208	3822	3742
Phosphorus	ppm	ASTM D5185m		949	981	848
Zinc	ppm	ASTM D5185m	1400	1064	1172	1002
Sulfur	ppm	ASTM D5185m		4282	3937	4076
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	17.3	12.8
Base Number (BN)	mg KOH/g	ASTM D2896	15	13.08	11.28	15.10
Visc @ 100°C	cSt	ASTM D445	15.5	14.2	14.6	15.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06157130
Lab Number : 06157130
Unique Number : 10992553
Test Package : MOB 2
Received : 22 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Wes Davis

CHARLES MOORE TRUCKING
 855 KINSEY RD
 MILES CITY, MT
 US 59301
 Contact: KELLY ZIETTLow
 cactus@midrivers.com

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)