TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
6 (S/N 1GD495SEY0MF100552)
Component
Diesel Engine
Fluid
TRC MOLY XL PRO-SPEC IV HD SYN 5W40 (1 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Cylinder, crank, or cam shaft wear is indicated.

CONTAMINATION

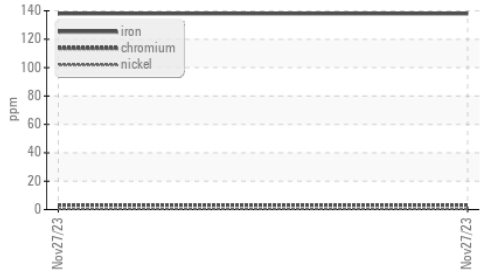
There is no indication of any contamination in the oil.

FLUID CONDITION

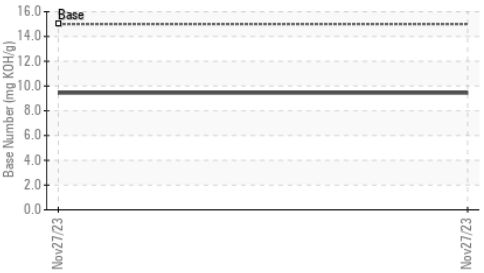
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06035400	---	---
Sample Date		Client Info		27 Nov 2023	---	---
Machine Age	hrs	Client Info		21900	---	---
Oil Age	hrs	Client Info		10900	---	---
Filter Age	hrs	Client Info		10900	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>100	▲ 138	---	---
Chromium	ppm	ASTM D5185m	>20	3	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	12	---	---
Lead	ppm	ASTM D5185m	>40	3	---	---
Copper	ppm	ASTM D5185m	>330	43	---	---
Tin	ppm	ASTM D5185m	>15	4	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	21	---	---
Potassium	ppm	ASTM D5185m	>20	39	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	1.4	---	---
Nitration	Abs/cm	*ASTM D7624	>20	21.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.3	---	---
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	---	---
Sodium	ppm	ASTM D5185m		3	---	---
Boron	ppm	ASTM D5185m		6	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		98	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		89	---	---
Calcium	ppm	ASTM D5185m	4500	3864	---	---
Phosphorus	ppm	ASTM D5185m		707	---	---
Zinc	ppm	ASTM D5185m	1200	854	---	---
Sulfur	ppm	ASTM D5185m		3478	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	15	9.44	---	---
Visc @ 100°C	cSt	ASTM D445	15	14.7	---	---

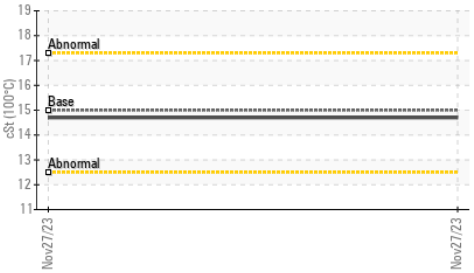
Ferrous Alloys



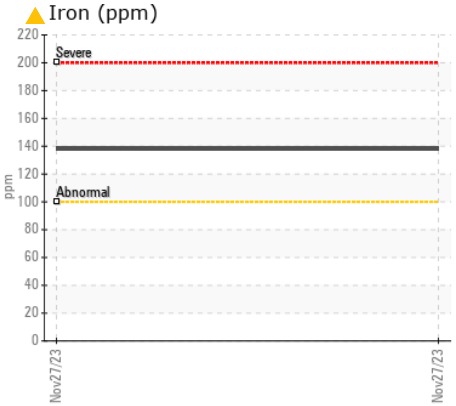
Base Number



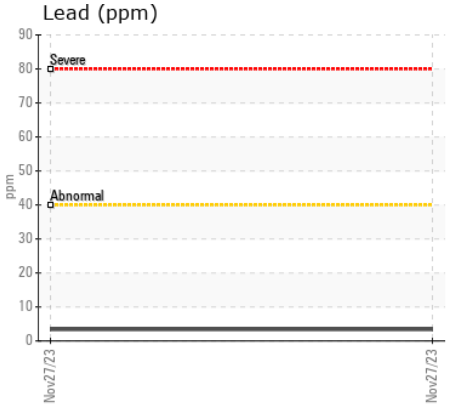
Viscosity @ 100°C



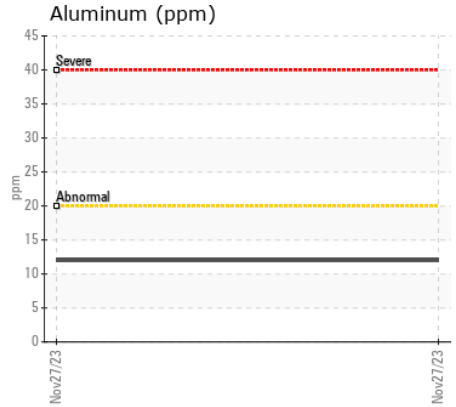
Iron (ppm)



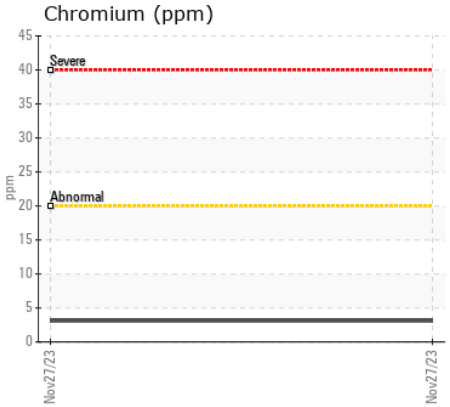
Lead (ppm)



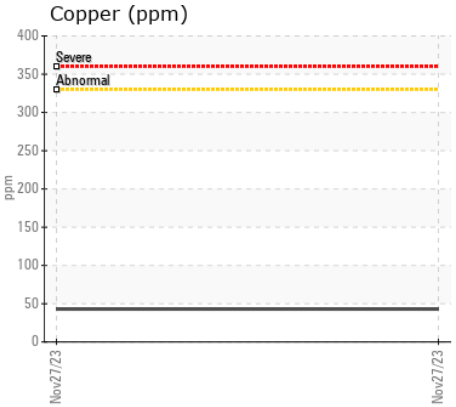
Aluminum (ppm)



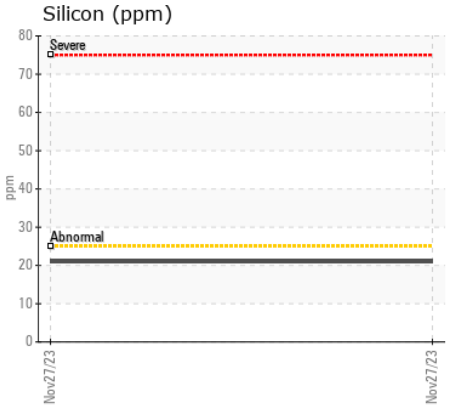
Chromium (ppm)



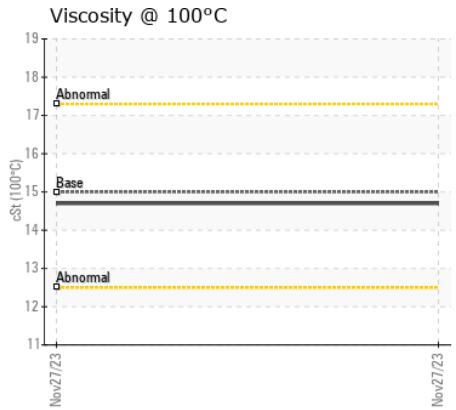
Copper (ppm)



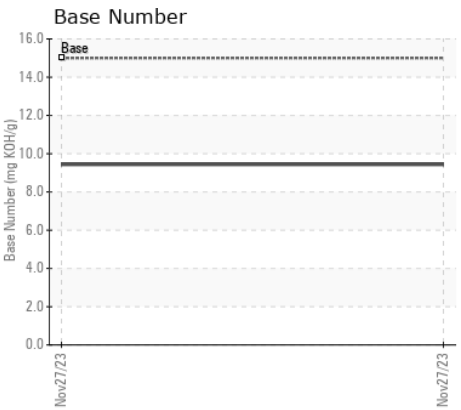
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06035400
Lab Number : 06035400
Unique Number : 10790629
Test Package : MOB 2

Received : 14 Dec 2023
Tested : 18 Dec 2023
Diagnosed : 19 Dec 2023 - Jonathan Hester

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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