



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**3BPZL70X3GF105194**

Component  
**Diesel Engine**

Fluid  
**TRC MOLY XL PRO-SPEC IV XP 15W40 (11 GAL)**

**RECOMMENDATION**

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06054165	---	---
Sample Date		Client Info		15 Nov 2023	---	---
Machine Age	mls	Client Info		0	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	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	>165	16	---	---
Chromium	ppm	ASTM D5185m	>5	<1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m	>2	0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>20	3	---	---
Lead	ppm	ASTM D5185m	>150	12	---	---
Copper	ppm	ASTM D5185m	>90	1	---	---
Tin	ppm	ASTM D5185m	>5	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

**CONTAMINATION**

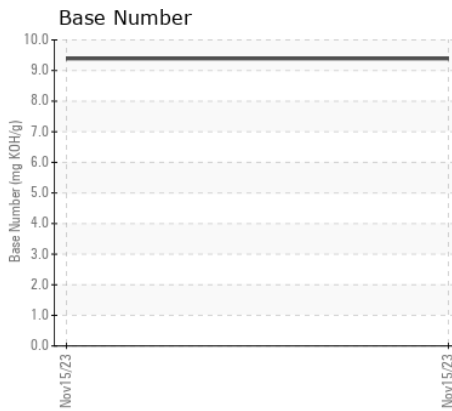
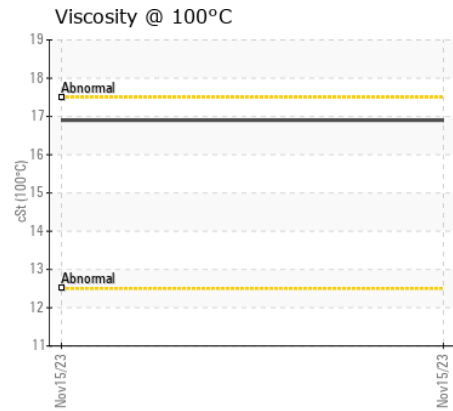
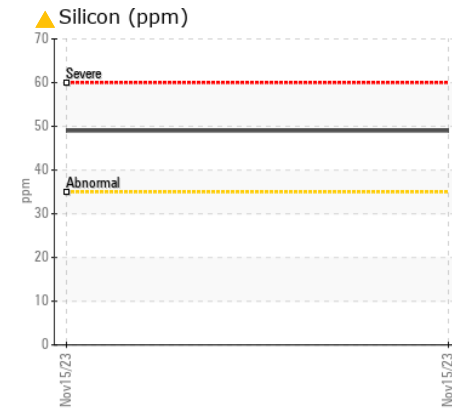
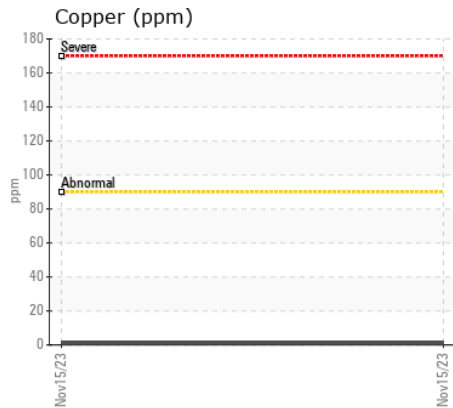
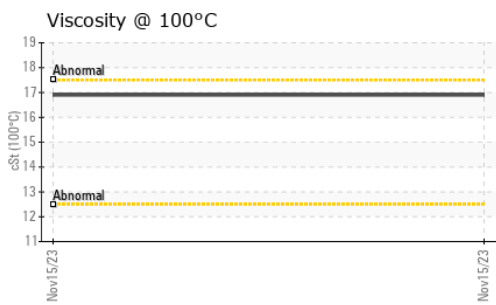
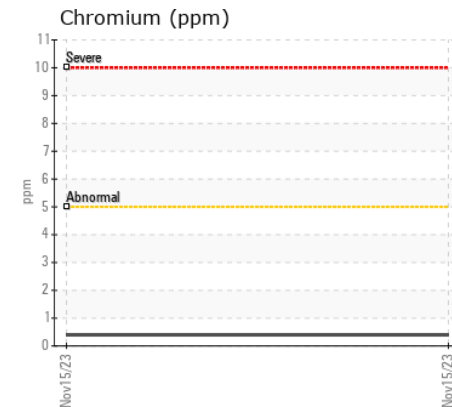
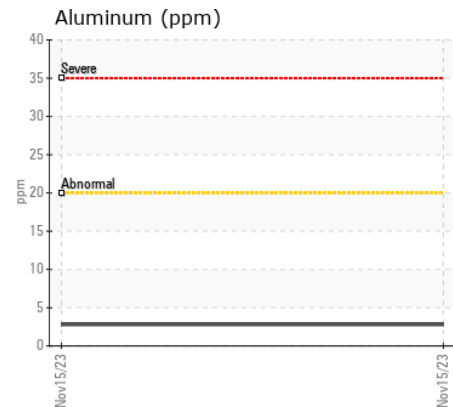
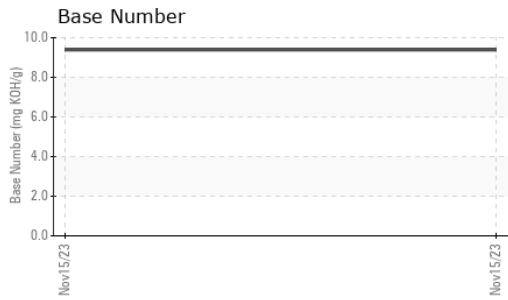
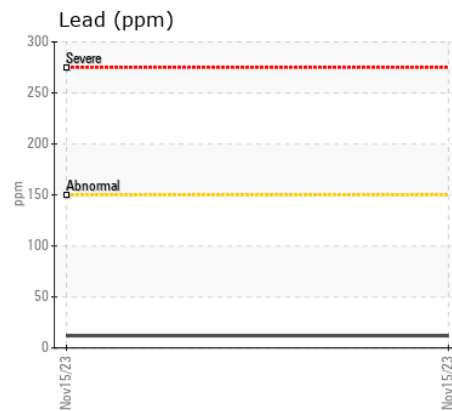
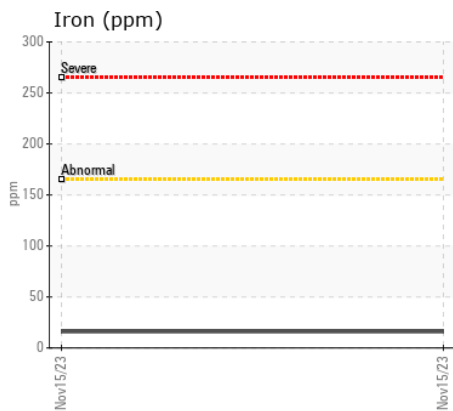
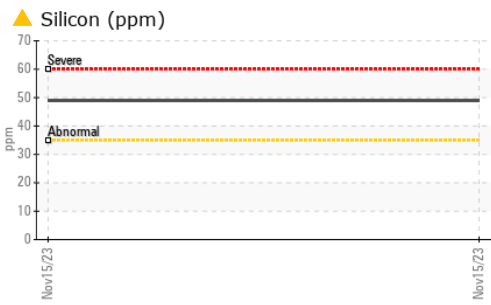
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>35	▲ 49	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Fuel		WC Method	>3.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>7.5	1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	15.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.2	---	---
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	NEG	---	---

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		6	---	---
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		145	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		30	---	---
Calcium	ppm	ASTM D5185m		4537	---	---
Phosphorus	ppm	ASTM D5185m		985	---	---
Zinc	ppm	ASTM D5185m		1120	---	---
Sulfur	ppm	ASTM D5185m		4502	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.39	---	---
Visc @ 100°C	cSt	ASTM D445		16.9	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06054165 **Received** : 08 Jan 2024  
**Lab Number** : 06054165 **Diagnosed** : 09 Jan 2024  
**Unique Number** : 10820114 **Diagnostician** : Sean Felton  
**Test Package** : MOB 2

**MARCHETTI COMMERCIAL FUELS**  
 131 BALLARD ST  
 SAUGUS, MA  
 US 01906  
 Contact: DON PERCY

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: