



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
V110
 Component
Rear Differential
 Fluid
GEAR OIL SAE 80W140 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0193339	JR0178292	JR0144729
Sample Date		Client Info		03 Jan 2024	13 Sep 2023	22 Aug 2023
Machine Age	mls	Client Info		71805	65810	64454
Oil Age	mls	Client Info		10934	25698	3583
Filter Age	mls	Client Info		10934	0	0
Oil Changed		Client Info		Not Changed	Not Changed	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

Gear wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		1237	241	577
Iron	ppm	ASTM D5185m	>500	▲ 1186	439	▲ 729
Chromium	ppm	ASTM D5185m	>10	3	2	3
Nickel	ppm	ASTM D5185m	>10	14	13	14
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	5	2	▲ 8
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>100	2	<1	1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

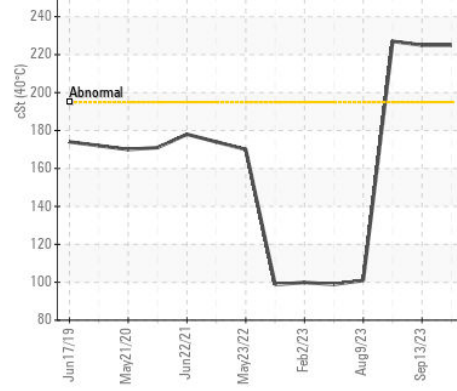
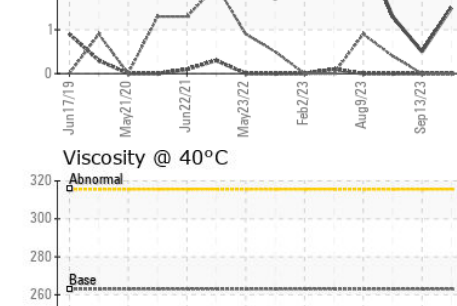
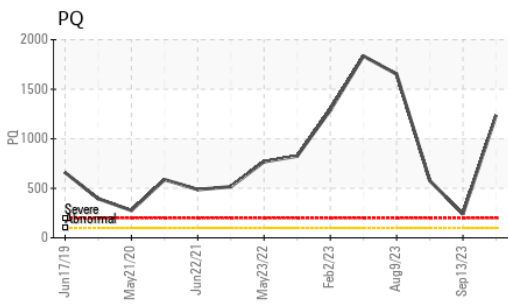
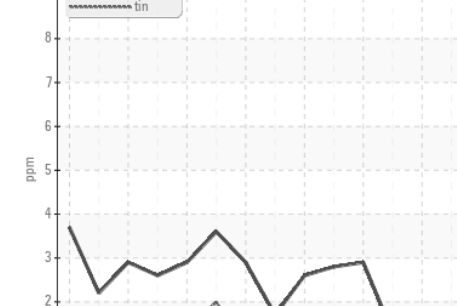
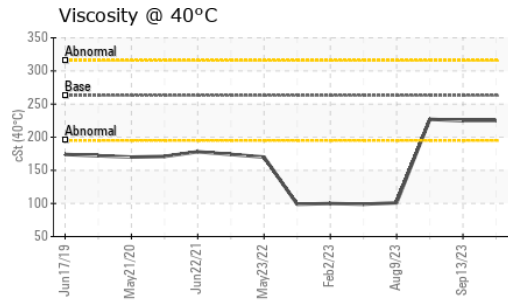
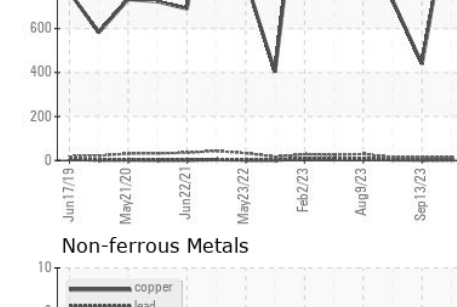
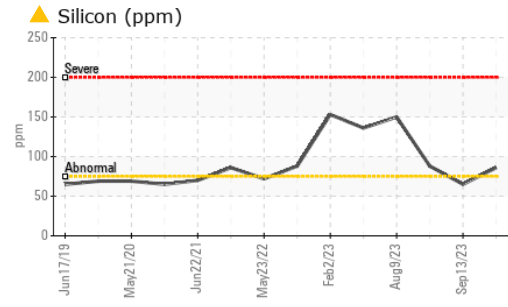
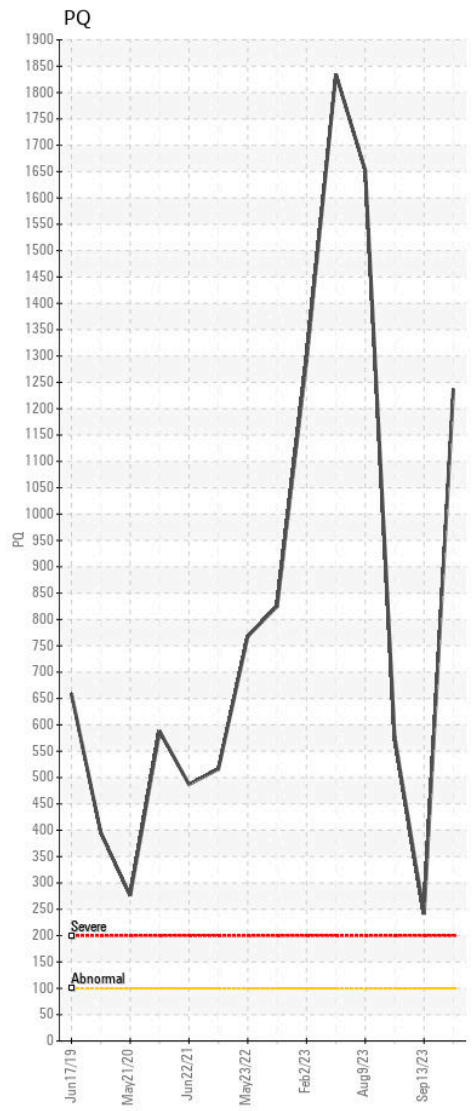
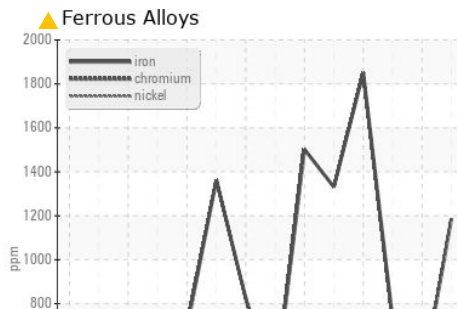
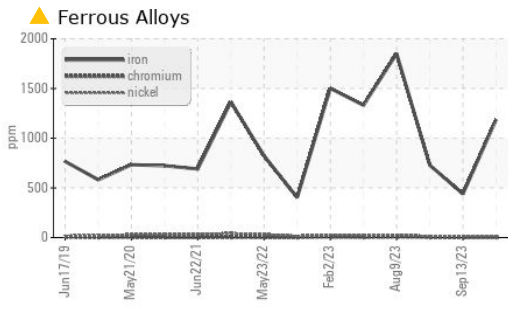
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>75	▲ 86	65	▲ 88
Potassium	ppm	ASTM D5185m	>20	6	5	4
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	MODER	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		5	4	5
Boron	ppm	ASTM D5185m	400	183	222	228
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	0	1	1
Manganese	ppm	ASTM D5185m		12	6	9
Magnesium	ppm	ASTM D5185m	12	0	2	4
Calcium	ppm	ASTM D5185m	150	28	28	63
Phosphorus	ppm	ASTM D5185m	1650	1177	1119	1113
Zinc	ppm	ASTM D5185m	125	8	17	26
Sulfur	ppm	ASTM D5185m	22500	20502	22660	21731
Visc @ 40°C	cSt	ASTM D445	263	225	225	227



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0193339 **Received** : 08 Jan 2024
Lab Number : 06054230 **Diagnosed** : 09 Jan 2024
Unique Number : 10820179 **Diagnostician** : Sean Felton
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)