



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 100
 Component
Front 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		TR06157129	TR05416631	TR05365915
Sample Date		Client Info		28 Feb 2024	08 Oct 2021	26 Aug 2021
Machine Age	mls	Client Info		2214702	2115592	0
Oil Age	mls	Client Info		45214	43201	31241
Filter Age	mls	Client Info		45214	12000	10000
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	>100	108	42	53
Chromium	ppm	ASTM D5185m	>20	3	1	2
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>25	5	3	5
Lead	ppm	ASTM D5185m	>40	4	2	5
Copper	ppm	ASTM D5185m	>330	13	5	8
Tin	ppm	ASTM D5185m	>15	2	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

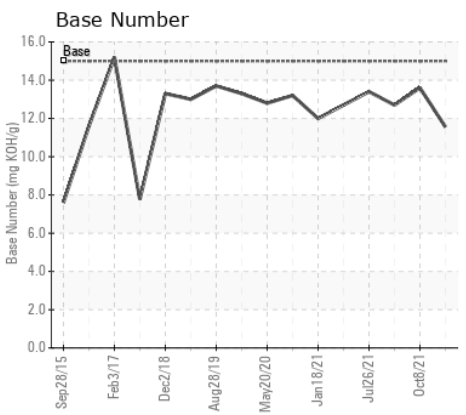
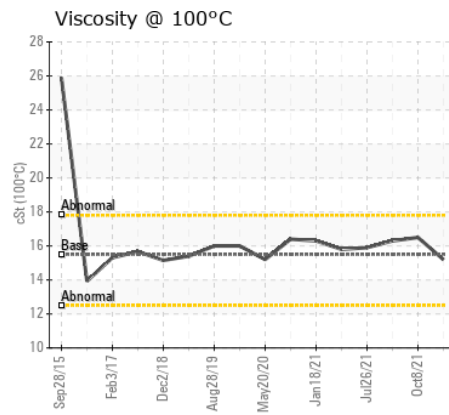
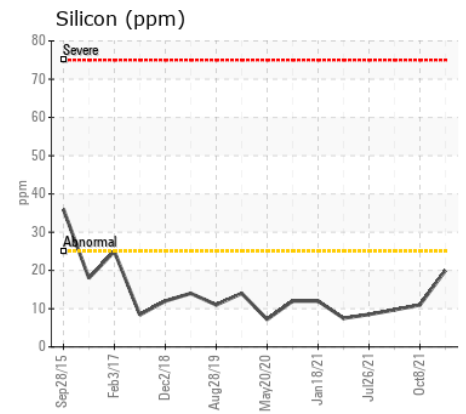
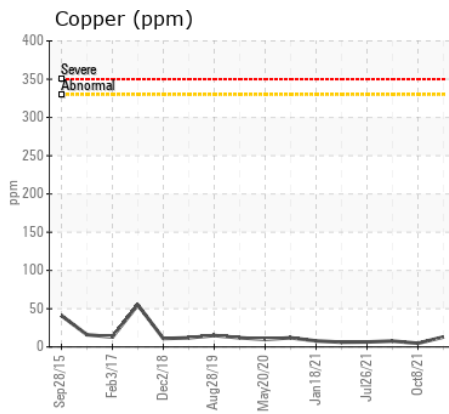
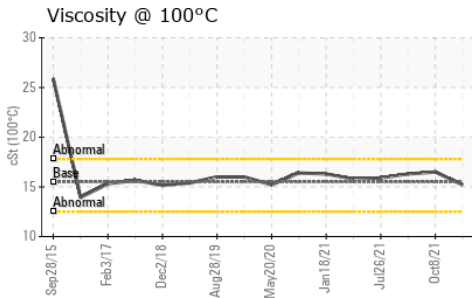
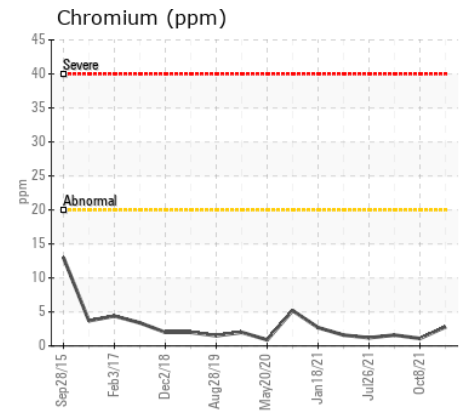
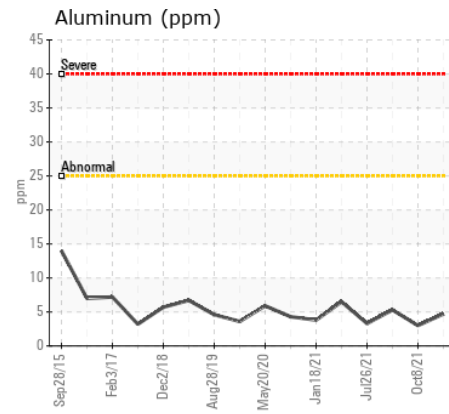
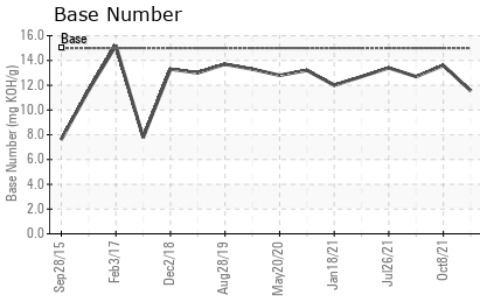
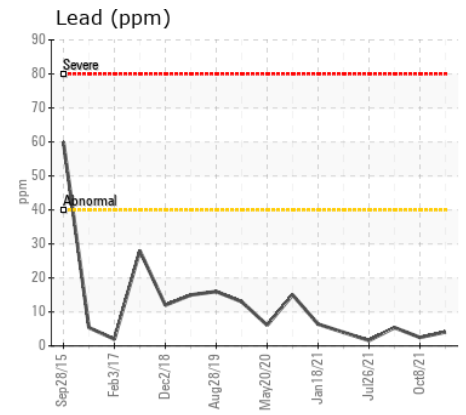
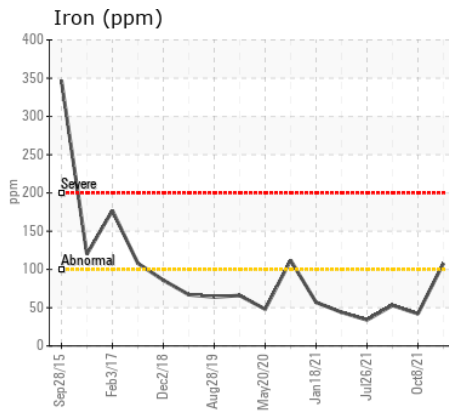
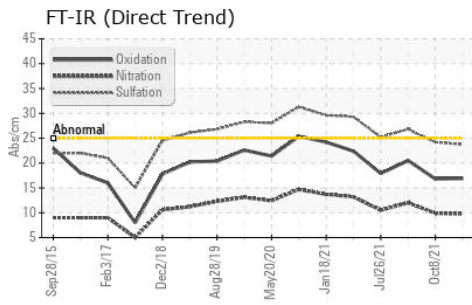
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	20	11	10
Potassium	ppm	ASTM D5185m	>20	<1	<1	2
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	0.3	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.8	9.9	12
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	24.2	26.8
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		4	2	2
Boron	ppm	ASTM D5185m		152	182	176
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		198	220	203
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		436	557	436
Calcium	ppm	ASTM D5185m	4500	3888	4689	4420
Phosphorus	ppm	ASTM D5185m		959	974	933
Zinc	ppm	ASTM D5185m	1400	1108	1073	1072
Sulfur	ppm	ASTM D5185m		3889	3647	3191
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	16.8	20.5
Base Number (BN)	mg KOH/g	ASTM D2896	15	11.56	13.6	12.7
Visc @ 100°C	cSt	ASTM D445	15.5	15.2	16.5	16.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06157129
Lab Number : 06157129
Unique Number : 10992552
Test Package : MOB 2

CHARLES MOORE TRUCKING
 855 KINSEY RD
 MILES CITY, MT
 US 59301
 Contact: KELLY ZIETTLow
 putter@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)