MOB I WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KOHLER RAND CO COURTHOUSE
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (3 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

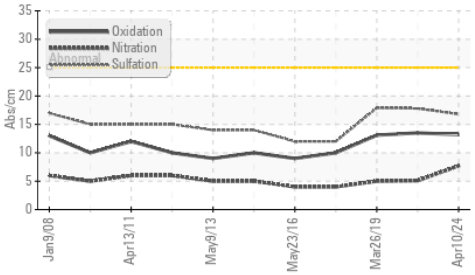
There is no indication of any contamination in the oil.

FLUID CONDITION

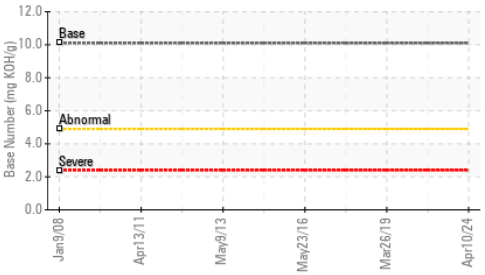
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0887893	WC0410894	WC0329399
Sample Date		Client Info		10 Apr 2024	20 Mar 2020	26 Mar 2019
Machine Age	hrs	Client Info		251	542	586
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	2	2	3
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	2	1	<1
Lead	ppm	ASTM D5185m	>26	2	<1	0
Copper	ppm	ASTM D5185m	>26	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	6	4	4
Potassium	ppm	ASTM D5185m	>20	2	<1	5
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.7	5.1	5
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.8	17.8	17.9
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	>0.21	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>31	1	1	2
Boron	ppm	ASTM D5185m	316	89	10	11
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	1.2	88	57	66
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	24	25	859	1039
Calcium	ppm	ASTM D5185m	2292	2134	1010	1222
Phosphorus	ppm	ASTM D5185m	1064	1104	970	1071
Zinc	ppm	ASTM D5185m	1160	1123	1071	1228
Sulfur	ppm	ASTM D5185m	4996	4100	3618	2792
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2	13.5	13.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	6.8	---	---
Visc @ 100°C	cSt	ASTM D445	15.7	13.9	13.8	14.00

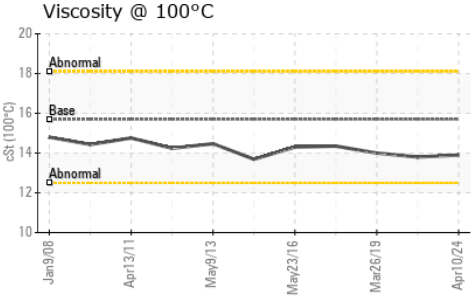
FT-IR (Direct Trend)



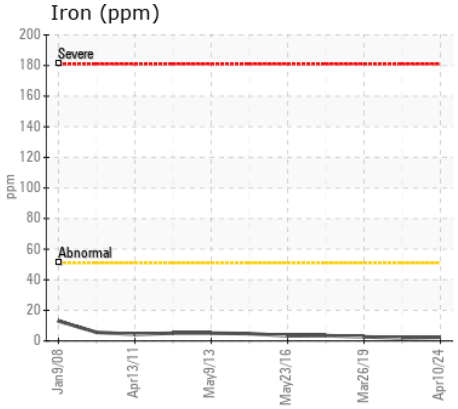
Base Number



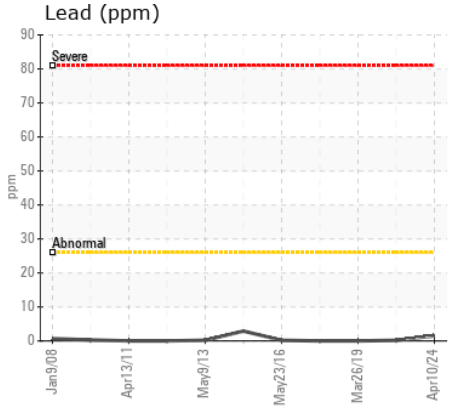
Viscosity @ 100°C



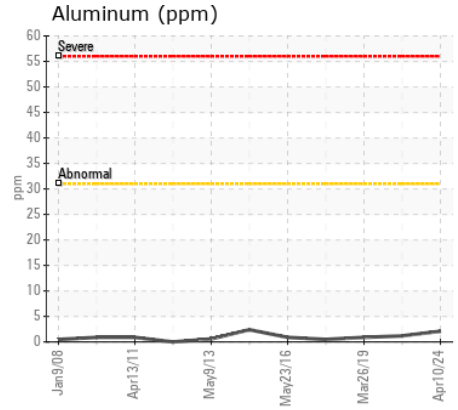
Iron (ppm)



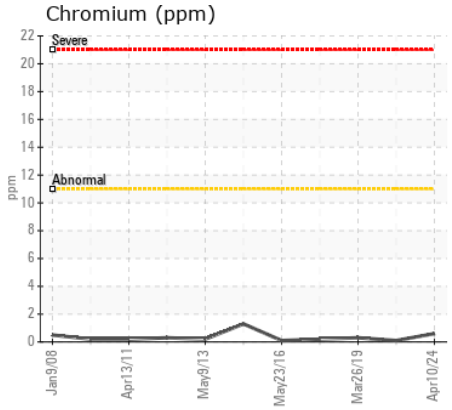
Lead (ppm)



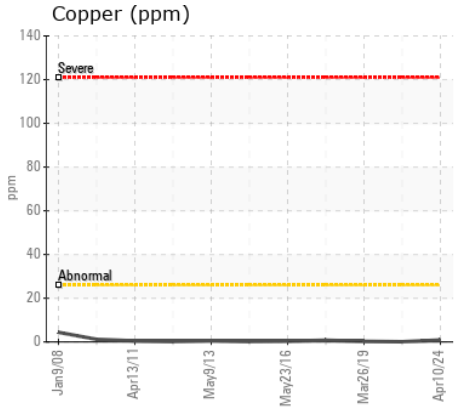
Aluminum (ppm)



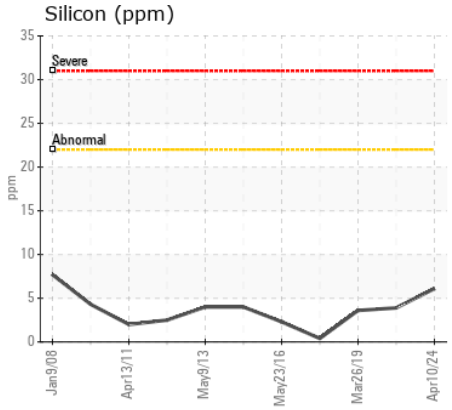
Chromium (ppm)



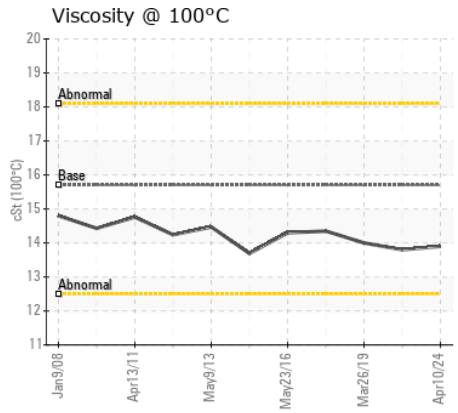
Copper (ppm)



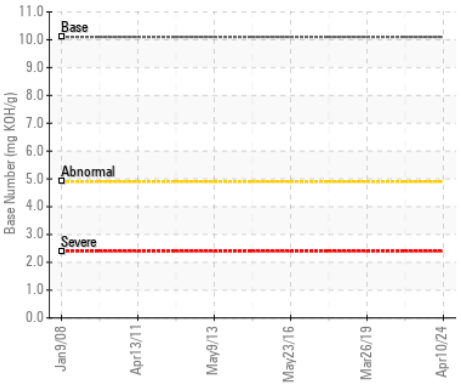
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0887893
Lab Number : 06146928
Unique Number : 10977006
Test Package : MOB 1 (Additional Tests: TBN)

Received : 12 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 15 Apr 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - 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)

PIEDMONT GENERATOR
7560 NC HWY 22 NORTH
CLIMAX, NC
US 27233
Contact: TERRY SHEPPARD
terry1pg@bellsouth.net; bill3pg@bellsouth.net
T: (336)685-4859
F: (336)685-5297