



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
15 - 1 EXTRUDER SCRAP MILL
 Component
Gearbox
 Fluid
TRC 890 VARI-PURPOSE 85W140 (170 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		TR06122592	TR06029535	TR05939814
Sample Date		Client Info		13 Mar 2024	21 Nov 2023	30 Aug 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	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				ABNORMAL	NORMAL	ABNORMAL

WEAR

The iron level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	▲ 213	76	▲ 217
Chromium	ppm	ASTM D5185m	>10	1	1	2
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	5
Lead	ppm	ASTM D5185m	>50	15	11	24
Copper	ppm	ASTM D5185m	>200	32	20	30
Tin	ppm	ASTM D5185m	>10	0	0	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

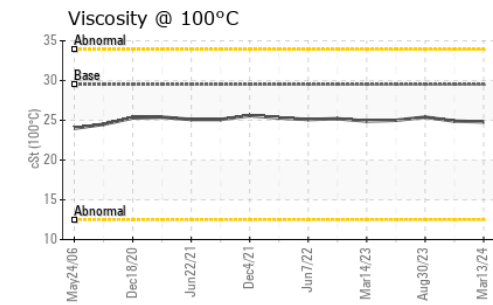
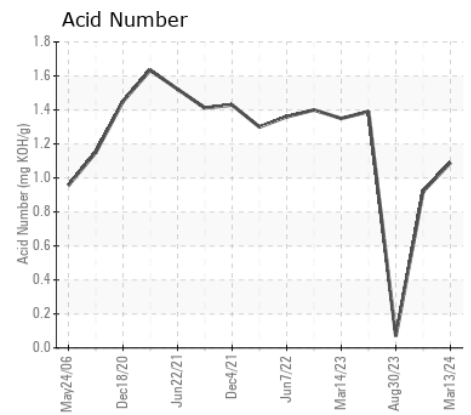
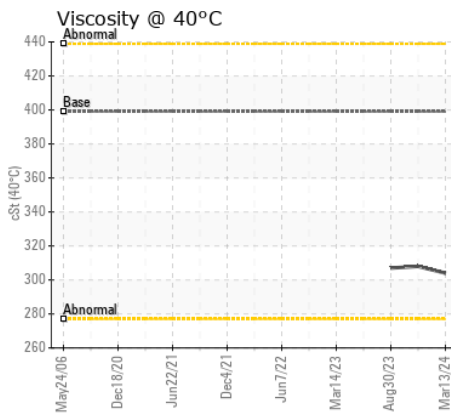
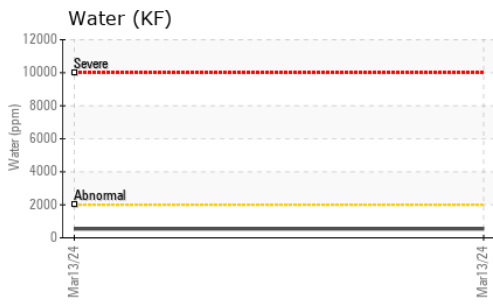
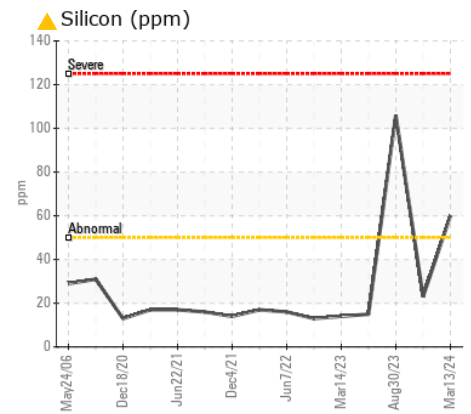
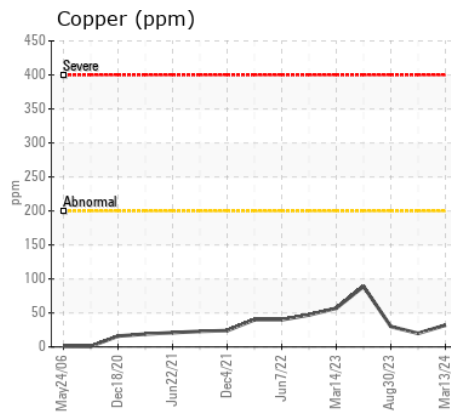
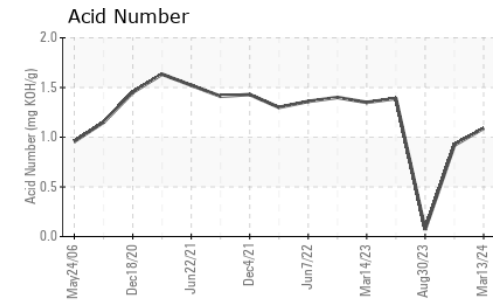
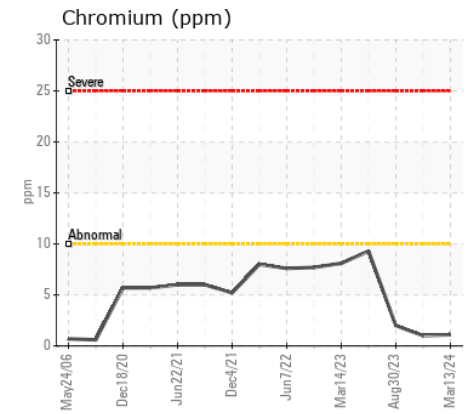
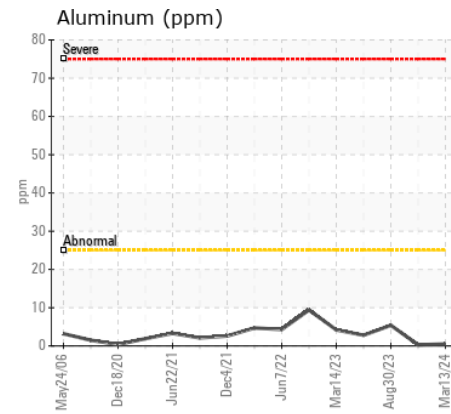
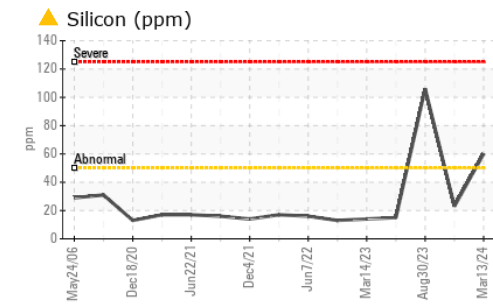
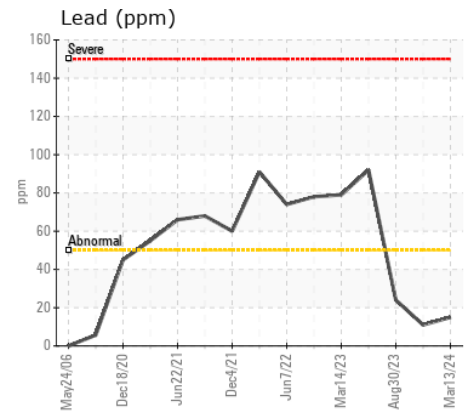
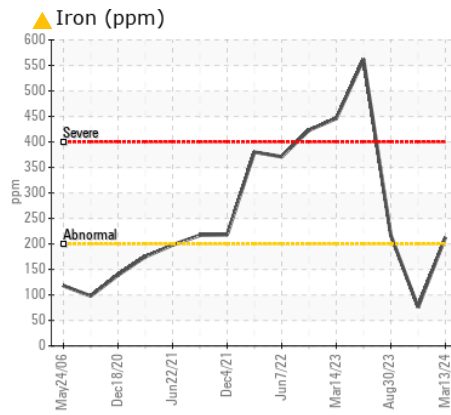
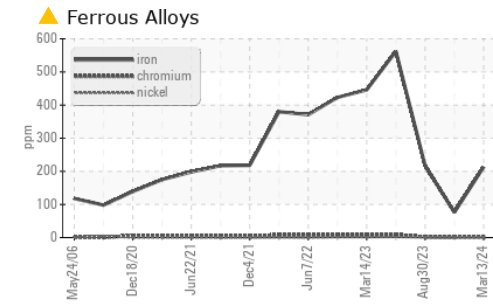
Elemental level of silicon (Si) above normal.

Silicon	ppm	ASTM D5185m	>50	▲ 60	23	▲ 106
Potassium	ppm	ASTM D5185m	>20	0	2	2
Water	%	ASTM D6304	>0.2	0.054	---	---
ppm Water	ppm	ASTM D6304	>2000	540	---	---
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		0	0	0
Boron	ppm	ASTM D5185m		4	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		2	1	2
Magnesium	ppm	ASTM D5185m		0	0	1
Calcium	ppm	ASTM D5185m		14	0	11
Phosphorus	ppm	ASTM D5185m		694	841	749
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m		21423	20006	23681
Acid Number (AN)	mg KOH/g	ASTM D8045		1.09	0.92	0.07
Visc @ 40°C	cSt	ASTM D445	399	304	308	307
Visc @ 100°C	cSt	ASTM D445	29.5	24.8	24.9	25.4
Viscosity Index (VI)	Scale	ASTM D2270		104	103	106



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06122592
Lab Number : 06122592
Unique Number : 10936743
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)

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