



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**1 - 1 MIXER**

Component  
**Gearbox**

Fluid  
**TRC 890 VARI-PURPOSE 85W140 (375 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06215907</b>	TR06122581	TR06029540
Sample Date		Client Info		<b>12 Jun 2024</b>	13 Mar 2024	21 Nov 2023
Machine Age	yrs	Client Info		<b>0</b>	0	0
Oil Age	yrs	Client Info		<b>0</b>	0	0
Filter Age	yrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>37</b>	26	34
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	1
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>200	<b>3</b>	5	4
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

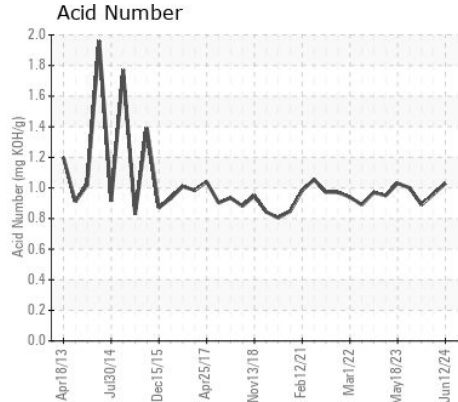
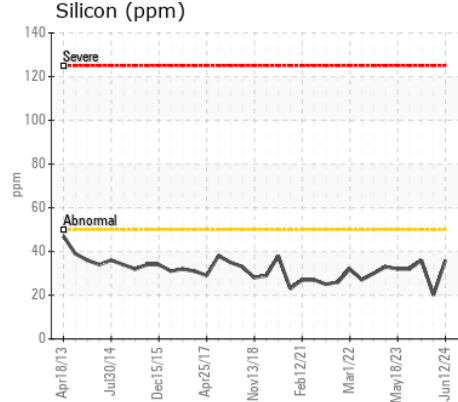
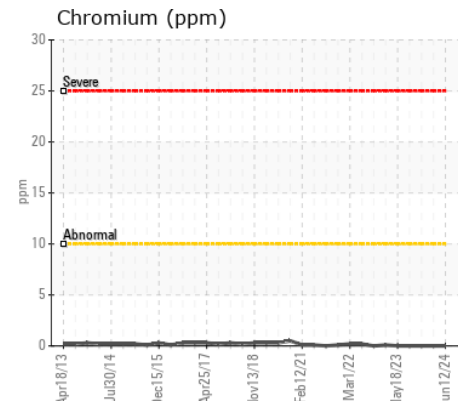
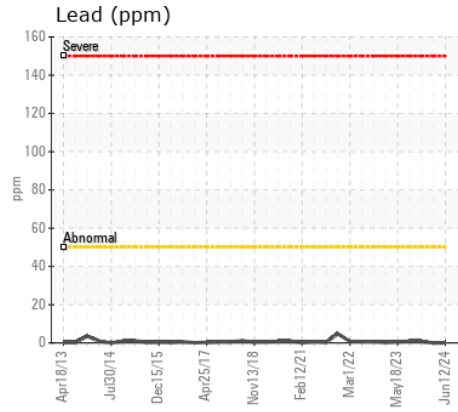
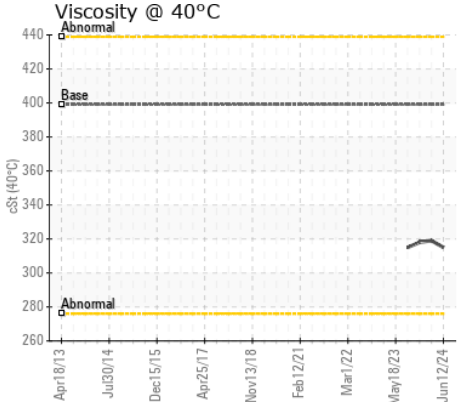
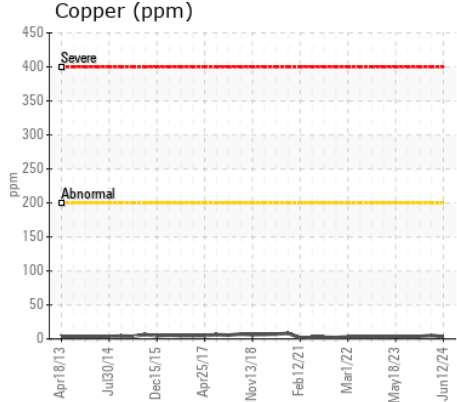
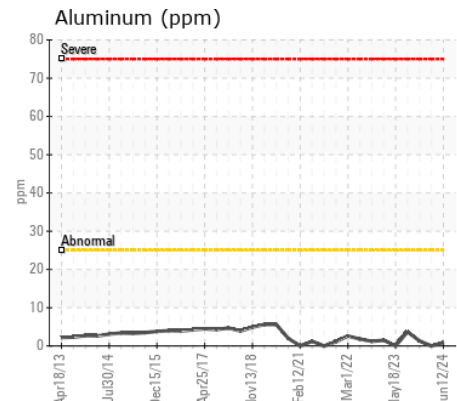
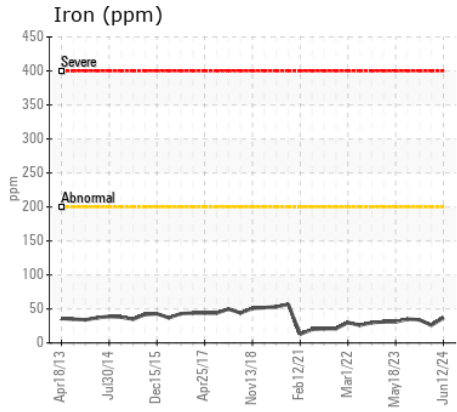
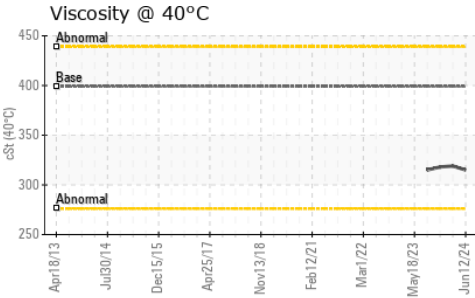
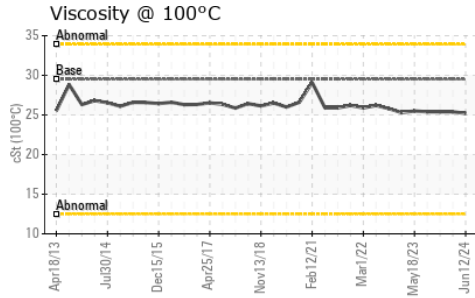
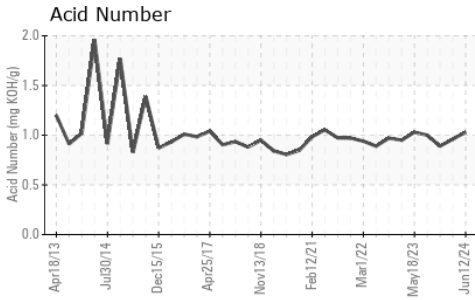
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>36</b>	20	36
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	2
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>&lt;1</b>	0	0
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	1	3
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	0
Calcium	ppm	ASTM D5185m		<b>11</b>	10	0
Phosphorus	ppm	ASTM D5185m		<b>698</b>	658	721
Zinc	ppm	ASTM D5185m		<b>11</b>	10	0
Sulfur	ppm	ASTM D5185m		<b>20577</b>	20816	18901
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.03</b>	0.96	0.89
Visc @ 40°C	cSt	ASTM D445	399	<b>315</b>	319	318
Visc @ 100°C	cSt	ASTM D445	29.5	<b>25.2</b>	25.4	25.4
Viscosity Index (VI)	Scale	ASTM D2270		<b>103</b>	103	103



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06215907  
**Lab Number** : 06215907  
**Unique Number** : 11088771  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI)  
**Received** : 20 Jun 2024  
**Tested** : 22 Jun 2024  
**Diagnosed** : 22 Jun 2024 - Wes Davis

**CARLSTAR GROUP - FORMERLY CARLISLE TIRE**  
 520 JD YARNELL IND. PKWY  
 CLINTON, TN  
 US 37716  
 Contact: JOHN GAINES

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)

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