



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
MACK MR688S 101
Component
Diesel Engine
Fluid
DURALENE Dura-Max 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0032403	DC0027406	DC0013703
Sample Date		Client Info		21 Feb 2024	31 Jul 2023	10 Aug 2021
Machine Age	hrs	Client Info		0	403	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	27	19	27
Chromium	ppm	ASTM D5185m	>20	2	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	1	0
Lead	ppm	ASTM D5185m	>40	2	<1	2
Copper	ppm	ASTM D5185m	>330	5	6	6
Tin	ppm	ASTM D5185m	>15	1	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

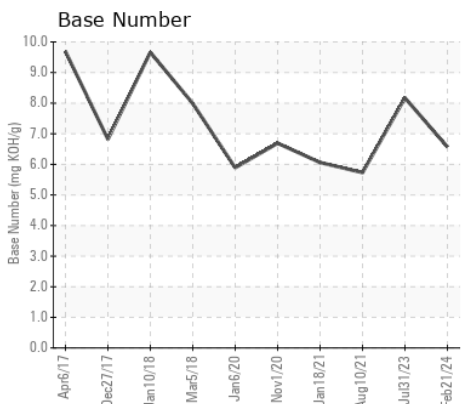
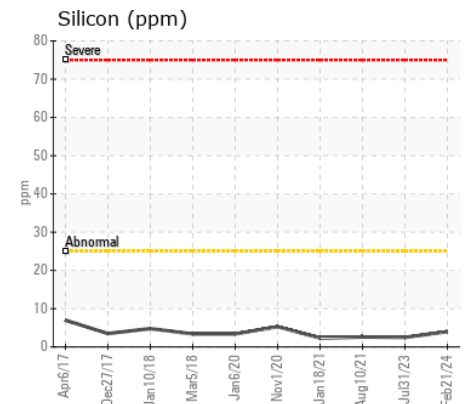
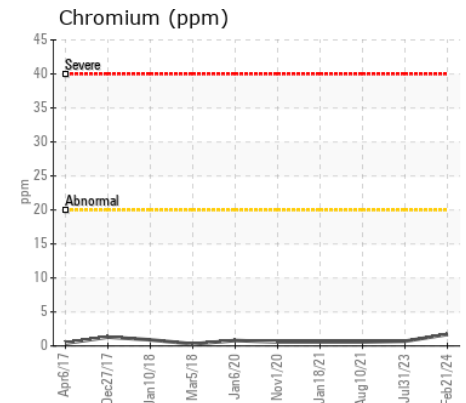
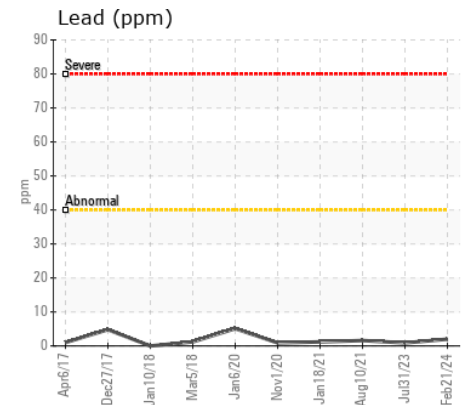
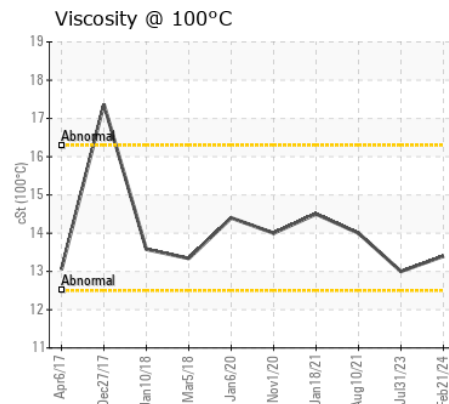
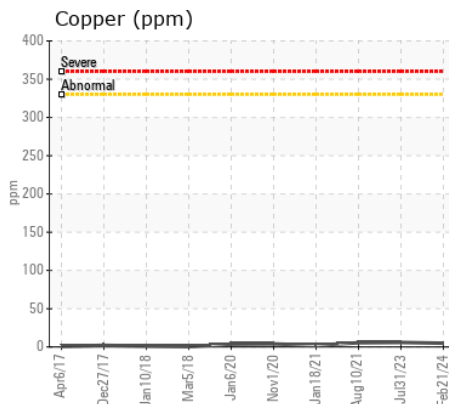
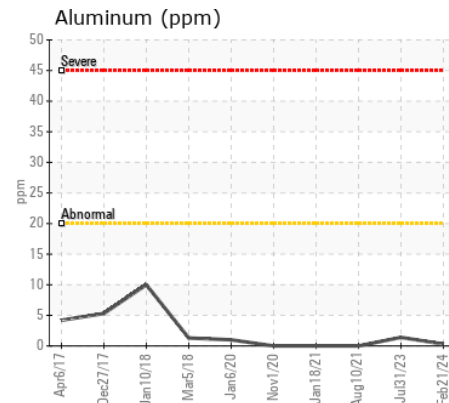
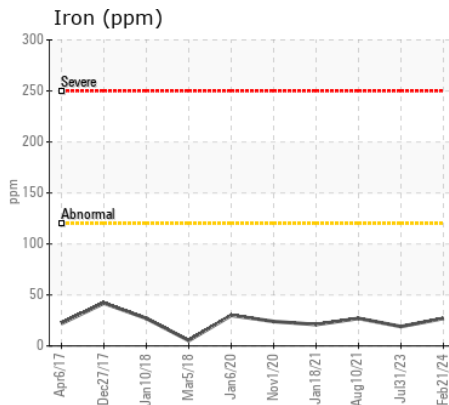
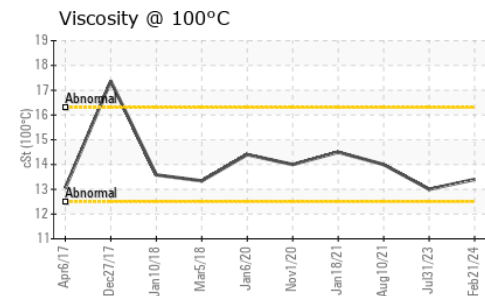
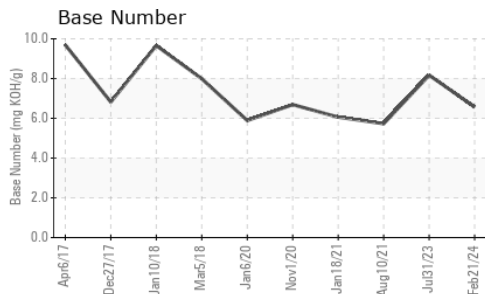
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	2	3
Potassium	ppm	ASTM D5185m	>20	2	2	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	3.5	2.1	▲ 4.5
Nitration	Abs/cm	*ASTM D7624	>20	10.0	8.5	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.8	20.3	27.4
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

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		0	0	2
Boron	ppm	ASTM D5185m		3	2	6
Barium	ppm	ASTM D5185m		5	0	0
Molybdenum	ppm	ASTM D5185m		5	3	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		52	37	48
Calcium	ppm	ASTM D5185m		2008	2308	2357
Phosphorus	ppm	ASTM D5185m		788	850	877
Zinc	ppm	ASTM D5185m		941	1038	1028
Sulfur	ppm	ASTM D5185m		3460	3844	3094
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.9	10.1	12.5
Base Number (BN)	mg KOH/g	ASTM D2896		6.57	8.17	5.73
Visc @ 100°C	cSt	ASTM D445		13.4	13.0	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : DC0032403
 Lab Number : 06097912
 Unique Number : 10896142
 Test Package : MOB 2

Received : 22 Feb 2024
 Tested : 23 Feb 2024
 Diagnosed : 23 Feb 2024 - Wes Davis

BLANCHET CONCRETE PUMPING
 9585 LYNN BUFF CT
 LAUREL, MD
 US 20723
 Contact: ED BAILEY
 EBAILEY@PUMPCONCRETE.COM
 T: (301)708-1159
 F: (301)206-4470

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)