



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**CASE IH 540 QT 540 QT (S/N 00006007)**  
 Component  
**Diesel Engine**  
 Fluid  
**TRC MOLY XL PRO-SPEC IV XP 15W40 (7 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR04929867	TR04418288	---
Sample Date		Client Info		05 Mar 2020	19 Feb 2018	---
Machine Age	hrs	Client Info		2830	1814	---
Oil Age	hrs	Client Info		470	488	---
Filter Age	hrs	Client Info		470	488	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	18	13	---
Chromium	ppm	ASTM D5185m	>20	1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m	>3	<1	0	---
Silver	ppm	ASTM D5185m	>3	<1	3	---
Aluminum	ppm	ASTM D5185m	>20	3	4	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	26	118	---
Tin	ppm	ASTM D5185m	>15	1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

## CONTAMINATION

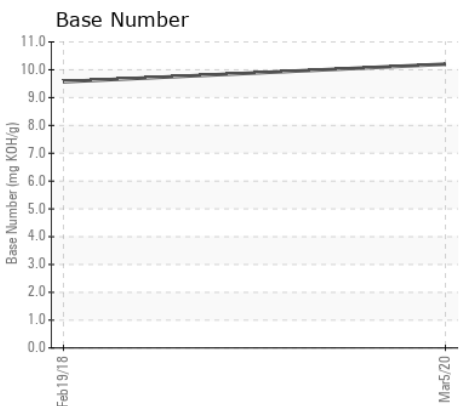
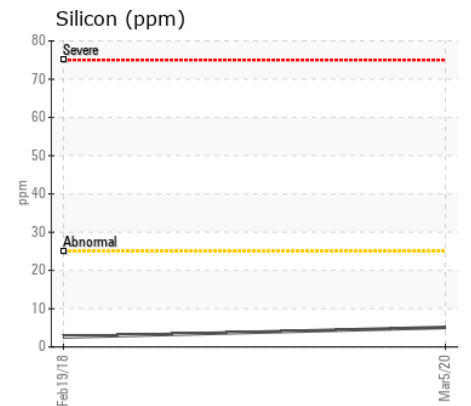
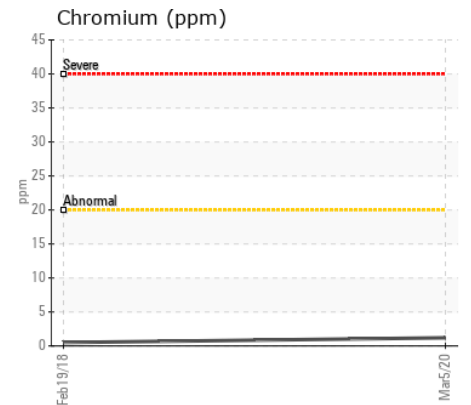
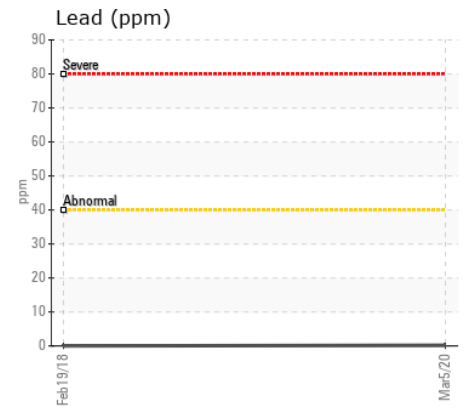
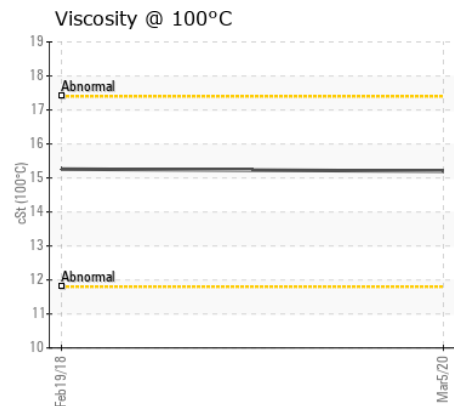
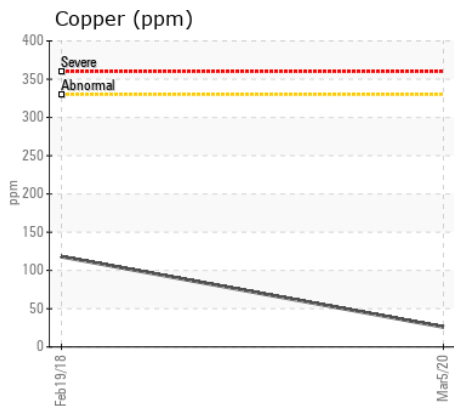
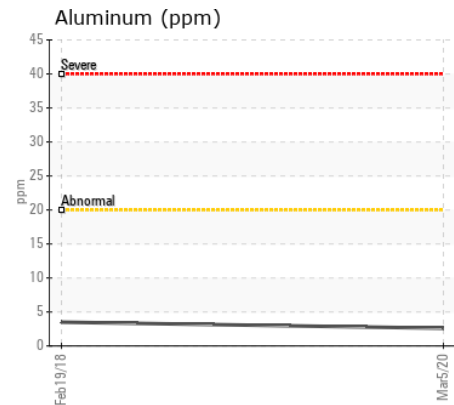
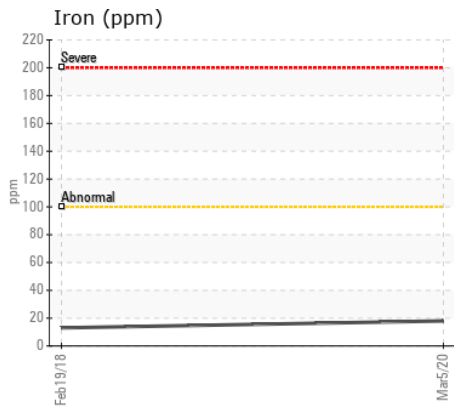
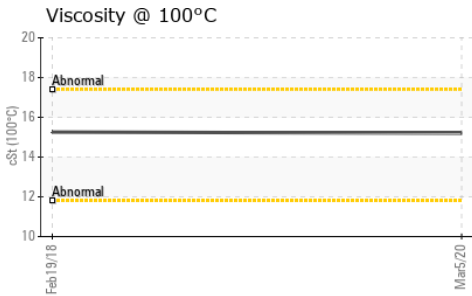
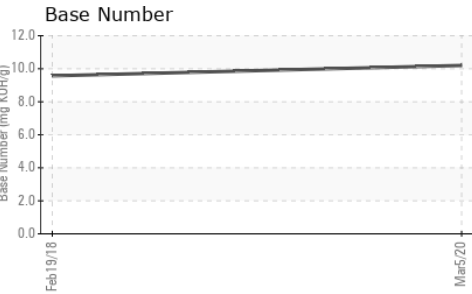
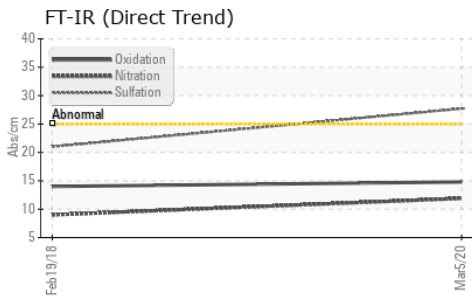
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	3	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0	---
Nitration	Abs/cm	*ASTM D7624	>20	11.9	9.	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.7	21.	---
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	>0.2	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		4	7	---
Boron	ppm	ASTM D5185m		3	<1	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		142	166	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		124	900	---
Calcium	ppm	ASTM D5185m		4280	1759	---
Phosphorus	ppm	ASTM D5185m		945	894	---
Zinc	ppm	ASTM D5185m		1098	1257	---
Sulfur	ppm	ASTM D5185m		3702	3413	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	14.	---
Base Number (BN)	mg KOH/g	ASTM D2896		10.2	9.57	---
Visc @ 100°C	cSt	ASTM D445		15.2	15.26	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR04929867  
**Lab Number** : 04929867  
**Unique Number** : 8954963  
**Test Package** : MOB 2  
**Received** : 10 Mar 2020  
**Tested** : 11 Mar 2020  
**Diagnosed** : 11 Mar 2020 - Wes Davis

**SLATER BROS FARM LLC**  
 10001 CANAL RD  
 HEBRON, OH  
 US 43025  
 Contact: LARRY HUMPHREY

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: