



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
18 - 2 TREAD LINE GUM CUSHION
 Component
Gearbox
 Fluid
TRC 890 VARI-PURPOSE 85W140 (22 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06122589	TR06029533	TR05854467
Sample Date		Client Info		13 Mar 2024	21 Nov 2023	18 May 2023
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		0	0	0
Filter Age	yrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				MARGINAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	13	6	7
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	<1	0
Lead	ppm	ASTM D5185m	>50	0	<1	<1
Copper	ppm	ASTM D5185m	>200	2	2	2
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

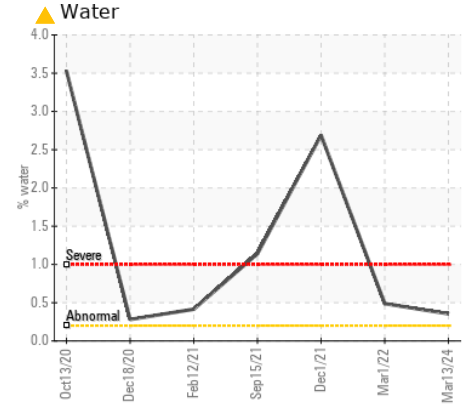
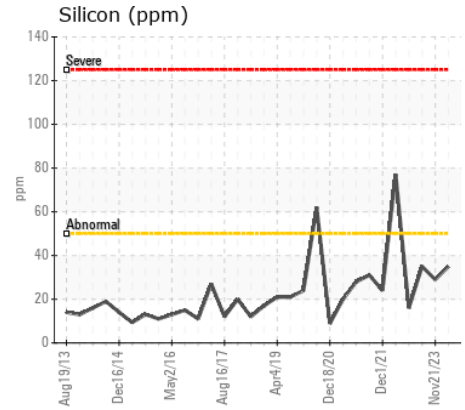
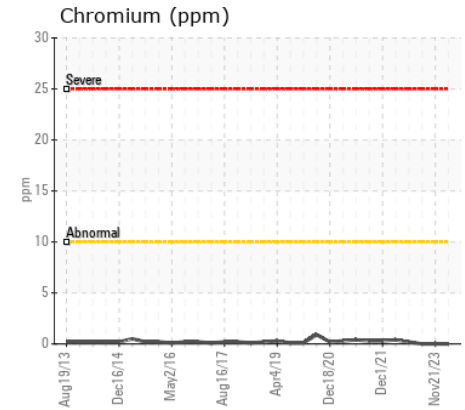
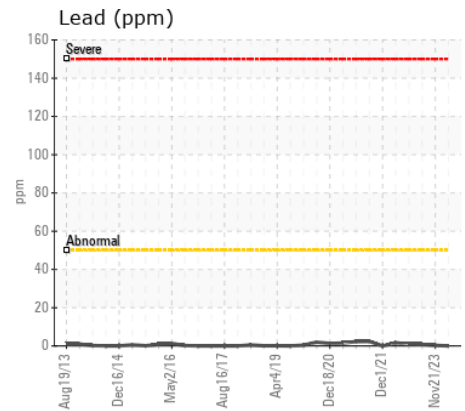
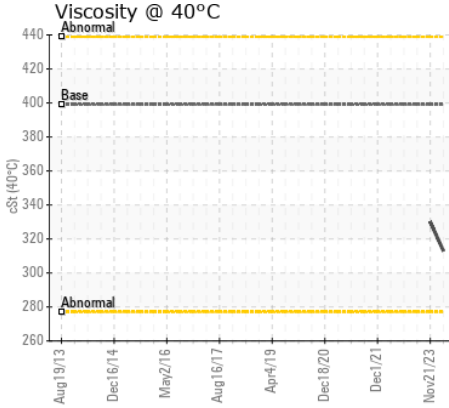
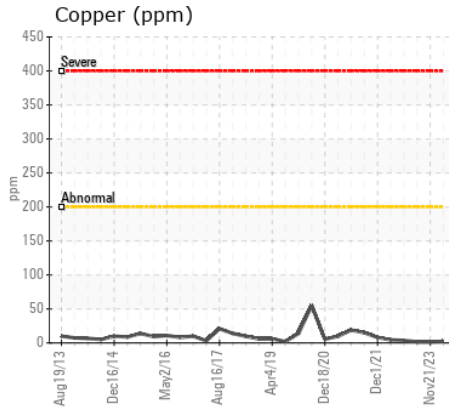
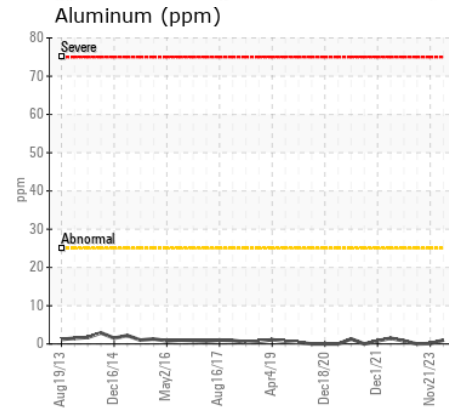
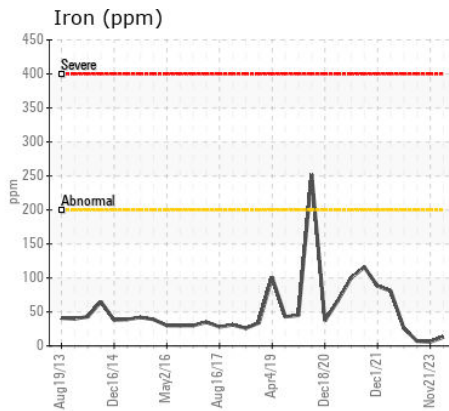
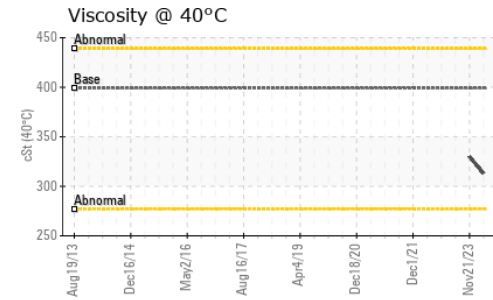
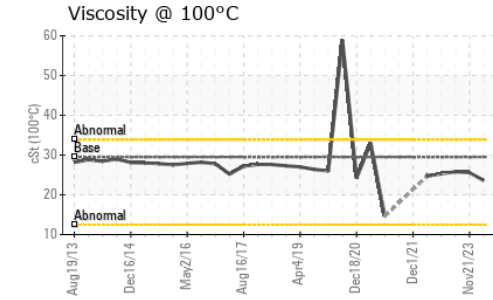
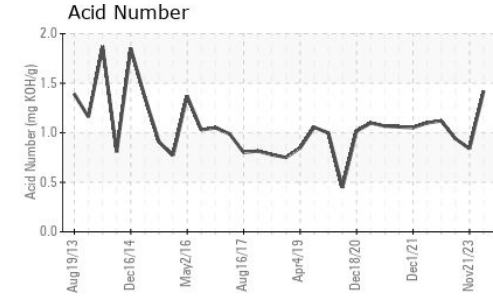
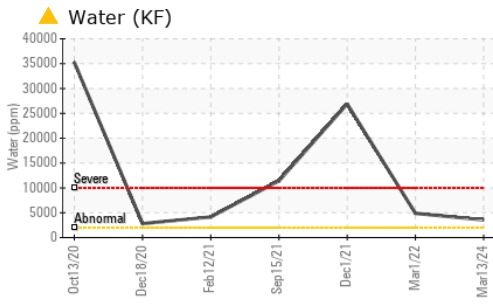
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>50	35	29	35
Potassium	ppm	ASTM D5185m	>20	1	1	<1
Water	%	ASTM D6304	>0.2	▲ 0.355	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 3550	---	---
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	▲ 0.2%	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		3	0	0
Boron	ppm	ASTM D5185m		<1	50	49
Barium	ppm	ASTM D5185m		14	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		6	0	2
Calcium	ppm	ASTM D5185m		46	78	109
Phosphorus	ppm	ASTM D5185m		814	726	704
Zinc	ppm	ASTM D5185m		27	0	4
Sulfur	ppm	ASTM D5185m		25052	18838	16701
Acid Number (AN)	mg KOH/g	ASTM D8045		1.42	0.84	0.94
Visc @ 40°C	cSt	ASTM D445	399	313	330	---
Visc @ 100°C	cSt	ASTM D445	29.5	23.6	25.6	25.8
Viscosity Index (VI)	Scale	ASTM D2270		94	100	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : TR06122589

Lab Number : 06122589

Unique Number : 10936740

Test Package : MOB 2 (Additional Tests: KF, KV100, VI)

Received : 19 Mar 2024

Tested : 20 Mar 2024

Diagnosed : 21 Mar 2024 - Don Baldrige

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)

T:

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