



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
MACK V98
Component
Rear Differential
Fluid
GEAR OIL SAE 80W140 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0219607	JR0203829	JR0178374
Sample Date		Client Info		26 Jun 2024	28 Feb 2024	20 Sep 2023
Machine Age	mls	Client Info		17006	16606	16043
Oil Age	mls	Client Info		400	4165	3602
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>1100	108	190	171
Iron	ppm	ASTM D5185m	>1200	104	255	281
Chromium	ppm	ASTM D5185m	>8	0	2	2
Nickel	ppm	ASTM D5185m	>20	4	12	14
Titanium	ppm	ASTM D5185m	>4	<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>30	5	13	14
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>50	0	0	<1
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Moderate concentration of visible dirt/debris present in the oil.

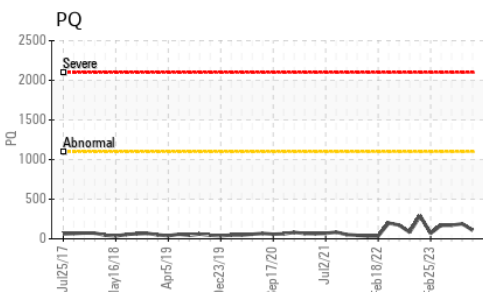
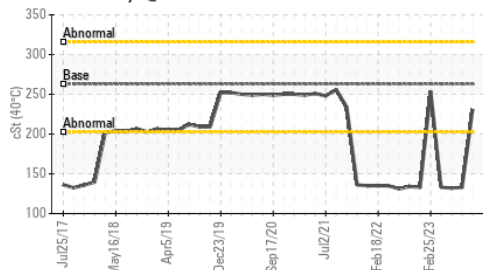
Silicon	ppm	ASTM D5185m	>230	24	48	51
Potassium	ppm	ASTM D5185m	>20	4	4	4
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	LIGHT
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

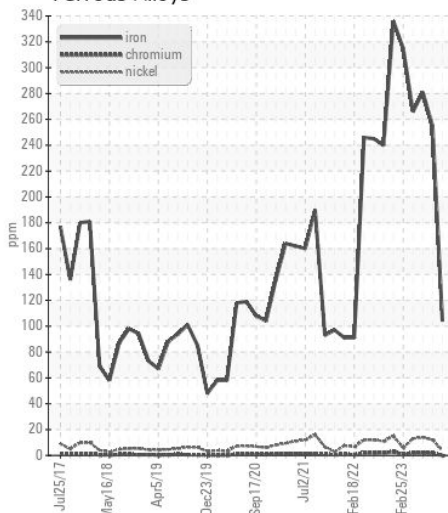
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	4	3
Boron	ppm	ASTM D5185m	400	264	260	331
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	0	0	0
Manganese	ppm	ASTM D5185m		2	4	4
Magnesium	ppm	ASTM D5185m	12	4	4	2
Calcium	ppm	ASTM D5185m	150	11	8	4
Phosphorus	ppm	ASTM D5185m	1650	1164	1224	1234
Zinc	ppm	ASTM D5185m	125	6	3	4
Sulfur	ppm	ASTM D5185m	22500	24209	20289	25437
Visc @ 40°C	cSt	ASTM D445	263	231	133	132

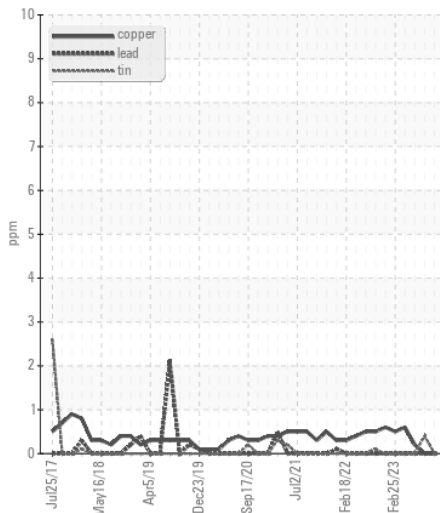
Viscosity @ 40°C



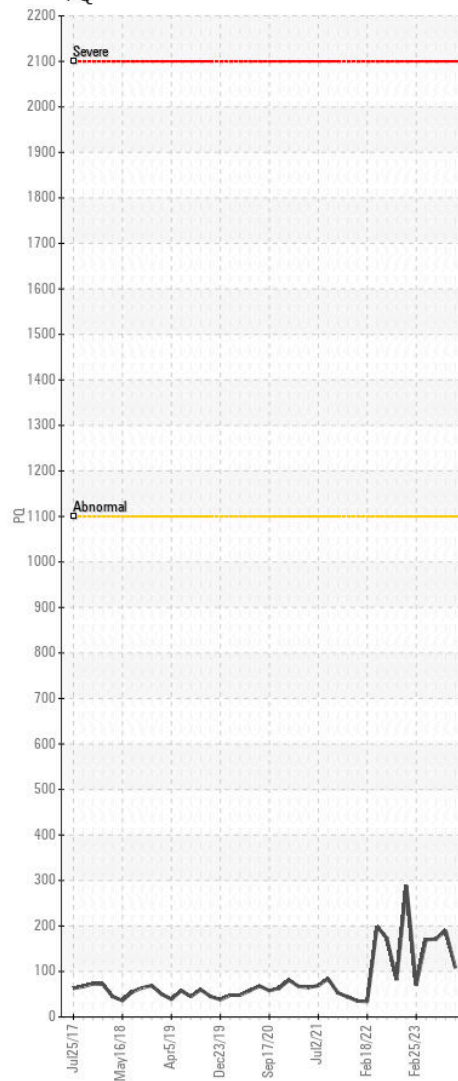
Ferrous Alloys



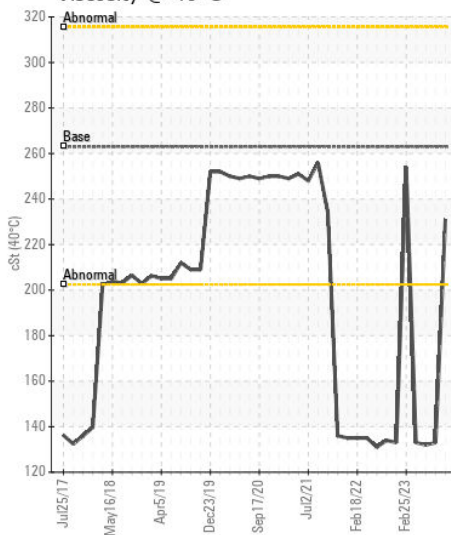
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : JR0219607
 Lab Number : 06227778
 Unique Number : 11111271
 Test Package : CONST (Additional Tests: PQ)

MATTHEWS CONSTRUCTION
 127 GRAYSON RD
 ROCK HILL, SC
 US 29732
 Contact: Tad Clinton
 tclinton@matthewsconstructionco.com
 T: (803)207-5607
 F:

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)