



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 5009

Component
Transmission (Auto)

Fluid
TRC TEXTRANS MULTI-VEHICLE SYN ATF (36 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06230327	TR05489177	TR05237391
Sample Date		Client Info		27 Jun 2024	28 Feb 2022	06 Apr 2021
Machine Age	hrs	Client Info		21087	19417	18341
Oil Age	hrs	Client Info		0	0	1200
Filter Age	hrs	Client Info		0	0	1200
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>230	212	217	126
Chromium	ppm	ASTM D5185m	>2	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	ppm	ASTM D5185m	>65	17	20	8
Lead	ppm	ASTM D5185m	>55	10	8	5
Copper	ppm	ASTM D5185m	>85	41	35	28
Tin	ppm	ASTM D5185m	>5	2	2	1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

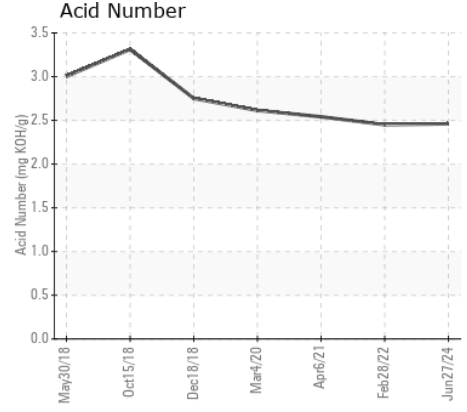
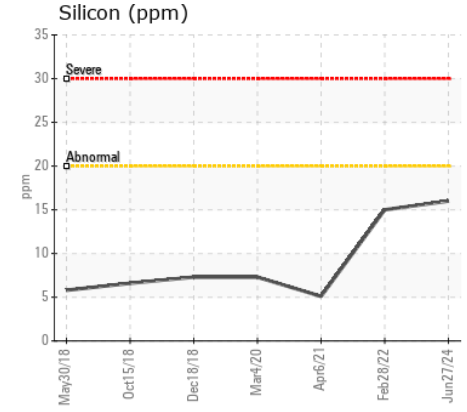
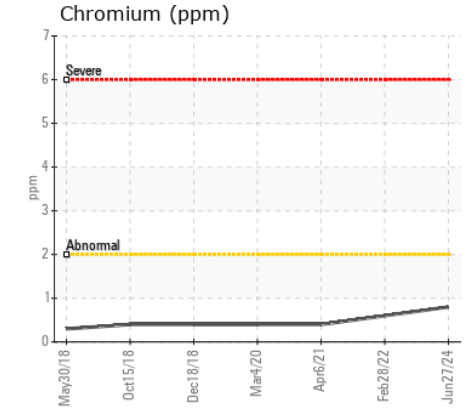
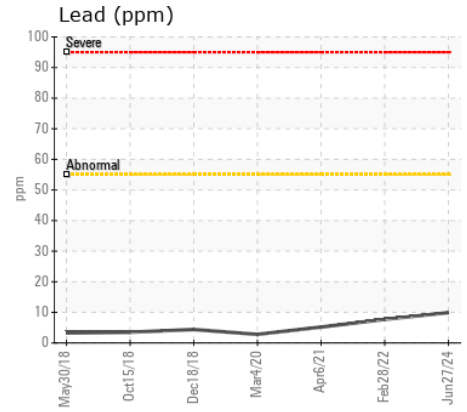
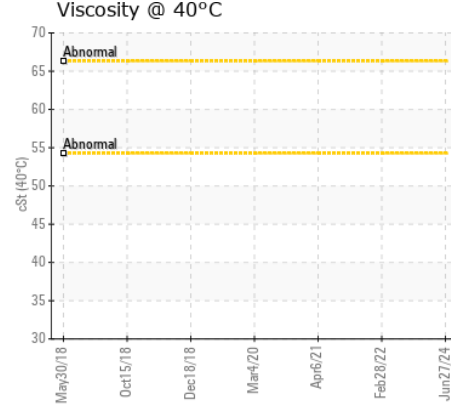
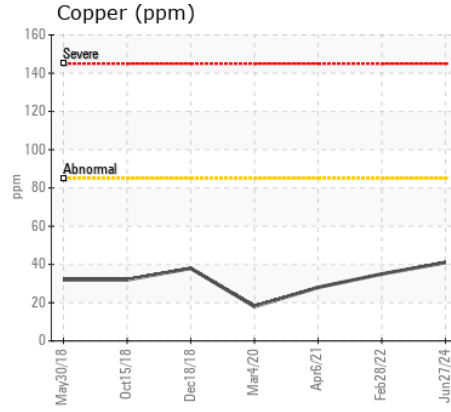
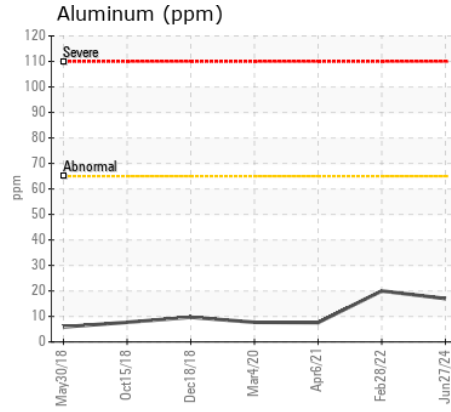
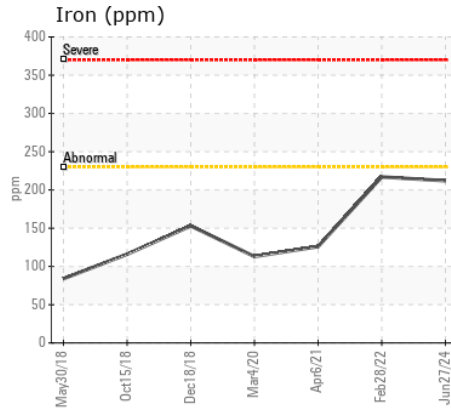
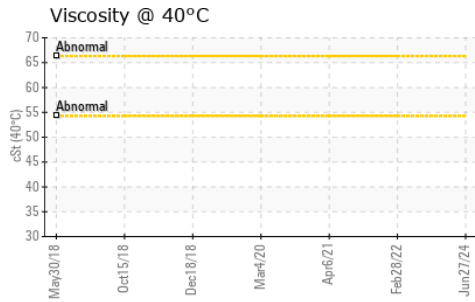
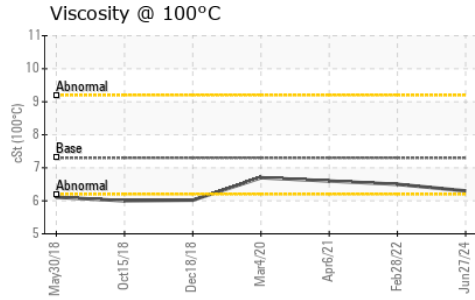
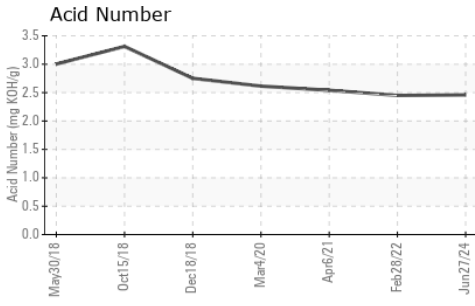
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	16	15	5
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		6	6	6
Boron	ppm	ASTM D5185m		337	336	325
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		2	2	<1
Magnesium	ppm	ASTM D5185m		<1	0	<1
Calcium	ppm	ASTM D5185m		206	234	219
Phosphorus	ppm	ASTM D5185m		616	775	689
Zinc	ppm	ASTM D5185m		14	5	<1
Sulfur	ppm	ASTM D5185m		2285	2392	2132
Acid Number (AN)	mg KOH/g	ASTM D8045		2.46	2.45	2.541
Visc @ 40°C	cSt	ASTM D445		35.5	---	---
Visc @ 100°C	cSt	ASTM D445	7.3	6.3	6.5	6.6
Viscosity Index (VI)	Scale	ASTM D2270	193	128	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06230327
Lab Number : 06230327
Unique Number : 11113820
Test Package : MOB 2 (Additional Tests: KV100, VI)

Received : 08 Jul 2024
Tested : 09 Jul 2024
Diagnosed : 10 Jul 2024 - Don Baldrige

MATHIOWETZ CONSTRUCTION COMPANY
 30676 COUNTY RD 24
 SLEEPY EYE, MN
 US 56085
 Contact: Jim Warwick
 jimwarwick@mathiowetzconst.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)

T:
F: