



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**KATOLIGHT KATO**  
 Component  
**Natural Gas Engine**  
 Fluid  
**TRC MOLY XL PRO-SPEC III SYNTHETIC15W40 (9 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05647350	TR03895193	---
Sample Date		Client Info		04 Apr 2022	17 Nov 2015	---
Machine Age	hrs	Client Info		251	205	---
Oil Age	hrs	Client Info		46	42	---
Filter Age	hrs	Client Info		46	42	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	76	20	---
Chromium	ppm	ASTM D5185m	>4	2	<1	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>9	2	3	---
Lead	ppm	ASTM D5185m	>30	5	4	---
Copper	ppm	ASTM D5185m	>35	72	12	---
Tin	ppm	ASTM D5185m	>4	3	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

## CONTAMINATION

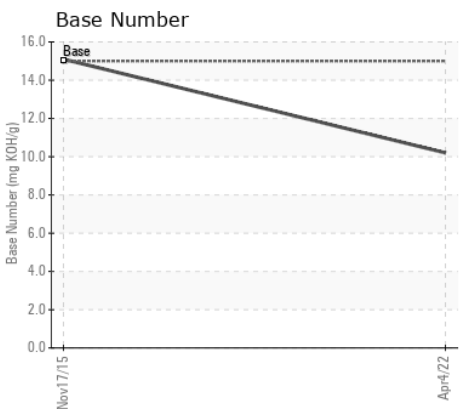
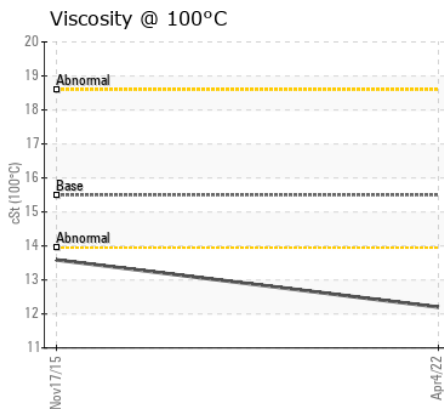
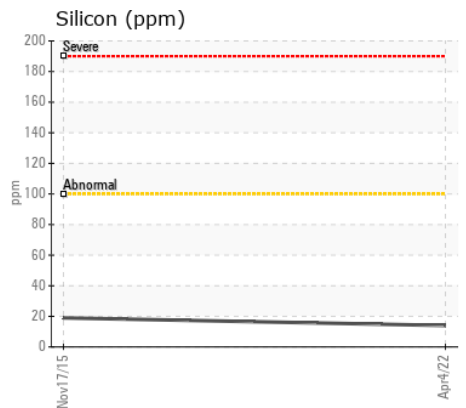
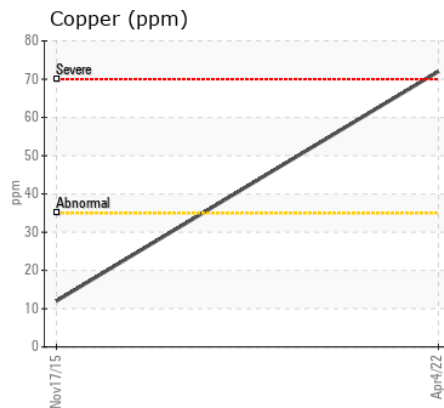
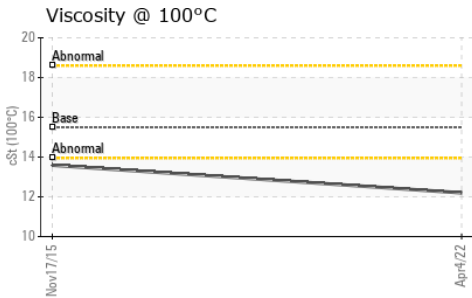
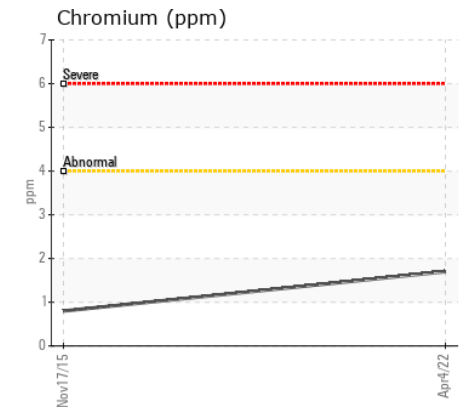
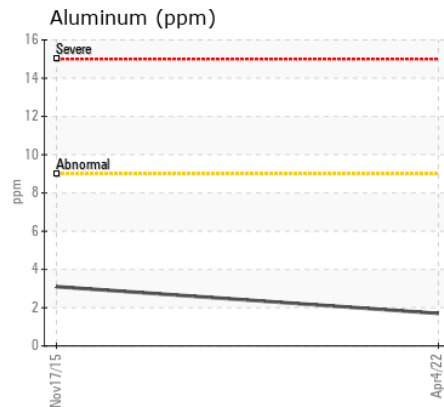
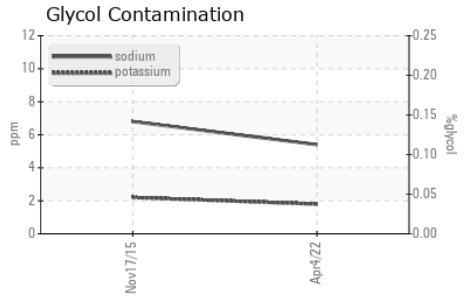
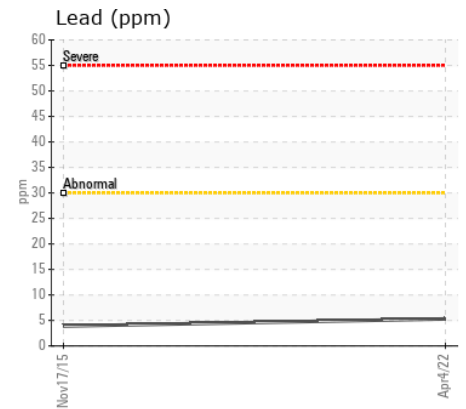
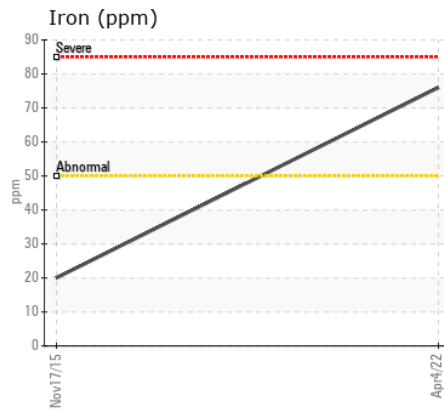
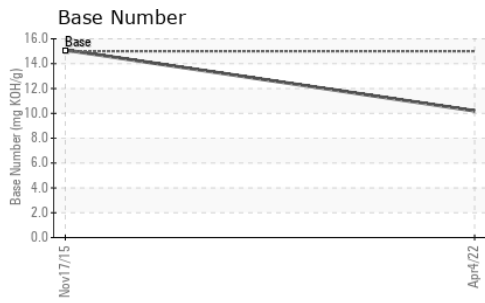
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	14	19	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Water		WC Method	>0.1	NEG	NEG	---
Soot %	%	*ASTM D7844		0.1	0	---
Nitration	Abs/cm	*ASTM D7624	>20	9.6	4.	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	11.	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		5	7	---
Boron	ppm	ASTM D5185m		2	3	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		190	190	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		825	530	---
Calcium	ppm	ASTM D5185m	4500	1719	3954	---
Phosphorus	ppm	ASTM D5185m		987	968	---
Zinc	ppm	ASTM D5185m	1400	1314	1169	---
Sulfur	ppm	ASTM D5185m		4883	7140	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	8.	---
Base Number (BN)	mg KOH/g	ASTM D2896	15	10.2	15.1	---
Visc @ 100°C	cSt	ASTM D445	15.5	12.2	13.59	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR05647350 **Received** : 21 Sep 2022  
**Lab Number** : 05647350 **Tested** : 23 Sep 2022  
**Unique Number** : 10141889 **Diagnosed** : 23 Sep 2022 - Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: Glycol )

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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