



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 562

Component
Diesel Engine

Fluid
TRC PRO-SPEC III SYNTHETIC BLEND 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06055541	TR06029608	---
Sample Date		Client Info		27 Dec 2023	25 Oct 2023	---
Machine Age	mls	Client Info		818000	766500	---
Oil Age	mls	Client Info		52000	50000	---
Filter Age	mls	Client Info		52000	50000	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	29	31	---
Chromium	ppm	ASTM D5185m	>6	4	1	---
Nickel	ppm	ASTM D5185m	>3	2	<1	---
Titanium	ppm	ASTM D5185m	>2	<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>50	5	5	---
Lead	ppm	ASTM D5185m	>10	<1	2	---
Copper	ppm	ASTM D5185m	>50	8	<1	---
Tin	ppm	ASTM D5185m	>6	1	1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

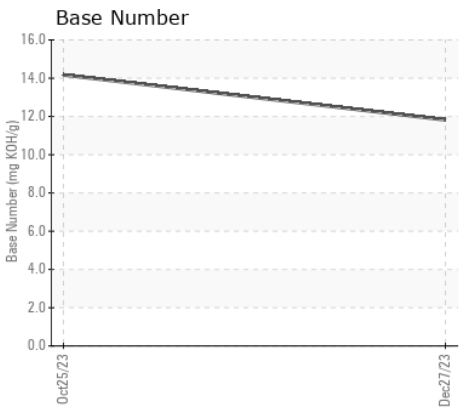
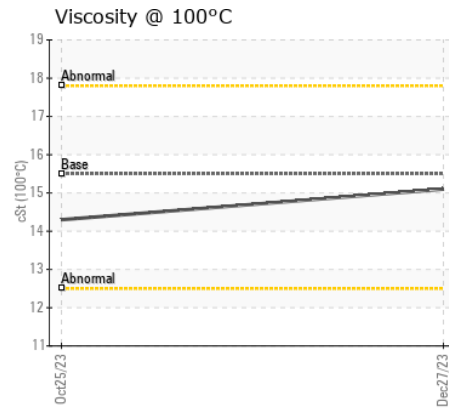
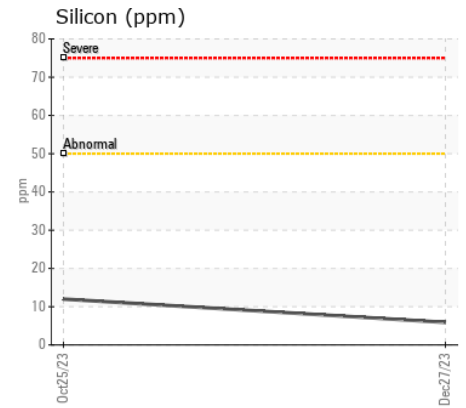
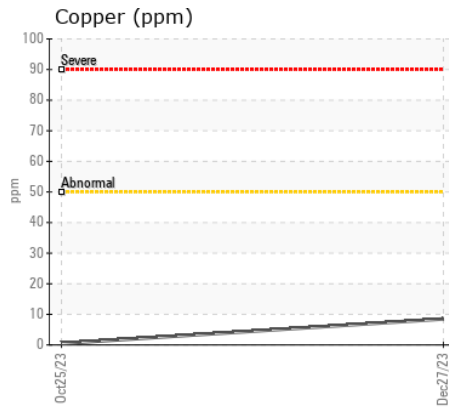
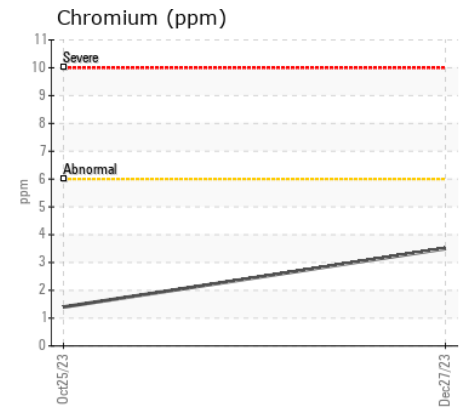
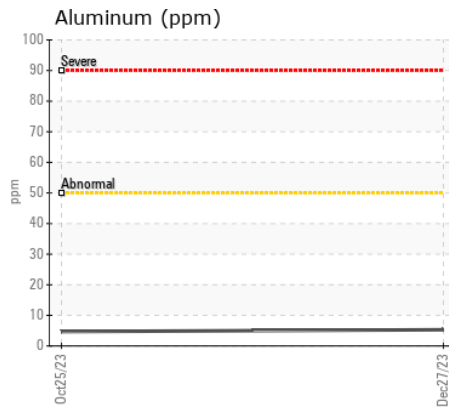
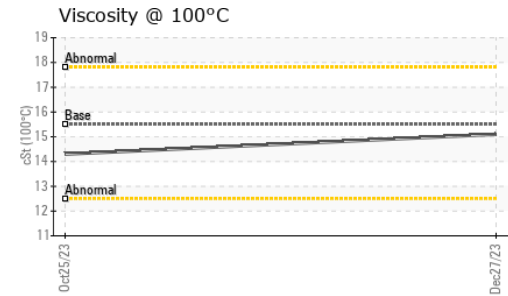
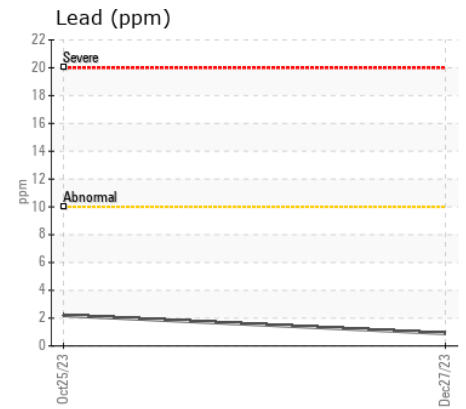
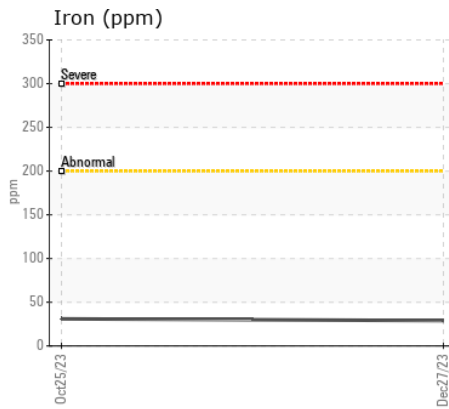
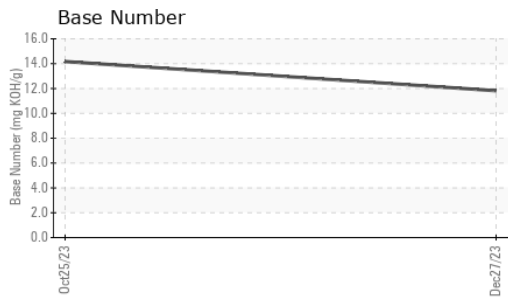
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	6	12	---
Potassium	ppm	ASTM D5185m	>20	2	3	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	1	---
Nitration	Abs/cm	*ASTM D7624	>20	9.6	6.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	18.5	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	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		58	0	---
Boron	ppm	ASTM D5185m		8	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		6	<1	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		55	4	---
Calcium	ppm	ASTM D5185m		4792	5031	---
Phosphorus	ppm	ASTM D5185m		974	1093	---
Zinc	ppm	ASTM D5185m		1237	1231	---
Sulfur	ppm	ASTM D5185m		3527	4632	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	9.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		11.82	14.17	---
Visc @ 100°C	cSt	ASTM D445	15.5	15.1	14.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06055541 **Received** : 09 Jan 2024
Lab Number : 06055541 **Diagnosed** : 10 Jan 2024
Unique Number : 10821490 **Diagnostician** : Wes Davis
Test Package : MOB 2

DANNY RILEY
 1204 CREEKMERE
 CANYON, TX
 US 79015
 Contact: MIKE LEWIS

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: