MOB I

Dura-Check Fluid Analysis

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
A-359
Component
Diesel Engine
Fluid
DURAMAX 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

WEAR

Valve wear is indicated. Piston, ring and cylinder wear is indicated.

CONTAMINATION

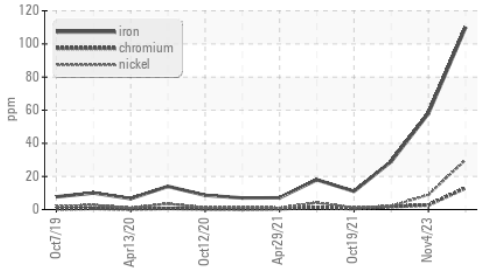
There is no indication of any contamination in the oil.

FLUID CONDITION

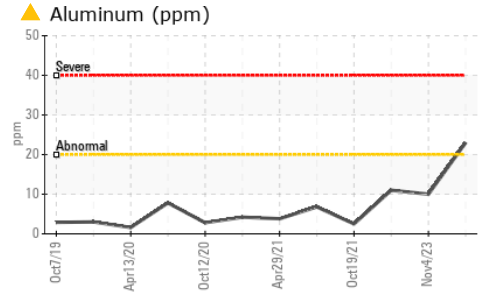
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0035302	DC0024236	DC0010401
Sample Date		Client Info		29 May 2024	04 Nov 2023	24 Jan 2022
Machine Age	hrs	Client Info		2824	27792	27050
Oil Age	hrs	Client Info		419	742	618
Filter Age	hrs	Client Info		419	742	618
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	▲ 110	58	29
Chromium	ppm	ASTM D5185m	>20	13	3	2
Nickel	ppm	ASTM D5185m	>4	▲ 30	▲ 9	2
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 23	10	11
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	2	5	4
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	13	9
Potassium	ppm	ASTM D5185m	>20	3	8	8
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	*ASTM D7844	>3	0.7	1.7	2
Nitration	Abs/cm	*ASTM D7624	>20	7.6	11.7	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.3	24.0	26.9
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	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		13	90	121
Boron	ppm	ASTM D5185m		4	2	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		4	11	15
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		51	69	90
Calcium	ppm	ASTM D5185m		2261	2326	2604
Phosphorus	ppm	ASTM D5185m		832	954	1032
Zinc	ppm	ASTM D5185m		1111	1100	1059
Sulfur	ppm	ASTM D5185m		3727	4548	3167
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.8	13.4	15.7
Base Number (BN)	mg KOH/g	ASTM D2896		7.9	8.17	9.0
Visc @ 100°C	cSt	ASTM D445		13.8	13.6	14.1

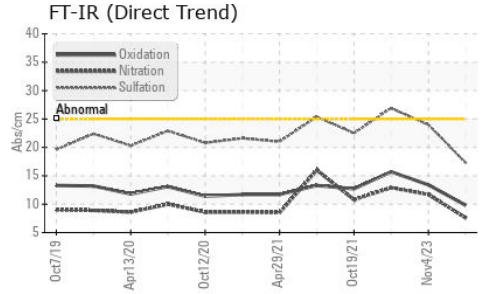
Ferrous Alloys



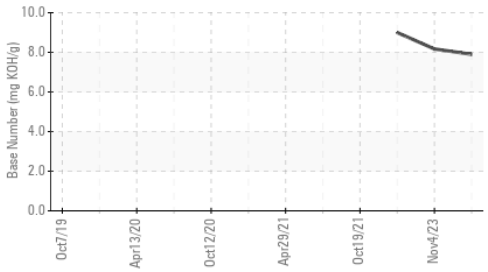
Aluminum (ppm)



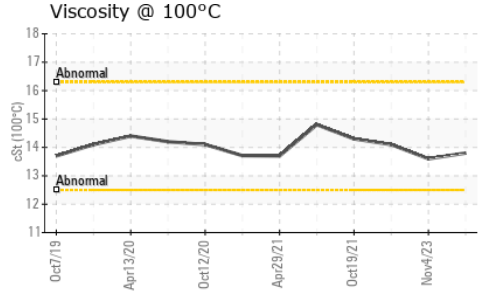
FT-IR (Direct Trend)



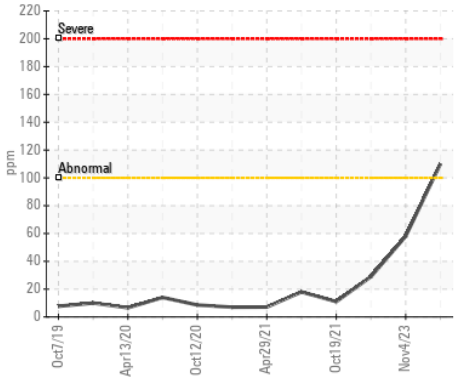
Base Number



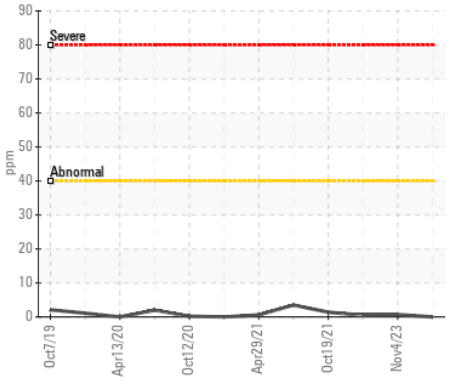
Viscosity @ 100°C



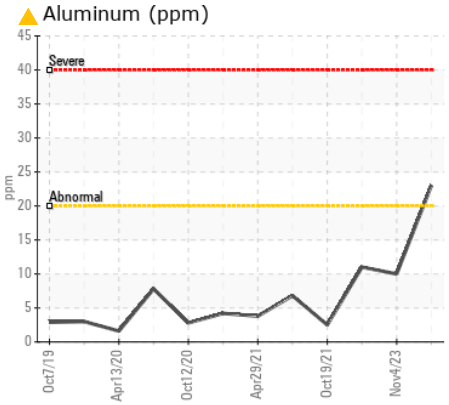
Iron (ppm)



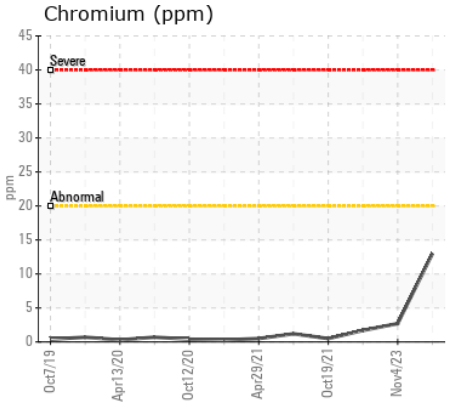
Lead (ppm)



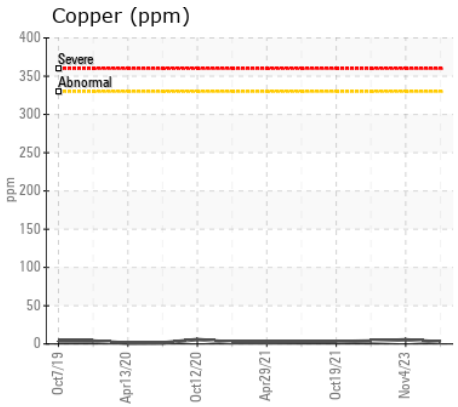
Aluminum (ppm)



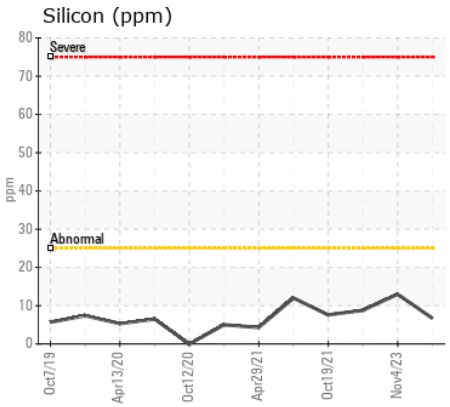
Chromium (ppm)



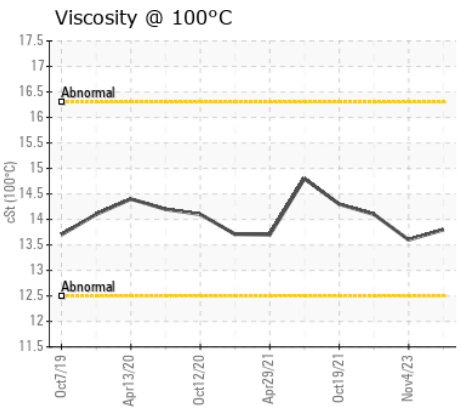
Copper (ppm)



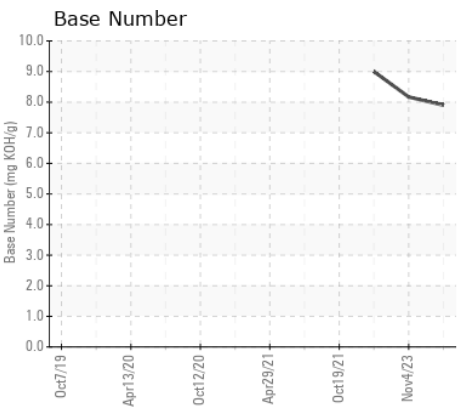
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0035302
Lab Number : 06221042
Unique Number : 11099239
Test Package : MOB 1 (Additional Tests: TBN)

Received : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Don Baldridge

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)

THOMAS BENNETT & HUNTER INC
70 JOHN ST
WESTMINSTER, MD
US 21157
Contact: JOE STEPHAN
jstephan@tbhconcrete.com
T: (410)848-9030
F: (410)848-9032