



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		TR06174069	TR06055541	TR06029608
Sample Date		Client Info		10 Apr 2024	27 Dec 2023	25 Oct 2023
Machine Age	mls	Client Info		863600	818000	766500
Oil Age	mls	Client Info		45600	52000	50000
Filter Age	mls	Client Info		45600	52000	50000
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	>200	28	29	31
Chromium	ppm	ASTM D5185m	>6	4	4	1
Nickel	ppm	ASTM D5185m	>3	3	2	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>50	6	5	5
Lead	ppm	ASTM D5185m	>10	<1	<1	2
Copper	ppm	ASTM D5185m	>50	10	8	<1
Tin	ppm	ASTM D5185m	>6	2	1	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

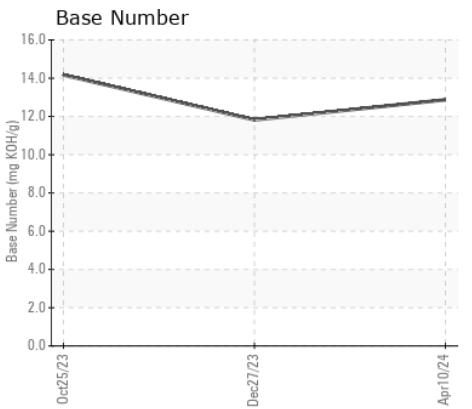
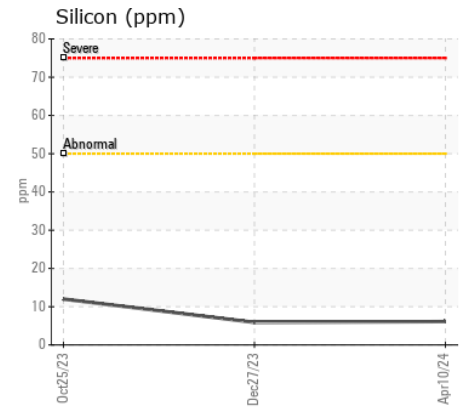
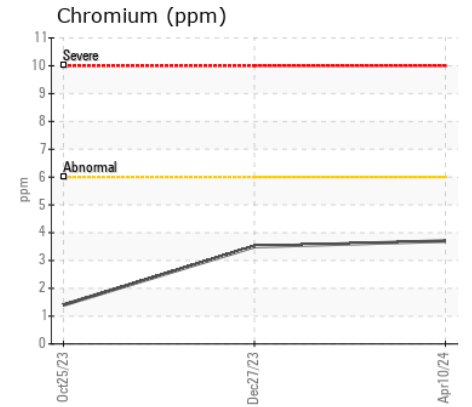
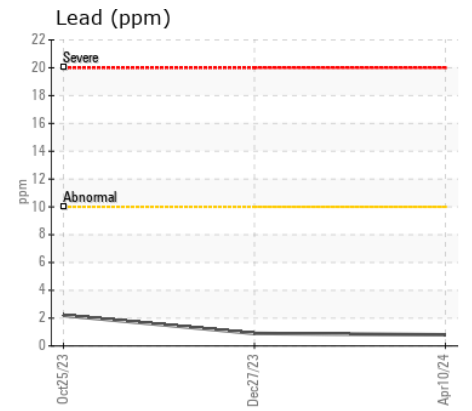
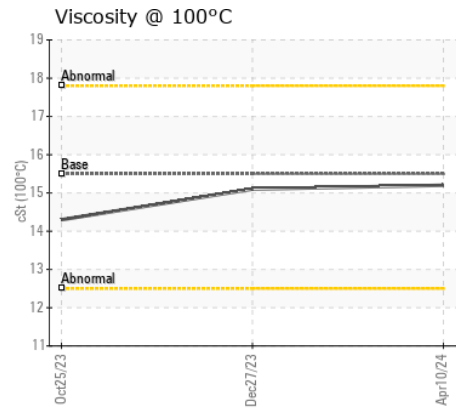
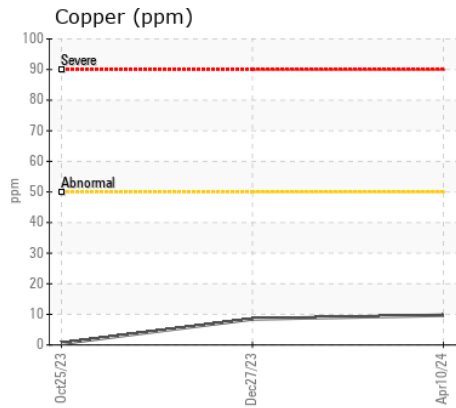
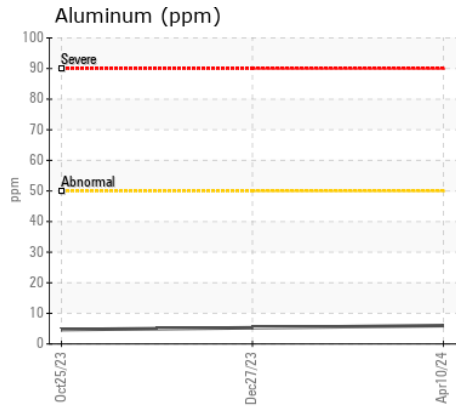
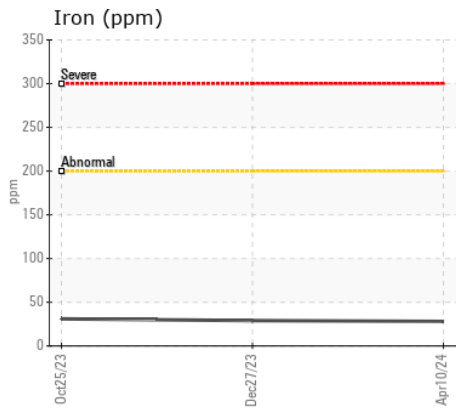
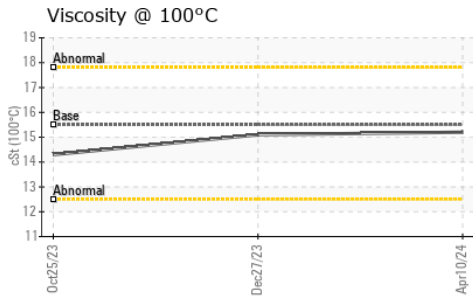
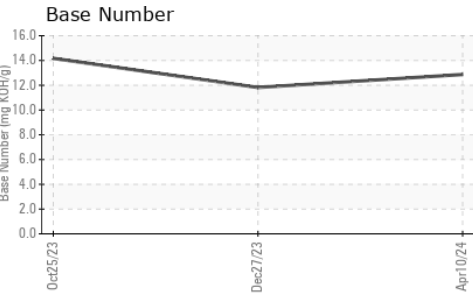
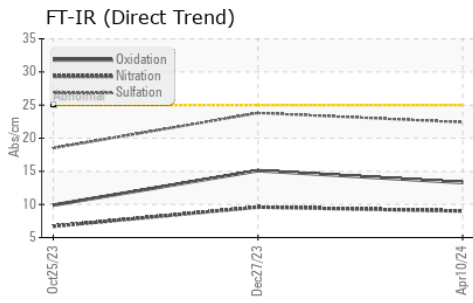
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	6	6	12
Potassium	ppm	ASTM D5185m	>20	5	2	3
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	>3	0.6	0.5	1
Nitration	Abs/cm	*ASTM D7624	>20	9.0	9.6	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	23.8	18.5
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		14	58	0
Boron	ppm	ASTM D5185m		5	8	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		5	6	<1
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		26	55	4
Calcium	ppm	ASTM D5185m		5259	4792	5031
Phosphorus	ppm	ASTM D5185m		1079	974	1093
Zinc	ppm	ASTM D5185m		1247	1237	1231
Sulfur	ppm	ASTM D5185m		4449	3527	4632
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.3	15.1	9.9
Base Number (BN)	mg KOH/g	ASTM D2896		12.87	11.82	14.17
Visc @ 100°C	cSt	ASTM D445	15.5	15.2	15.1	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06174069  
**Lab Number** : 06174069  
**Unique Number** : 11020122  
**Test Package** : MOB 2

**Received** : 09 May 2024  
**Tested** : 10 May 2024  
**Diagnosed** : 10 May 2024 - Wes Davis

**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: