



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
COL CD 1
 Component
Gearbox
 Fluid
TRC MOLY ULTRA-TEC GEAR OIL 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06187866	---	---
Sample Date		Client Info		15 May 2024	---	---
Machine Age	yrs	Client Info		0	---	---
Oil Age	yrs	Client Info		4	---	---
Filter Age	yrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	192	---	---
Chromium	ppm	ASTM D5185m	>10	1	---	---
Nickel	ppm	ASTM D5185m	>10	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>25	49	---	---
Lead	ppm	ASTM D5185m	>50	<1	---	---
Copper	ppm	ASTM D5185m	>200	2	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

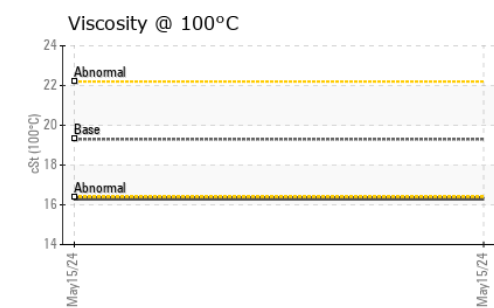
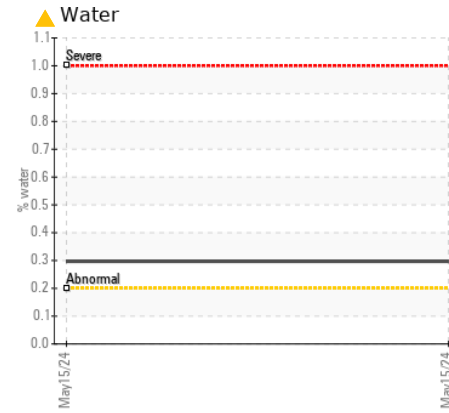
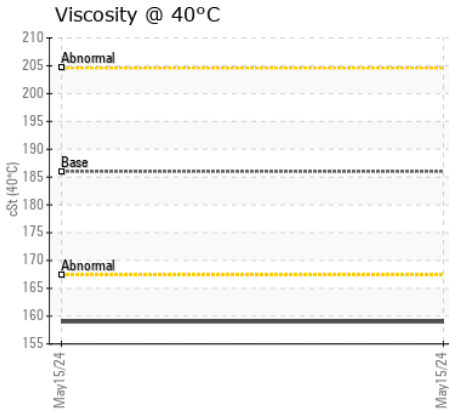
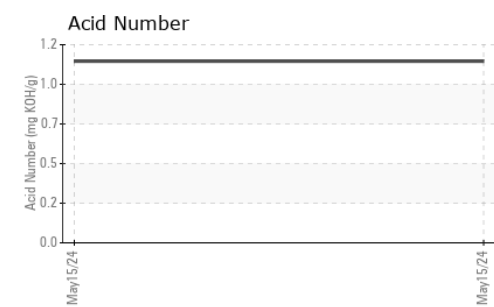
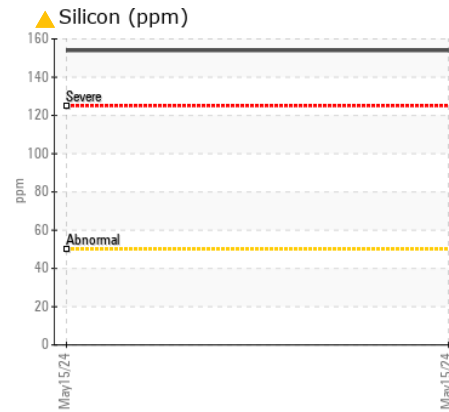
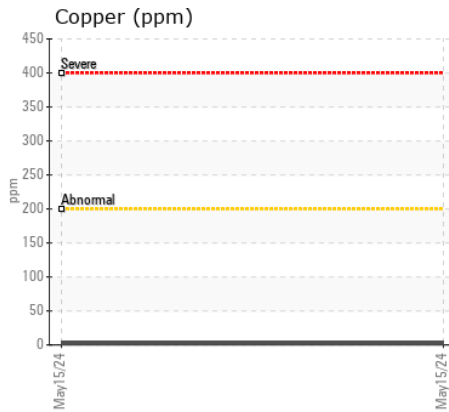
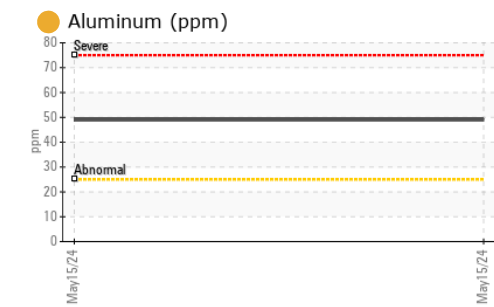
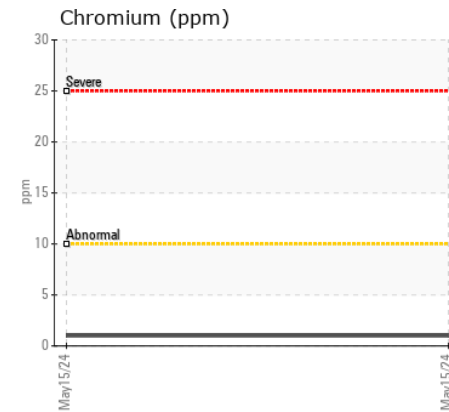
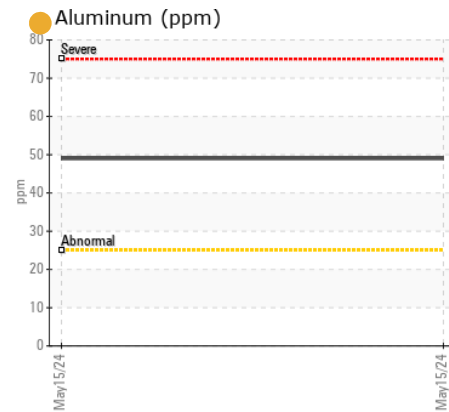
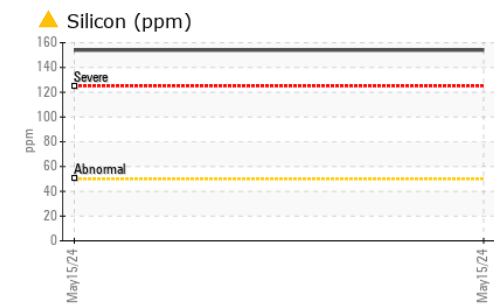
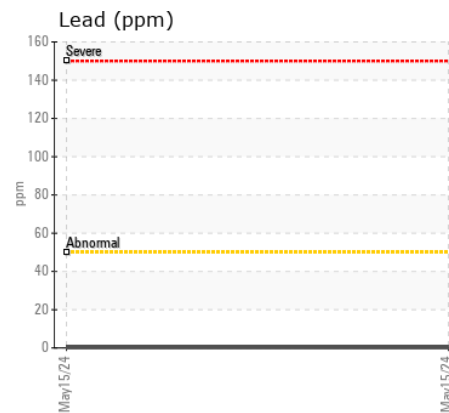
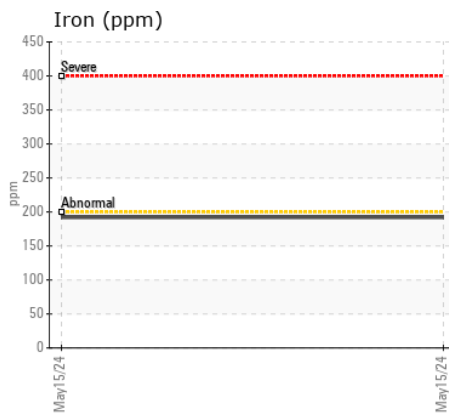
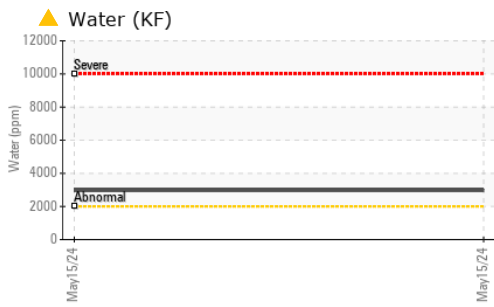
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a light concentration of water present in the oil. Free water present.

Silicon	ppm	ASTM D5185m	>50	154	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water	%	ASTM D6304	>0.2	0.297	---	---
ppm Water	ppm	ASTM D6304	>2000	2970	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	MILKY	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	0.2%	---	---

FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<1	---	---
Boron	ppm	ASTM D5185m		33	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		12	---	---
Manganese	ppm	ASTM D5185m		3	---	---
Magnesium	ppm	ASTM D5185m		8	---	---
Calcium	ppm	ASTM D5185m		31	---	---
Phosphorus	ppm	ASTM D5185m		807	---	---
Zinc	ppm	ASTM D5185m		33	---	---
Sulfur	ppm	ASTM D5185m		19323	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.10	---	---
Visc @ 40°C	cSt	ASTM D445	186	159	---	---
Visc @ 100°C	cSt	ASTM D445	19.3	16.3	---	---
Viscosity Index (VI)	Scale	ASTM D2270	125	107	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06187866
Lab Number : 06187866
Unique Number : 11044618
Test Package : MOB 2 (Additional Tests: KF, KV100, VI)

CHRIST BROTHERS PRODUCTS
 820 S FRITZ
 LEBANON, IL
 US 62254
 Contact: BRUCE COWELL

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: