



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PETERBILT T103**  
 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		TR06157118	TR05895769	TR05834049
Sample Date		Client Info		18 Mar 2024	11 Jul 2023	06 Apr 2023
Machine Age	mls	Client Info		395423	355985	337978
Oil Age	mls	Client Info		17187	18007	20501
Filter Age	mls	Client Info		17187	0	20501
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	21	29	9
Chromium	ppm	ASTM D5185m	>20	<1	1	0
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	8	2
Lead	ppm	ASTM D5185m	>40	2	15	0
Copper	ppm	ASTM D5185m	>330	0	6	0
Tin	ppm	ASTM D5185m	>15	2	2	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

**CONTAMINATION**

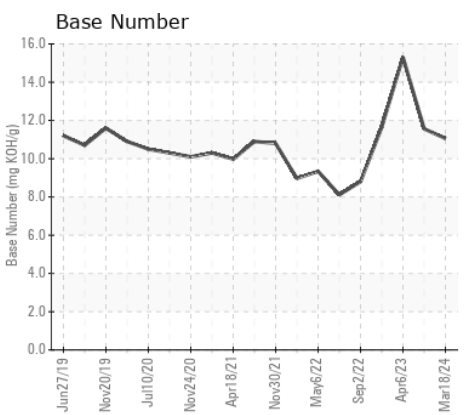
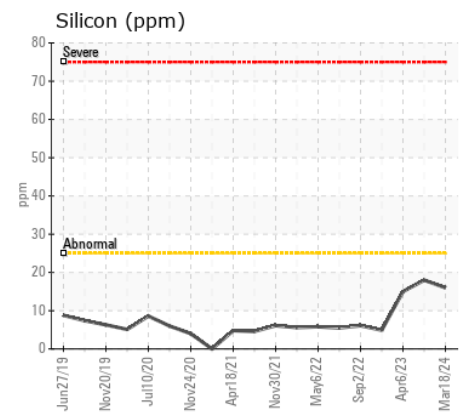
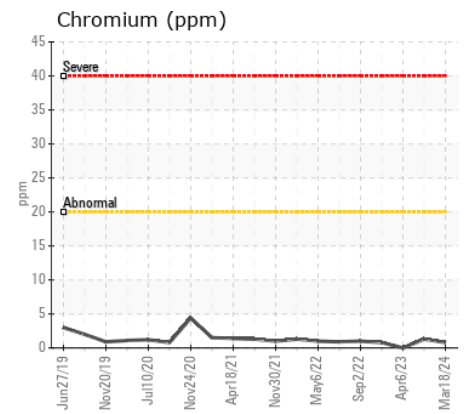
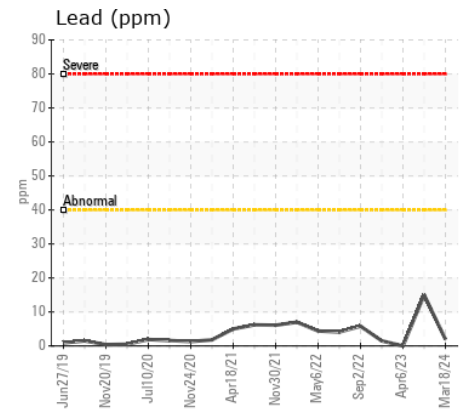
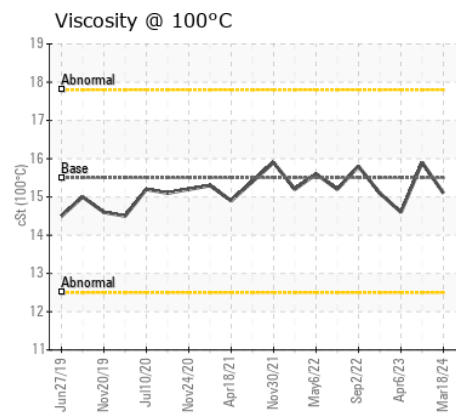
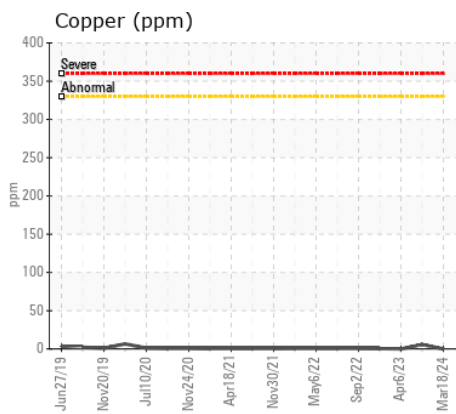
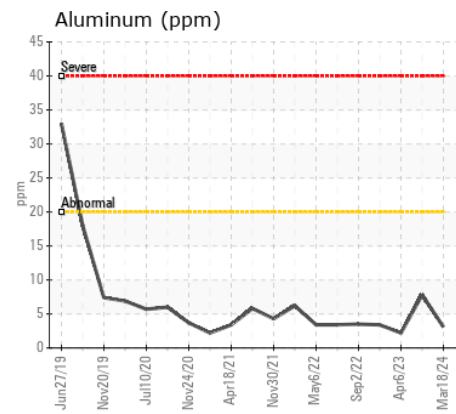
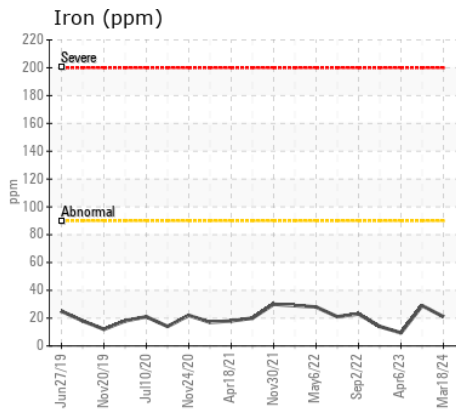
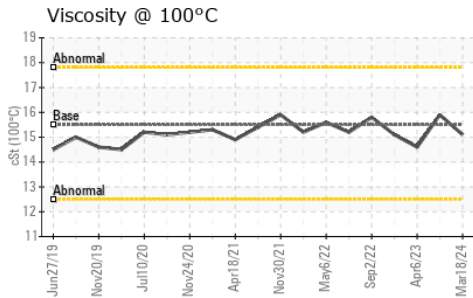
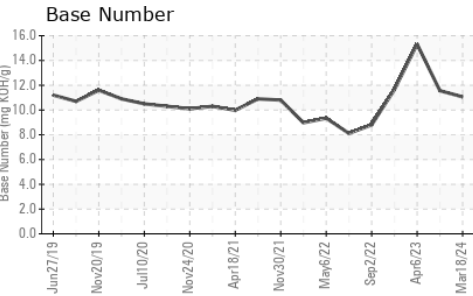
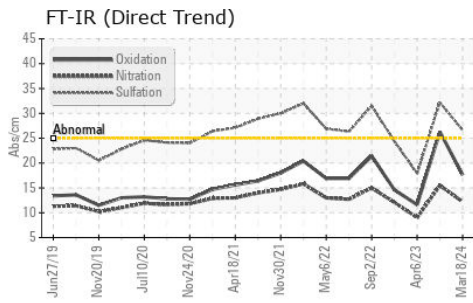
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	16	18	15
Potassium	ppm	ASTM D5185m	>20	2	9	0
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	0.7	0.9	0.3
Nitration	Abs/cm	*ASTM D7624	>20	12.2	15.5	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.6	32.2	17.9
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		8	3	1
Boron	ppm	ASTM D5185m		0	1	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	4	<1
Manganese	ppm	ASTM D5185m		<1	3	<1
Magnesium	ppm	ASTM D5185m		20	19	21
Calcium	ppm	ASTM D5185m		4264	4872	4762
Phosphorus	ppm	ASTM D5185m		944	1043	1003
Zinc	ppm	ASTM D5185m		1074	1263	1213
Sulfur	ppm	ASTM D5185m		4448	5302	4939
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	26.3	11.6
Base Number (BN)	mg KOH/g	ASTM D2896		11.06	11.56	15.31
Visc @ 100°C	cSt	ASTM D445	15.5	15.1	15.9	14.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06157118  
**Lab Number** : 06157118  
**Unique Number** : 10992541  
**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)