



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT T100
 Component
Diesel Engine
 Fluid
TRC PRO-SPEC IV XP SYN BLEND 15W40 (11 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06157117	TR06042722	TR05952280
Sample Date		Client Info		26 Mar 2024	07 Dec 2023	08 Sep 2023
Machine Age	mls	Client Info		439361	424147	408151
Oil Age	mls	Client Info		15214	16000	15198
Filter Age	mls	Client Info		15214	16000	15198
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	>90	33	22	26
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	4	7
Lead	ppm	ASTM D5185m	>40	1	3	1
Copper	ppm	ASTM D5185m	>330	0	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

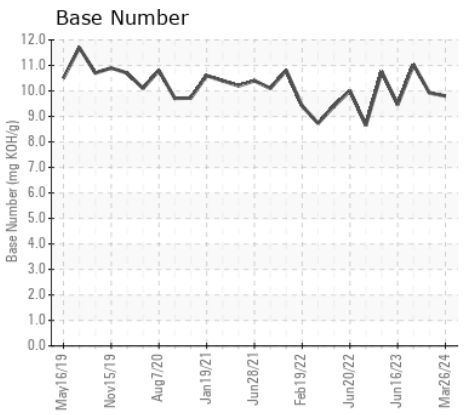
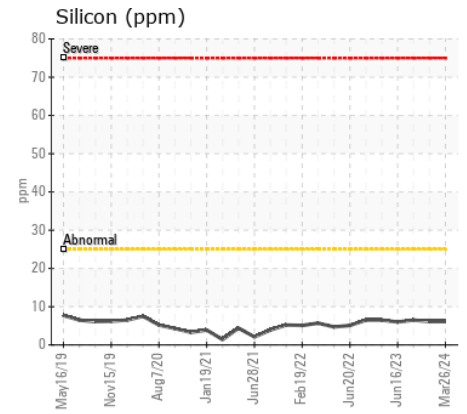
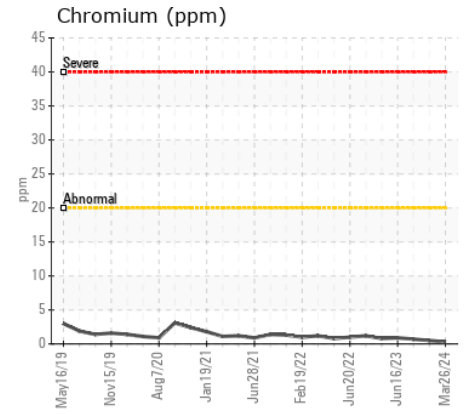
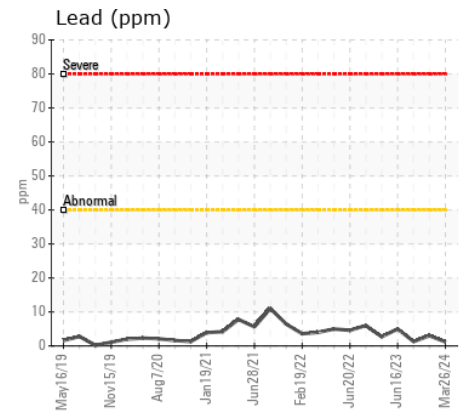
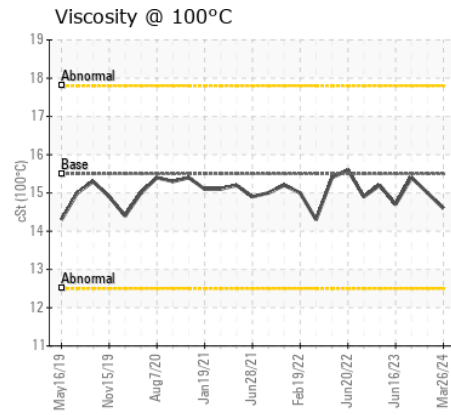
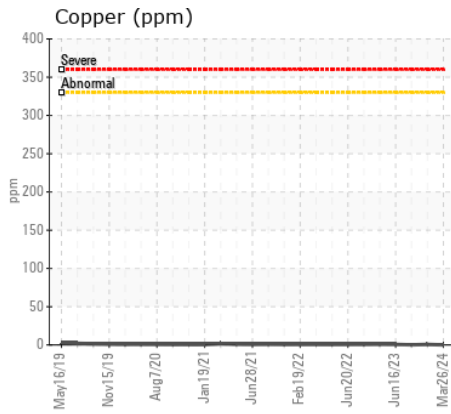
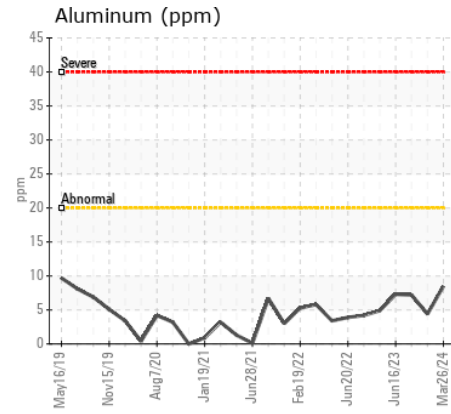
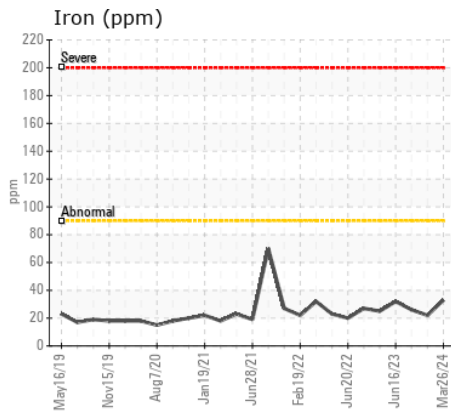
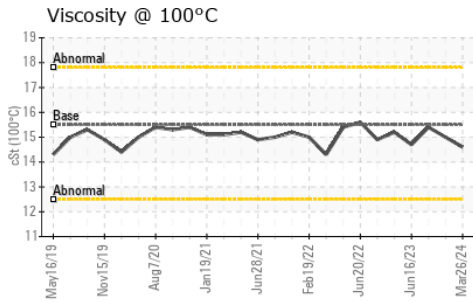
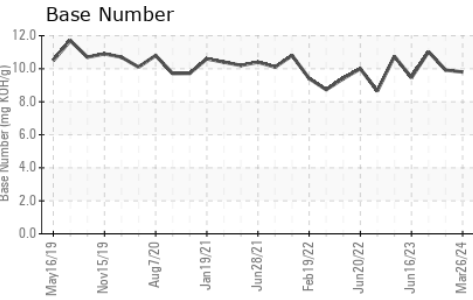
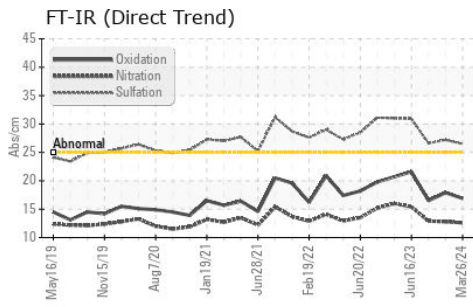
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	6	6
Potassium	ppm	ASTM D5185m	>20	4	2	6
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	>6	1	1.3	1.1
Nitration	Abs/cm	*ASTM D7624	>20	12.6	12.8	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.5	27.2	26.6
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		25	15	6
Boron	ppm	ASTM D5185m		4	17	44
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		5	9	15
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		63	105	112
Calcium	ppm	ASTM D5185m		4217	3551	4239
Phosphorus	ppm	ASTM D5185m		969	949	1014
Zinc	ppm	ASTM D5185m		1108	1110	1198
Sulfur	ppm	ASTM D5185m		4323	3610	4840
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	17.9	16.5
Base Number (BN)	mg KOH/g	ASTM D2896		9.80	9.92	11.03
Visc @ 100°C	cSt	ASTM D445	15.5	14.6	15.0	15.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06157117
Lab Number : 06157117
Unique Number : 10992540
Test Package : MOB 2
Received : 22 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Wes Davis

MID-EAST TRUCKING
 831 W. NASSAU ST.
 EAST CANTON, OH
 US 44730
 Contact: JIM FITZGERALD
 shop@mideast.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)