



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
MACK MR688S 145
Component
Diesel Engine
Fluid
UNITED OIL DURALENE (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0027589	DC0023709	DC0023641
Sample Date		Client Info		07 Sep 2023	09 Mar 2023	14 Nov 2022
Machine Age	hrs	Client Info		6367	4687	4687
Oil Age	hrs	Client Info		430	700	700
Filter Age	hrs	Client Info		430	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	MARGINAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	4	13	15
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	1	0
Titanium	ppm	ASTM D5185m	>2	1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	5	2
Lead	ppm	ASTM D5185m	>40	<1	2	<1
Copper	ppm	ASTM D5185m	>330	<1	1	1
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

CONTAMINATION

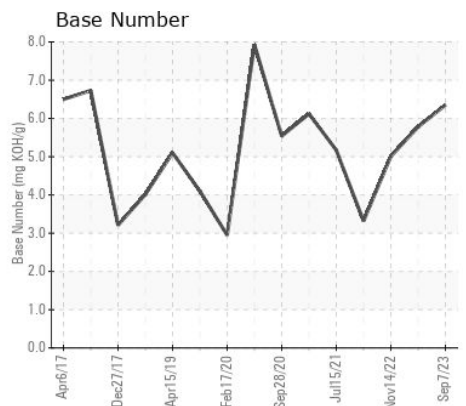
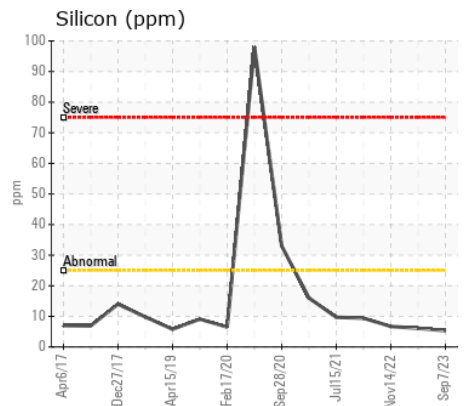
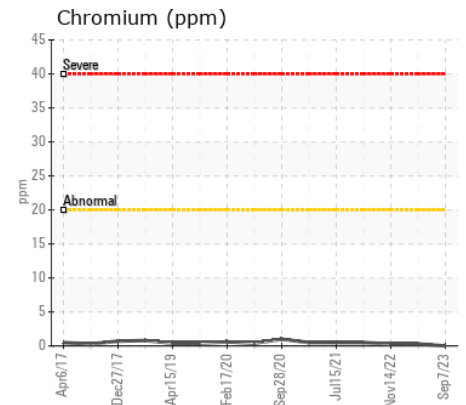
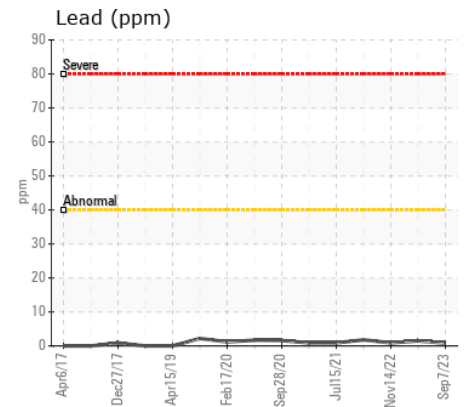
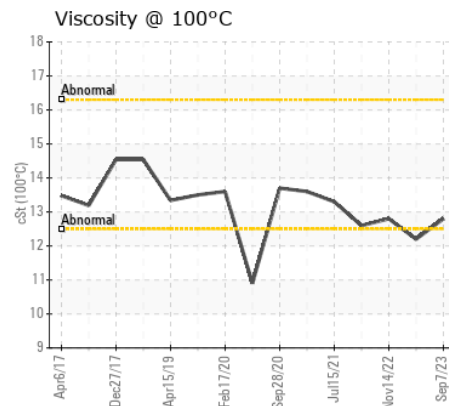
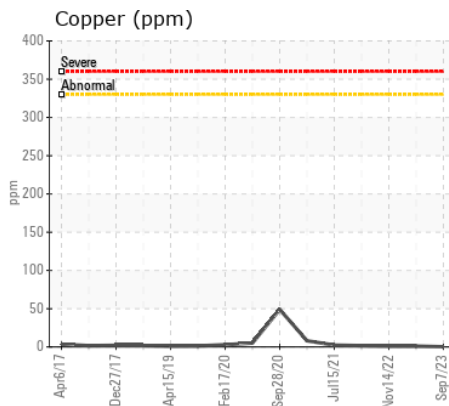
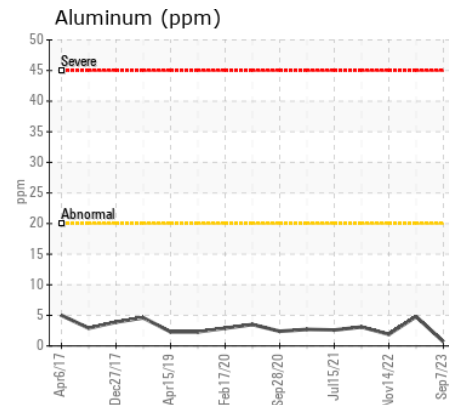
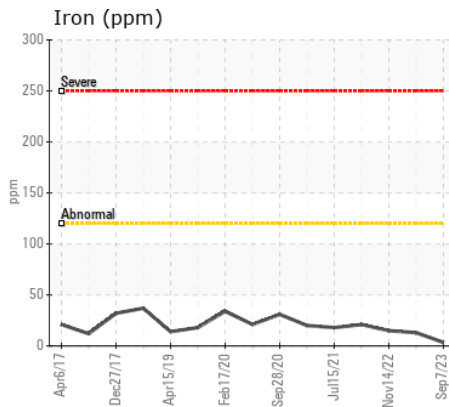
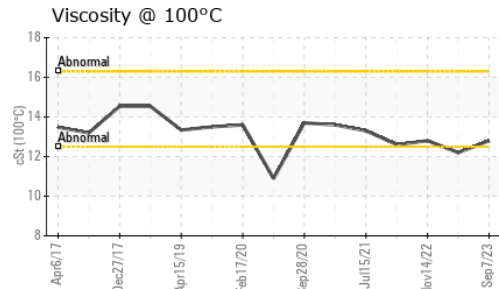
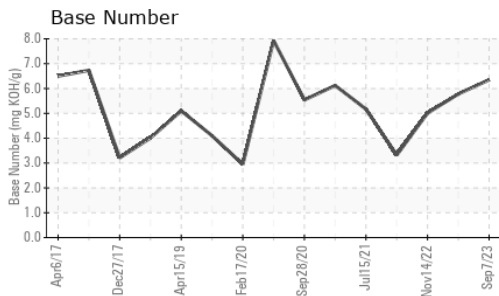
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	6	7
Potassium	ppm	ASTM D5185m	>20	2	10	1
Fuel		WC Method	>3.0	<1.0	▲ 3.4	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.2	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.1	9.2	10
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	23.3	25.6
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		4	1	4
Boron	ppm	ASTM D5185m		2	4	6
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	4	3
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		46	51	41
Calcium	ppm	ASTM D5185m		2066	2415	2402
Phosphorus	ppm	ASTM D5185m		771	868	858
Zinc	ppm	ASTM D5185m		1066	1083	1039
Sulfur	ppm	ASTM D5185m		3334	3658	4163
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	14.4	16.3
Base Number (BN)	mg KOH/g	ASTM D2896		6.35	5.78	5.01
Visc @ 100°C	cSt	ASTM D445		12.8	▲ 12.2	12.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0027589 **Received** : 11 Jan 2024
Lab Number : 06058311 **Diagnosed** : 12 Jan 2024
Unique Number : 10829693 **Diagnostician** : Sean Felton
Test Package : MOB 2

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)

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