



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		TR06215894	TR06122592	TR06029535
Sample Date		Client Info		10 Jun 2024	13 Mar 2024	21 Nov 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	ABNORMAL	NORMAL

WEAR

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

Iron	ppm	ASTM D5185m	>200	▲ 372	▲ 213	76
Chromium	ppm	ASTM D5185m	>10	4	1	1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	3	<1	<1
Lead	ppm	ASTM D5185m	>50	27	15	11
Copper	ppm	ASTM D5185m	>200	41	32	20
Tin	ppm	ASTM D5185m	>10	2	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

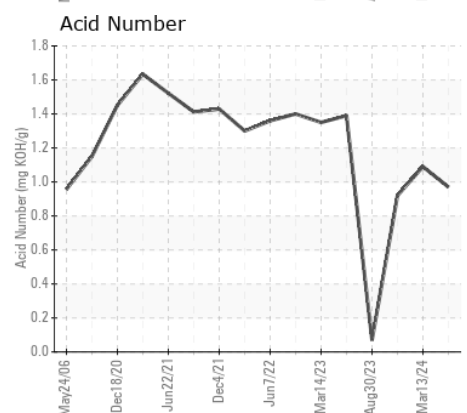
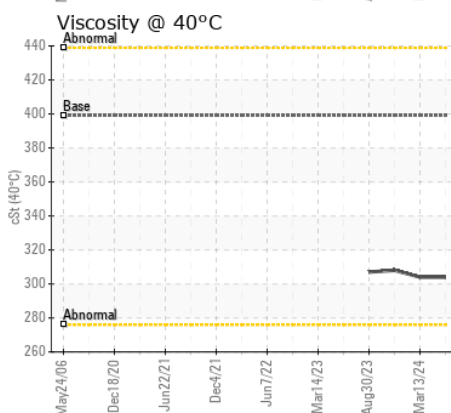
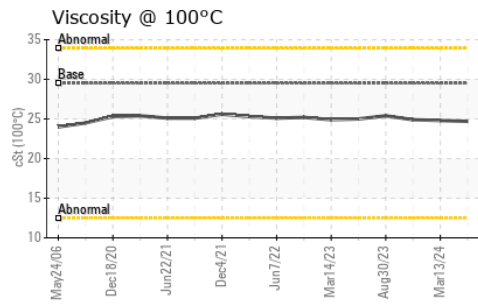
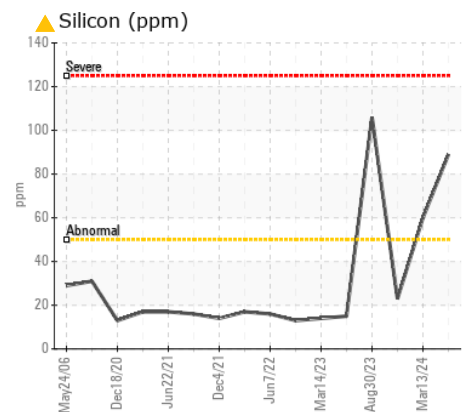
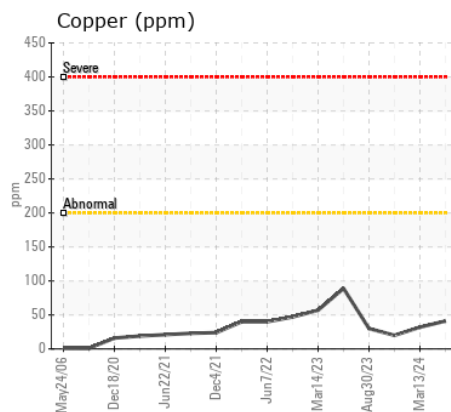
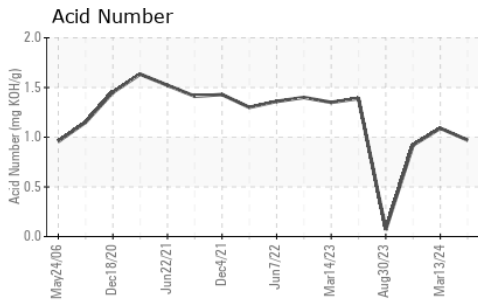
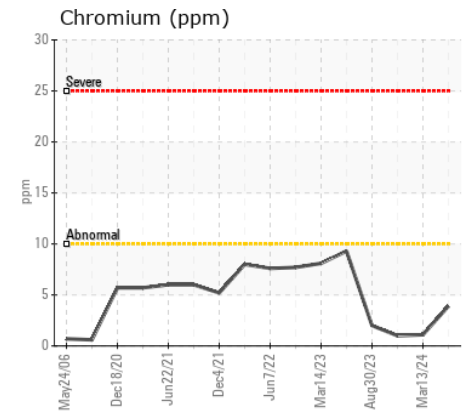
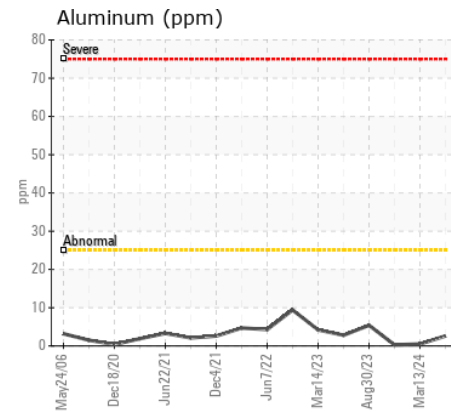
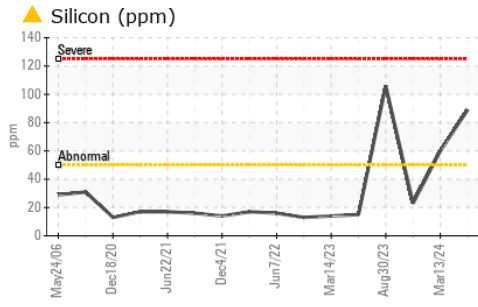
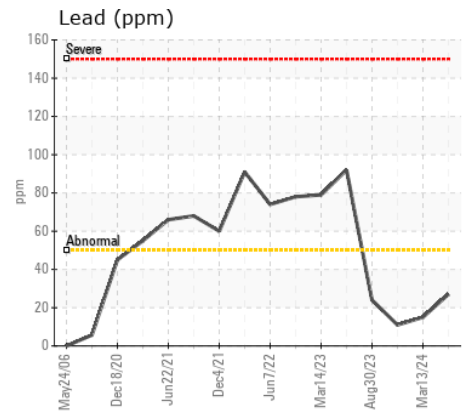
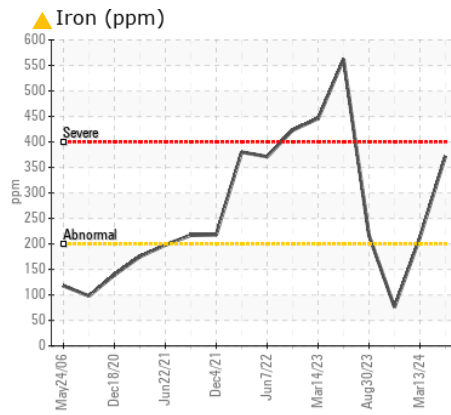
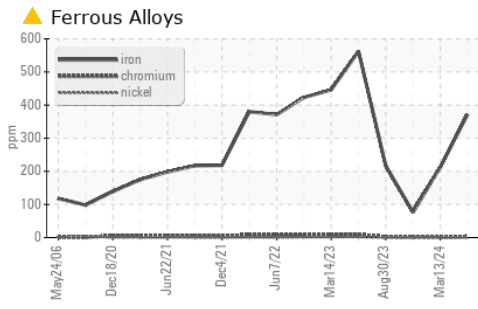
Elemental level of silicon (Si) above normal.

Silicon	ppm	ASTM D5185m	>50	▲ 89	▲ 60	23
Potassium	ppm	ASTM D5185m	>20	0	0	2
Water		WC Method	>0.2	NEG	NEG	NEG
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	NEG	0.2%	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		<1	0	0
Boron	ppm	ASTM D5185m		<1	4	0
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		4	2	1
Magnesium	ppm	ASTM D5185m		<1	0	0
Calcium	ppm	ASTM D5185m		17	14	0
Phosphorus	ppm	ASTM D5185m		761	694	841
Zinc	ppm	ASTM D5185m		9	0	0
Sulfur	ppm	ASTM D5185m		21913	21423	20006
Acid Number (AN)	mg KOH/g	ASTM D8045		0.97	1.09	0.92
Visc @ 40°C	cSt	ASTM D445	399	304	304	308
Visc @ 100°C	cSt	ASTM D445	29.5	24.7	24.8	24.9
Viscosity Index (VI)	Scale	ASTM D2270		103	104	103



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06215894 **Received** : 20 Jun 2024
Lab Number : 06215894 **Tested** : 22 Jun 2024
Unique Number : 11088758 **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)

T:
 F: (865)463-3696