



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CASE IH 500 QUAD 2013
 Component
Diesel Engine
 Fluid
SCHAEFFERS 15W40 (9 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05408831	---	---
Sample Date		Client Info		23 Nov 2021	---	---
Machine Age	hrs	Client Info		7600	---	---
Oil Age	hrs	Client Info		375	---	---
Filter Age	hrs	Client Info		375	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	11	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	2	---	---
Lead	ppm	ASTM D5185m	>40	6	---	---
Copper	ppm	ASTM D5185m	>330	8	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

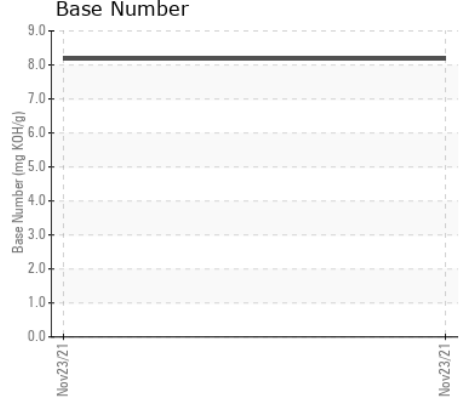
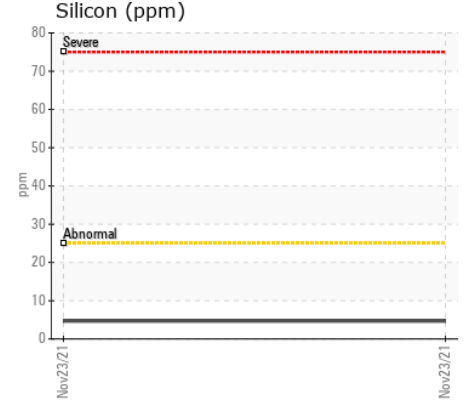
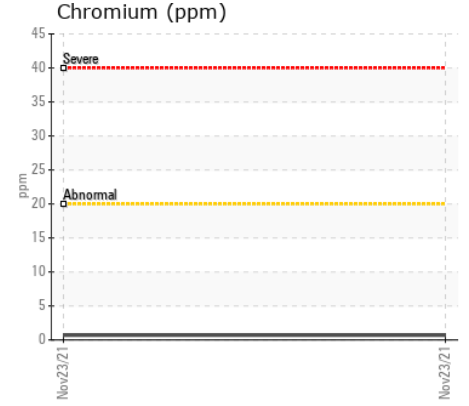
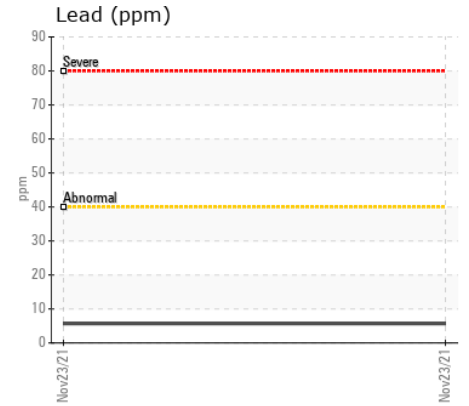
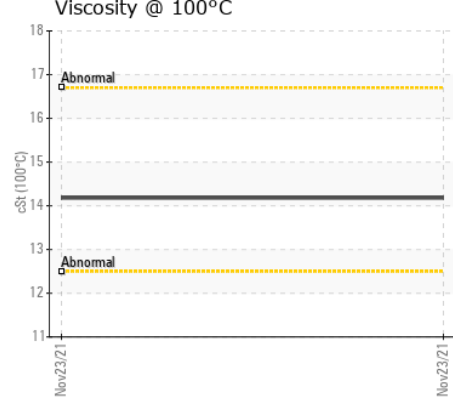
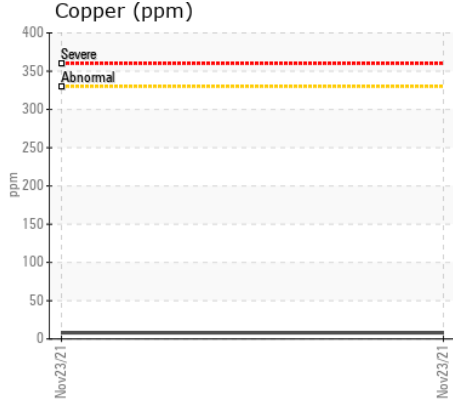
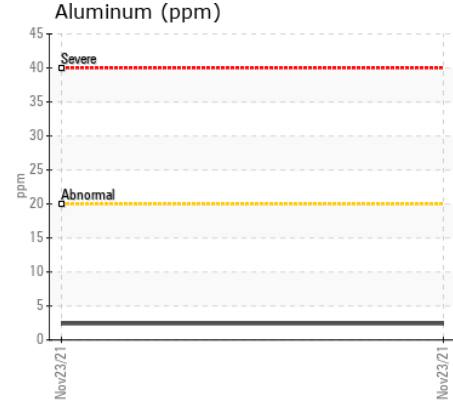
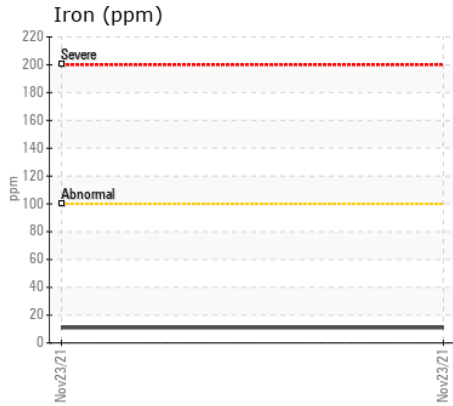
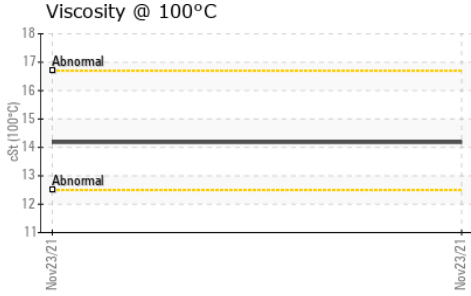
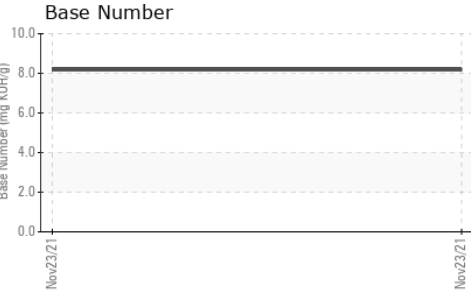
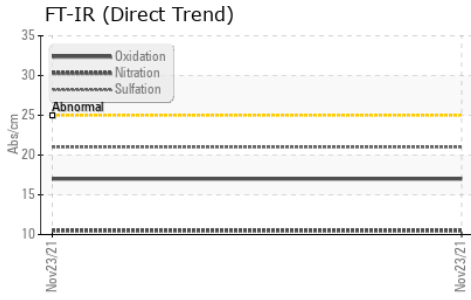
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21	---	---
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 suitable for further service.

Sodium	ppm	ASTM D5185m		5	---	---
Boron	ppm	ASTM D5185m		58	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		90	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		57	---	---
Calcium	ppm	ASTM D5185m		2859	---	---
Phosphorus	ppm	ASTM D5185m		1127	---	---
Zinc	ppm	ASTM D5185m		1248	---	---
Sulfur	ppm	ASTM D5185m		5732	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.18	---	---
Visc @ 100°C	cSt	ASTM D445		14.18	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR05408831 **Received** : 24 Nov 2021
Lab Number : 05408831 **Tested** : 26 Nov 2021
Unique Number : 9752994 **Diagnosed** : 26 Nov 2021 - Jonathan Hester
Test Package : MOB 2

WEST HILLS JV
 43667 LAKE RD E
 SPRAGUE, WA
 US 99032
 Contact: RON GROGAN

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: