



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

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

Machine Id  
**14 - 2 TREAD LINE GUM CUSHION**  
 Component  
**Gearbox**  
 Fluid  
**TRC 890 VARI-PURPOSE 85W140 (13 GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06215898</b>	TR06122580	TR06029532
Sample Date		Client Info		<b>10 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>ABNORMAL</b>	ABNORMAL	NORMAL

**WEAR**

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>200	<b>▲ 247</b>	▲ 216	48
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</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>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>50	<b>9</b>	7	6
Copper	ppm	ASTM D5185m	>200	<b>120</b>	115	12
Tin	ppm	ASTM D5185m	>10	<b>6</b>	4	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**

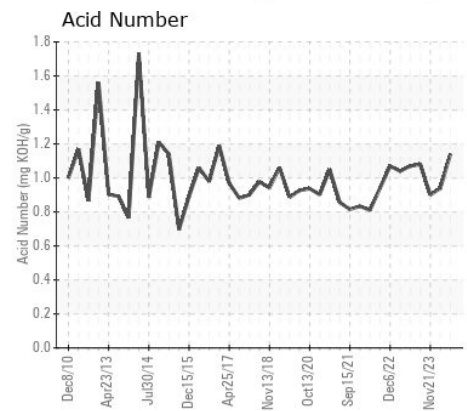
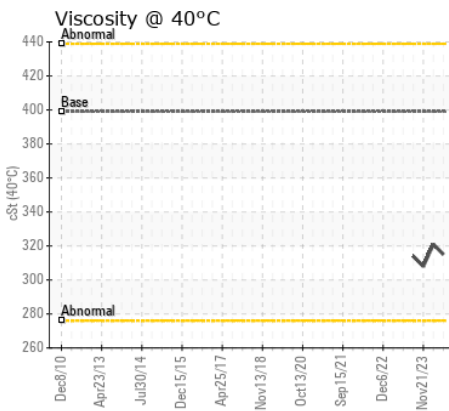
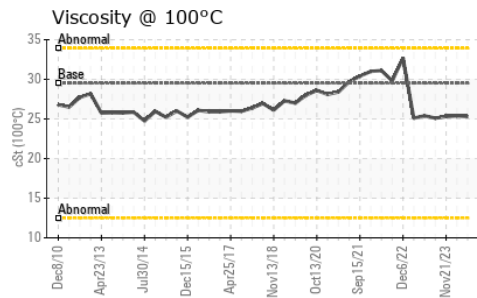
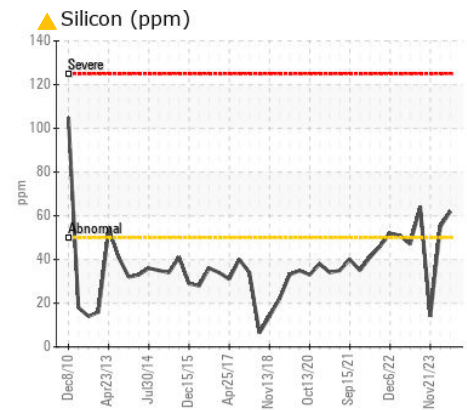
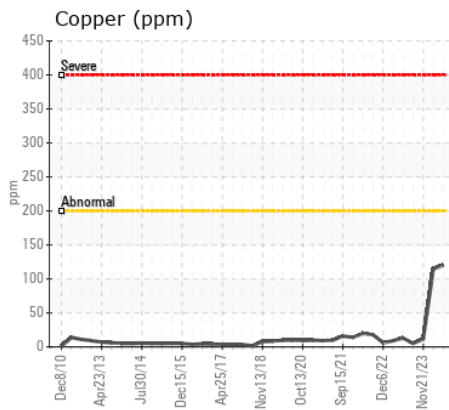
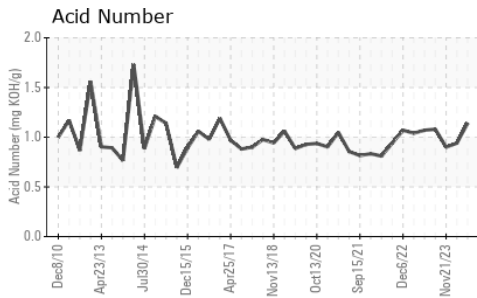
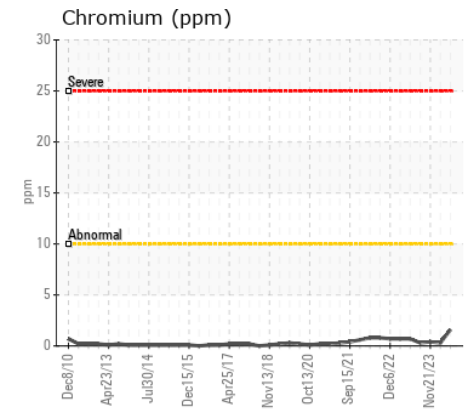
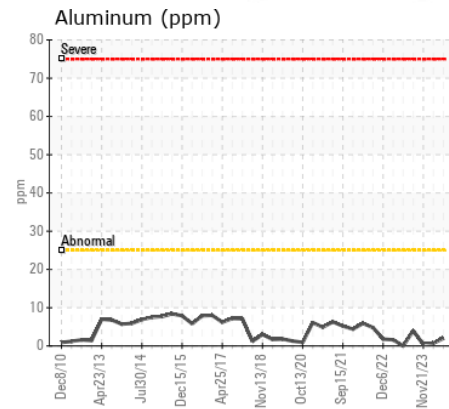
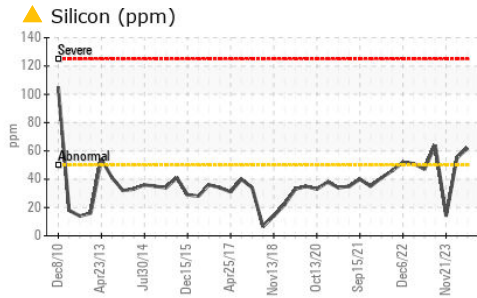
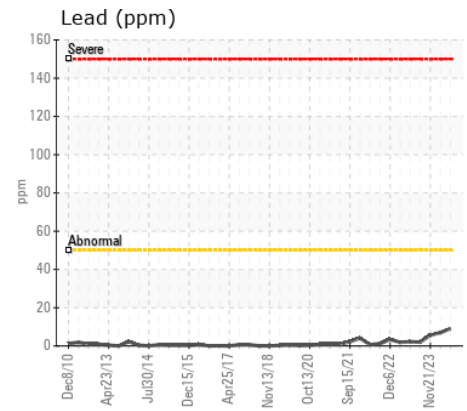
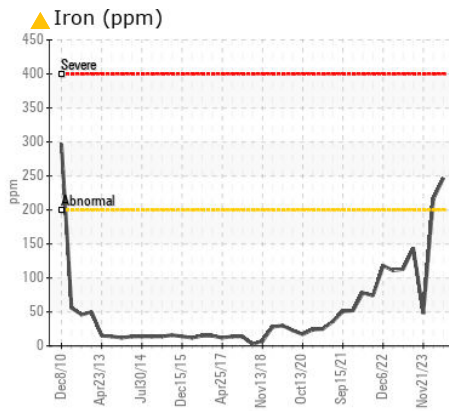
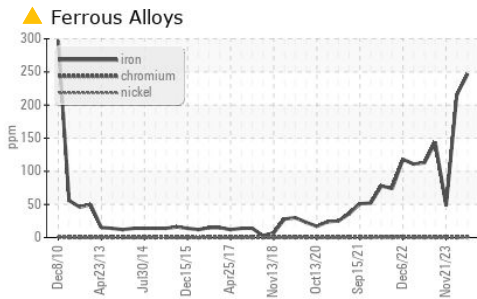
Elemental level of silicon (Si) above normal.

Silicon	ppm	ASTM D5185m	>50	<b>▲ 62</b>	▲ 55	14
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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>6</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	1
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	0
Calcium	ppm	ASTM D5185m		<b>8</b>	7	0
Phosphorus	ppm	ASTM D5185m		<b>765</b>	711	788
Zinc	ppm	ASTM D5185m		<b>31</b>	28	16
Sulfur	ppm	ASTM D5185m		<b>22408</b>	23146	20815
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.14</b>	0.94	0.90
Visc @ 40°C	cSt	ASTM D445	399	<b>315</b>	321	308
Visc @ 100°C	cSt	ASTM D445	29.5	<b>25.3</b>	25.4	25.3
Viscosity Index (VI)	Scale	ASTM D2270		<b>103</b>	102	106



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06215898 **Received** : 20 Jun 2024  
**Lab Number** : 06215898 **Tested** : 22 Jun 2024  
**Unique Number** : 11088762 **Diagnosed** : 23 Jun 2024 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI)

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

Certificate L2367  
 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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