



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT T101
 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		TR06157116	TR06073162	TR05905671
Sample Date		Client Info		18 Mar 2024	28 Dec 2023	18 Jul 2023
Machine Age	mls	Client Info		431125	413556	387705
Oil Age	mls	Client Info		17569	13556	15060
Filter Age	mls	Client Info		17569	13556	15060
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	18	31	23
Chromium	ppm	ASTM D5185m	>20	1	1	2
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	9	22	5
Lead	ppm	ASTM D5185m	>40	1	4	2
Copper	ppm	ASTM D5185m	>330	<1	6	<1
Tin	ppm	ASTM D5185m	>15	1	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

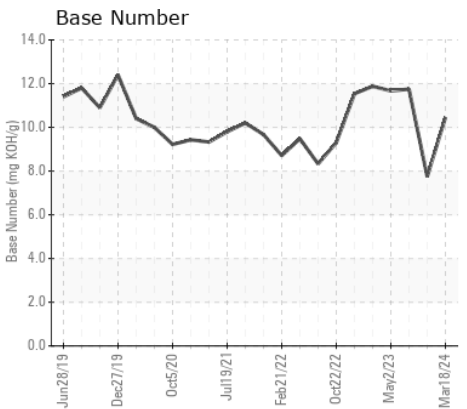
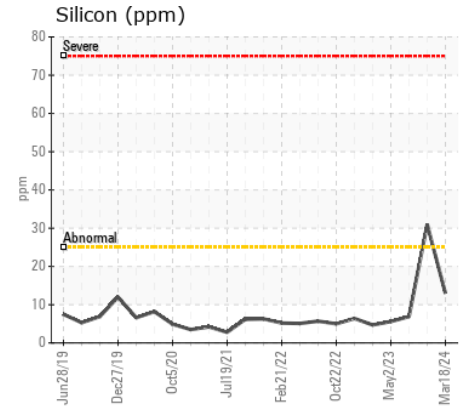
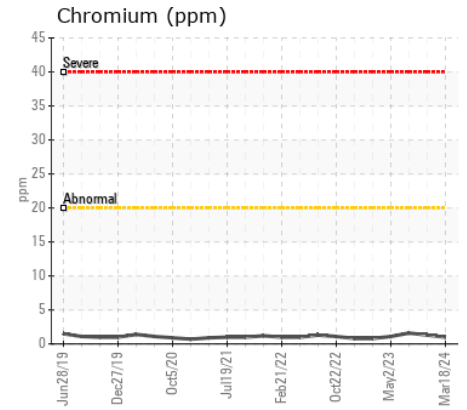
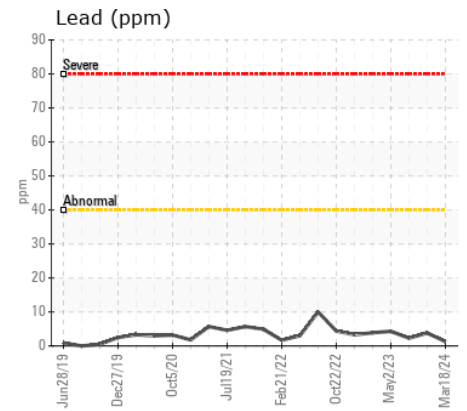
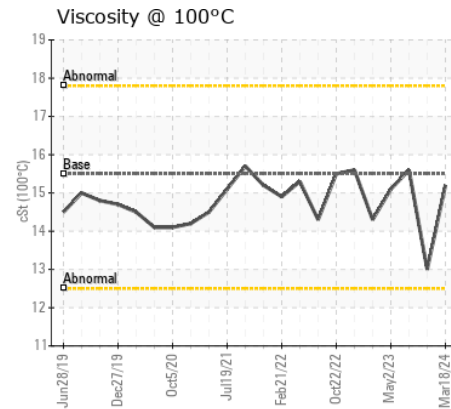
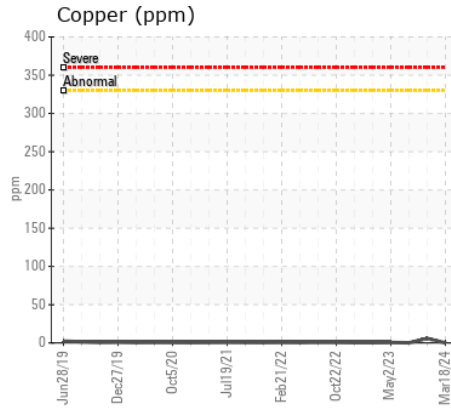
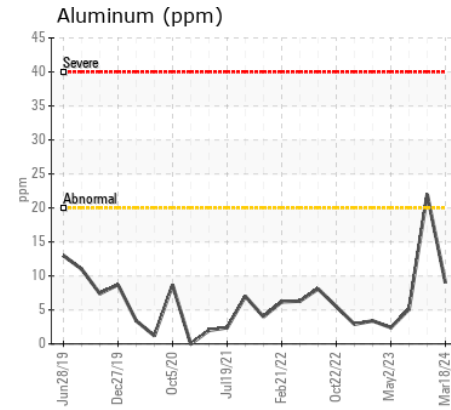
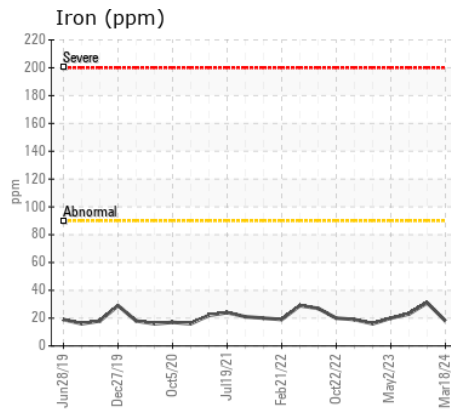
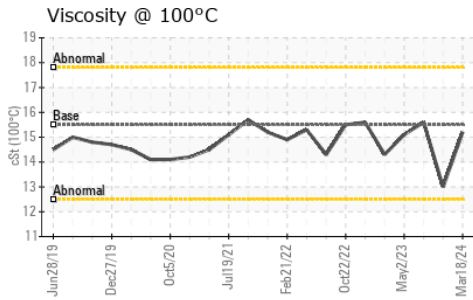
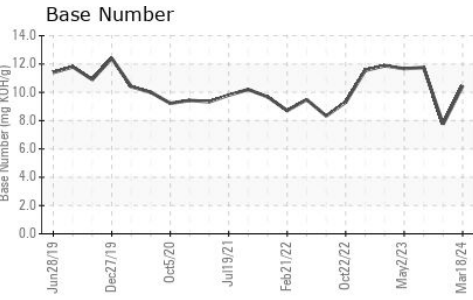
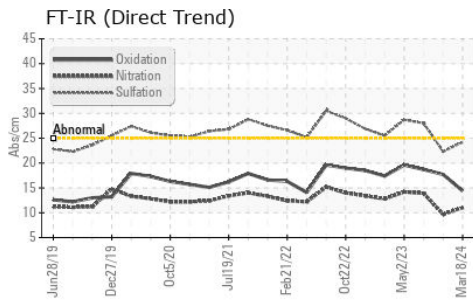
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	13	31	7
Potassium	ppm	ASTM D5185m	>20	2	14	2
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	0.8	0.6	0.9
Nitration	Abs/cm	*ASTM D7624	>20	11.0	9.7	13.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	22.3	28.0
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		10	28	3
Boron	ppm	ASTM D5185m		4	54	2
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		6	32	2
Manganese	ppm	ASTM D5185m		<1	3	<1
Magnesium	ppm	ASTM D5185m		48	272	42
Calcium	ppm	ASTM D5185m		4254	1921	4707
Phosphorus	ppm	ASTM D5185m		940	967	966
Zinc	ppm	ASTM D5185m		1086	1196	1150
Sulfur	ppm	ASTM D5185m		4272	2955	4946
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	17.7	18.7
Base Number (BN)	mg KOH/g	ASTM D2896		10.45	7.75	11.75
Visc @ 100°C	cSt	ASTM D445	15.5	15.2	13.0	15.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06157116
Lab Number : 06157116
Unique Number : 10992539
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)