



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
MACK GRANITE V108
Component
Rear Differential
Fluid
GEAR OIL SAE 80W140 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0206224	JR0206210	JR0189082
Sample Date		Client Info		27 Jun 2024	11 Apr 2024	12 Dec 2023
Machine Age	hrs	Client Info		10130	9761	9498
Oil Age	hrs	Client Info		2824	2455	2192
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>1100	65	73	82
Iron	ppm	ASTM D5185m	>1200	144	143	152
Chromium	ppm	ASTM D5185m	>8	<1	<1	2
Nickel	ppm	ASTM D5185m	>20	4	4	5
Titanium	ppm	ASTM D5185m	>4	<1	<1	2
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>30	16	19	19
Lead	ppm	ASTM D5185m	>25	0	0	<1
Copper	ppm	ASTM D5185m	>50	<1	0	2
Tin	ppm	ASTM D5185m	>5	0	0	1
Vanadium	ppm	ASTM D5185m		0	0	<1
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.

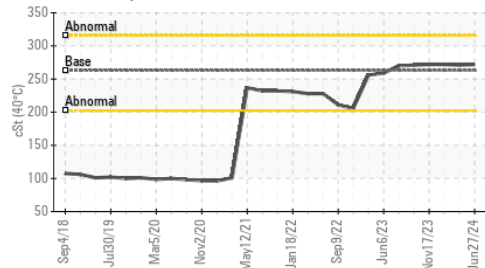
Silicon	ppm	ASTM D5185m	>230	74	78	83
Potassium	ppm	ASTM D5185m	>20	3	4	4
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

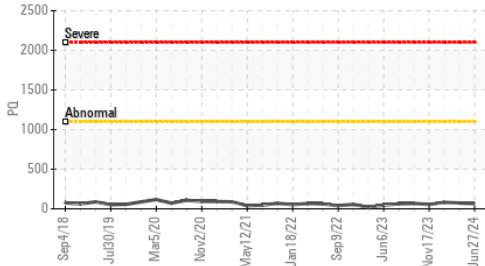
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<1	1	2
Boron	ppm	ASTM D5185m	400	256	266	262
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	0	0	1
Manganese	ppm	ASTM D5185m		1	<1	3
Magnesium	ppm	ASTM D5185m	12	3	5	7
Calcium	ppm	ASTM D5185m	150	83	16	21
Phosphorus	ppm	ASTM D5185m	1650	1102	1130	1082
Zinc	ppm	ASTM D5185m	125	34	4	0
Sulfur	ppm	ASTM D5185m	22500	17713	19814	20117
Visc @ 40°C	cSt	ASTM D445	263	272	271	272

Viscosity @ 40°C



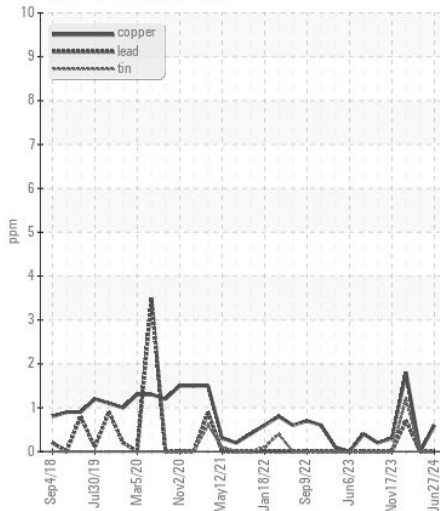
PQ



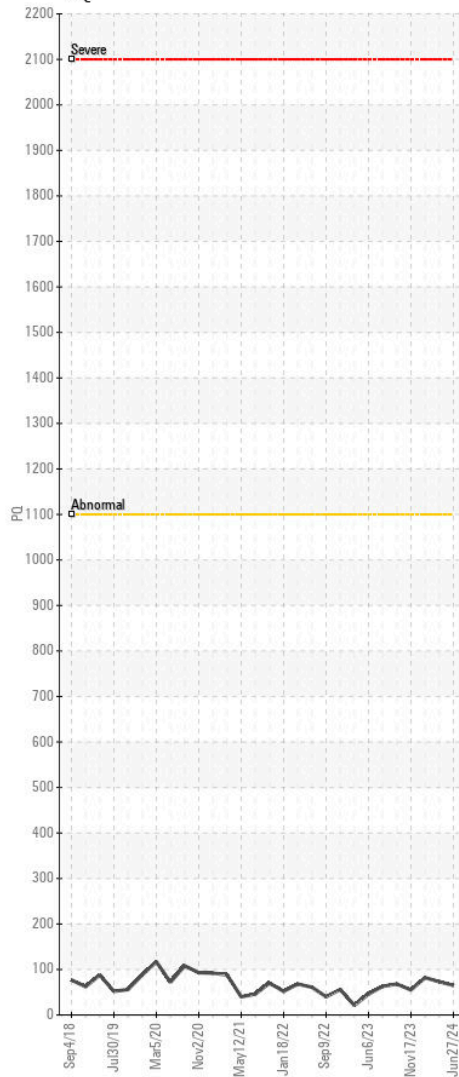
Ferrous Alloys



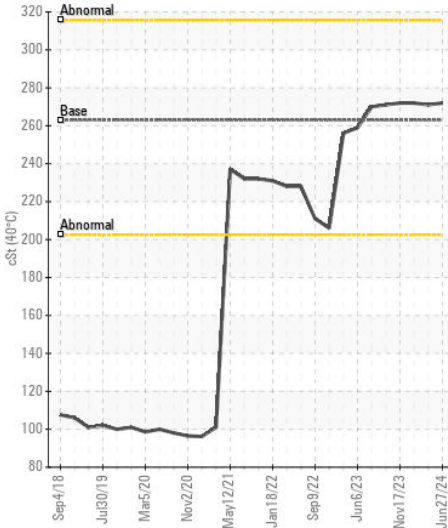
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : JR0206224
 Lab Number : 06226563
 Unique Number : 11110056
 Test Package : CONST (Additional Tests: PQ)
 Received : 02 Jul 2024
 Tested : 03 Jul 2024
 Diagnosed : 03 Jul 2024 - Wes Davis

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