TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
GMC 1GTHK23648F153126
Component
Diesel Engine
Fluid
TRC MOLY XL PRO-SPEC IV XP 15W40 (10 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

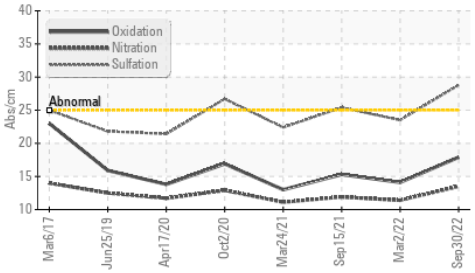
There is no indication of any contamination in the oil.

FLUID CONDITION

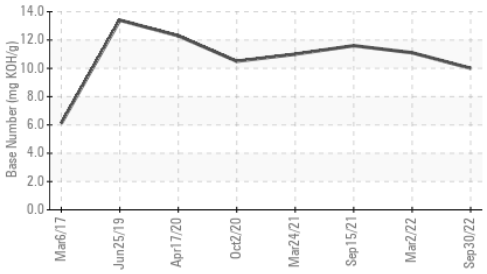
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05671127	TR05506692	TR05354944
Sample Date		Client Info		30 Sep 2022	02 Mar 2022	15 Sep 2021
Machine Age	mls	Client Info		255966	245726	237982
Oil Age	mls	Client Info		36966	26726	18982
Filter Age	mls	Client Info		10240	7744	10361
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	17	14	13
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	5	4	4
Lead	ppm	ASTM D5185m	>40	2	2	2
Copper	ppm	ASTM D5185m	>330	10	10	15
Tin	ppm	ASTM D5185m	>15	<1	2	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	13	10	12
Potassium	ppm	ASTM D5185m	>20	4	3	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	13.5	11.4	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.8	23.5	25.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		0	2	7
Boron	ppm	ASTM D5185m		2	<1	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		132	125	135
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		56	47	56
Calcium	ppm	ASTM D5185m		4446	4558	4700
Phosphorus	ppm	ASTM D5185m		914	911	964
Zinc	ppm	ASTM D5185m		1116	1051	1138
Sulfur	ppm	ASTM D5185m		5062	3667	4075
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.9	14.1	15.3
Base Number (BN)	mg KOH/g	ASTM D2896		10.0	11.1	11.6
Visc @ 100°C	cSt	ASTM D445		16.8	16.5	16.8

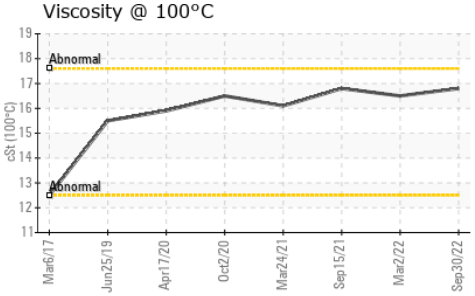
FT-IR (Direct Trend)



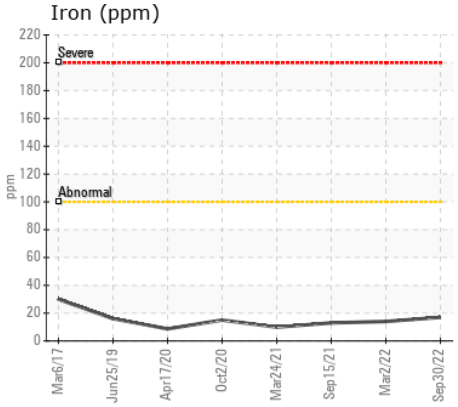
Base Number



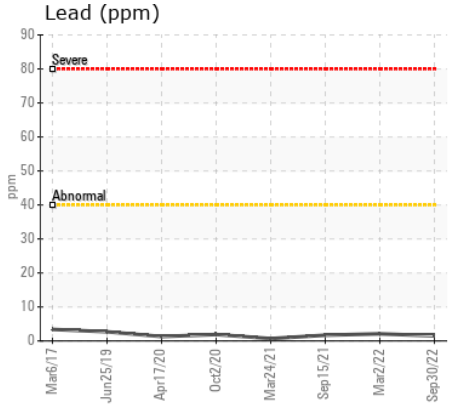
Viscosity @ 100°C



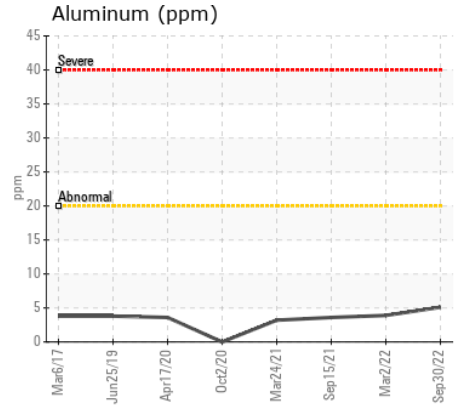
Iron (ppm)



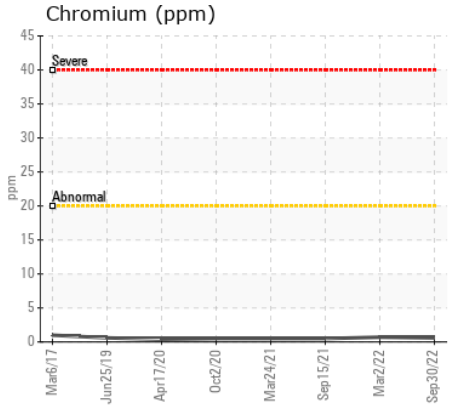
Lead (ppm)



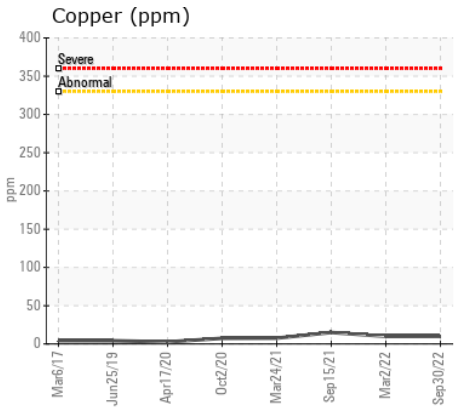
Aluminum (ppm)



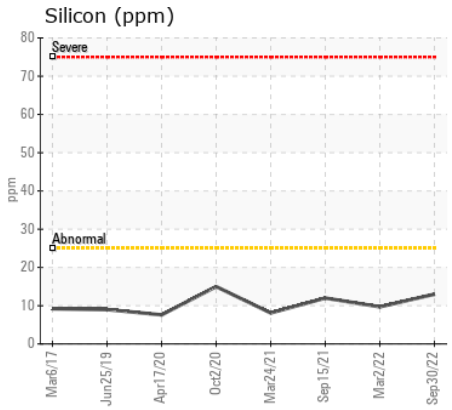
Chromium (ppm)



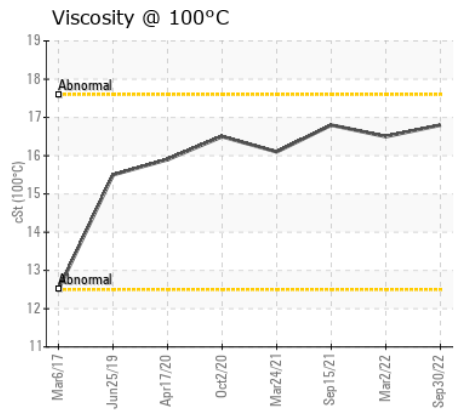
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



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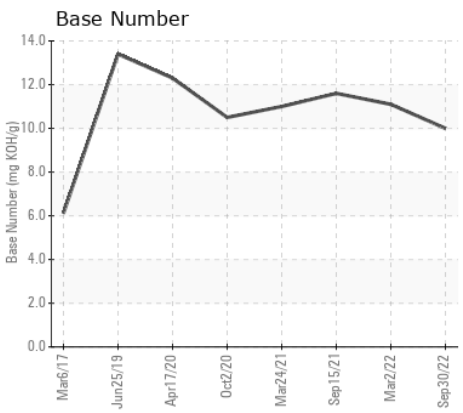

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR05671127
Lab Number : 05671127
Unique Number : 10180697
Test Package : MOB 2

Received : 19 Oct 2022
Tested : 02 Nov 2022
Diagnosed : 02 Nov 2022 - Angela Borella

HAYDEN TAYLOR
1502 FOURTH ST
JONESVILLE, LA
US 71343
Contact: HAYDEN TAYLOR

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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