



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
17 - 2 TREADLINE GUM CUSHION
 Component
Gearbox
 Fluid
TRC 890 VARI-PURPOSE 85W140 (22 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

The aluminum, chrome, iron and nickel levels are severe. Gear wear is indicated.

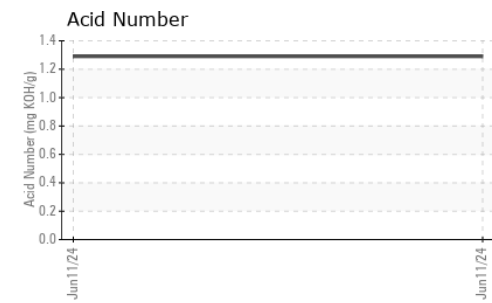
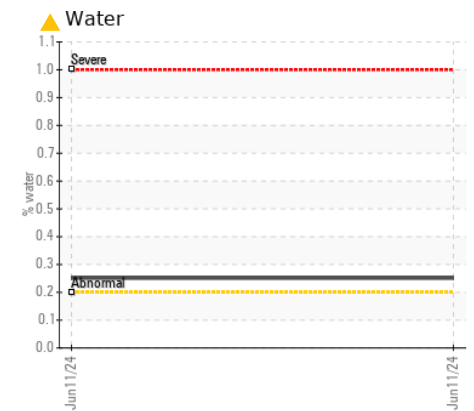
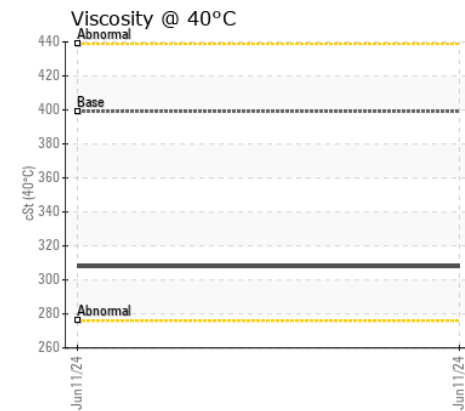
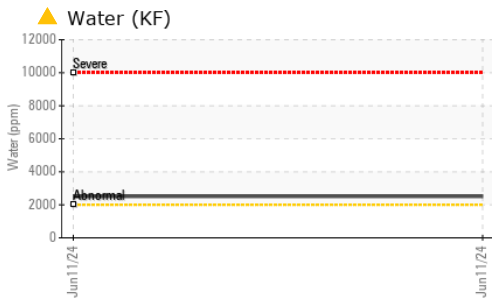
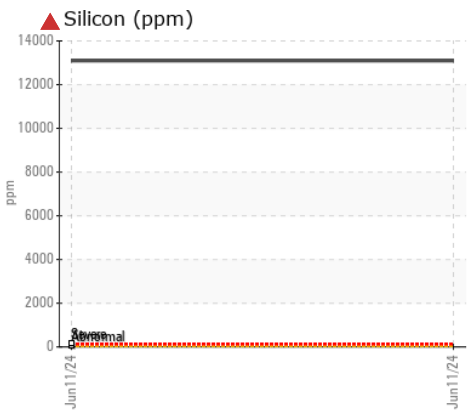
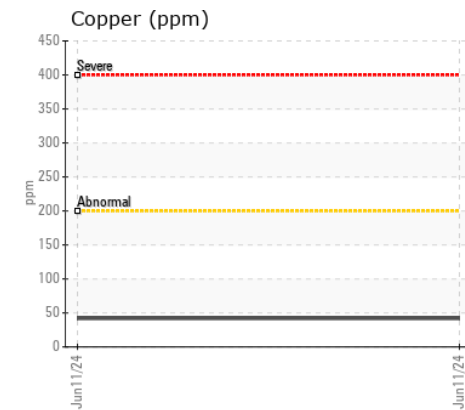
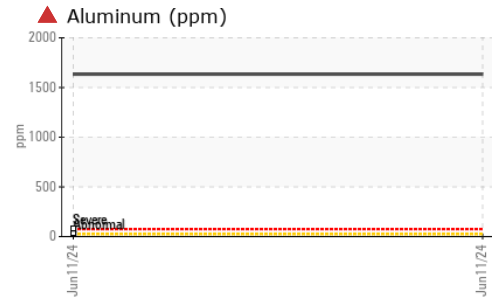
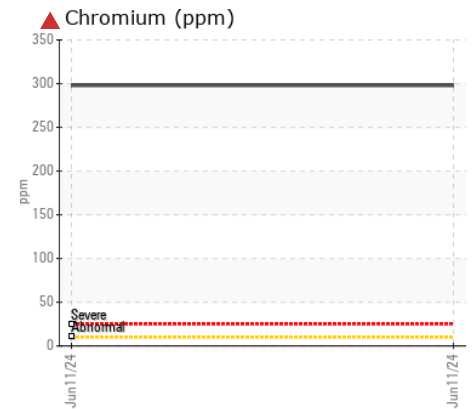
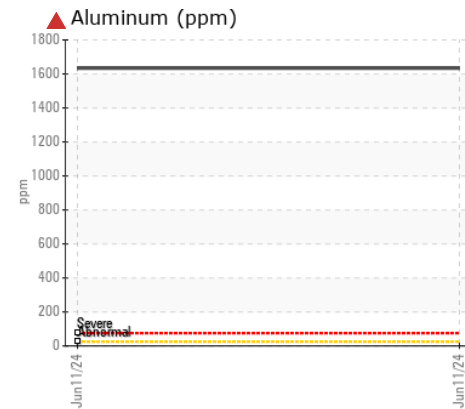
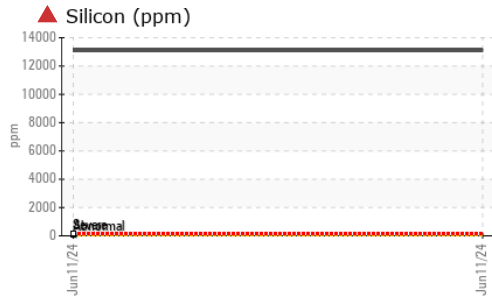
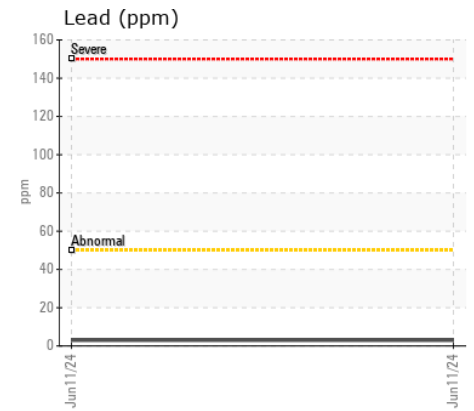
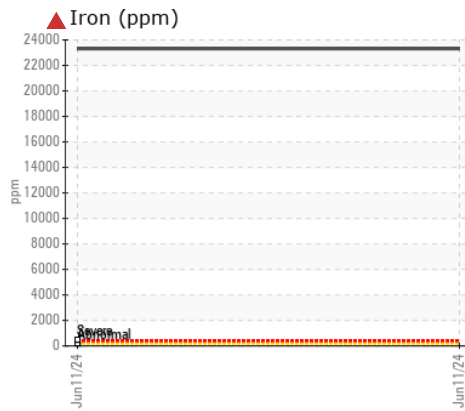
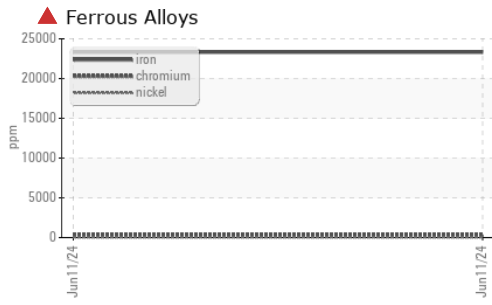
CONTAMINATION

There is a light concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06215900	---	---
Sample Date		Client Info		11 Jun 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>200	▲ 23318	---	---
Chromium	ppm	ASTM D5185m	>10	▲ 298	---	---
Nickel	ppm	ASTM D5185m	>10	▲ 37	---	---
Titanium	ppm	ASTM D5185m		183	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	▲ 1634	---	---
Lead	ppm	ASTM D5185m	>50	3	---	---
Copper	ppm	ASTM D5185m	>200	42	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		5	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>50	▲ 13095	---	---
Potassium	ppm	ASTM D5185m	>20	346	---	---
Water	%	ASTM D6304	>0.2	▲ 0.251	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 2510	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	0.2%	---	---
Sodium	ppm	ASTM D5185m		93	---	---
Boron	ppm	ASTM D5185m		192	---	---
Barium	ppm	ASTM D5185m		4	---	---
Molybdenum	ppm	ASTM D5185m		42	---	---
Manganese	ppm	ASTM D5185m		187	---	---
Magnesium	ppm	ASTM D5185m		53	---	---
Calcium	ppm	ASTM D5185m		76	---	---
Phosphorus	ppm	ASTM D5185m		804	---	---
Zinc	ppm	ASTM D5185m		13	---	---
Sulfur	ppm	ASTM D5185m		87292	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.29	---	---
Visc @ 40°C	cSt	ASTM D445	399	308	---	---
Visc @ 100°C	cSt	ASTM D445	29.5	25.3	---	---
Viscosity Index (VI)	Scale	ASTM D2270		106	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06215900
Lab Number : 06215900
Unique Number : 11088764
Test Package : MOB 2 (Additional Tests: KF, KV100, VI)

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:
 F: (865)463-3696