



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HYDREMA 40103
Component
Rear Differential
Fluid
CHEVRON DELO GEAR ESI OIL 80W90 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0882743	WC0733399	WC0563755
Sample Date		Client Info		01 May 2024	21 Oct 2022	27 May 2021
Machine Age	hrs	Client Info		4363	3804	2710
Oil Age	hrs	Client Info		1500	1000	2710
Filter Age	hrs	Client Info		1500	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	216	269	285
Chromium	ppm	ASTM D5185m	>10	1	2	2
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	<1	1
Lead	ppm	ASTM D5185m	>25	3	4	3
Copper	ppm	ASTM D5185m	>100	33	27	23
Tin	ppm	ASTM D5185m	>10	3	3	3
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

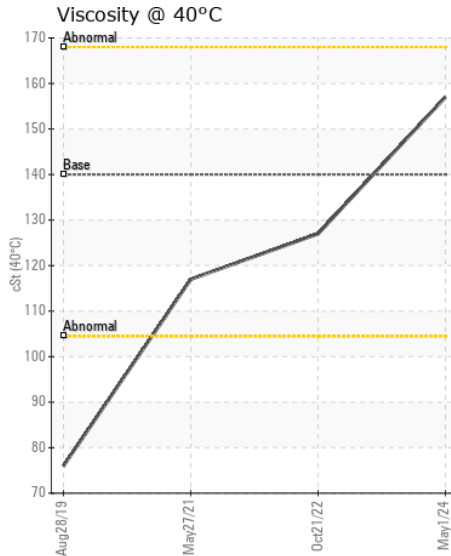
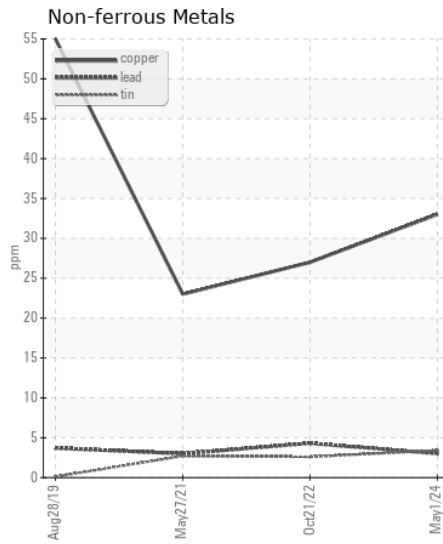
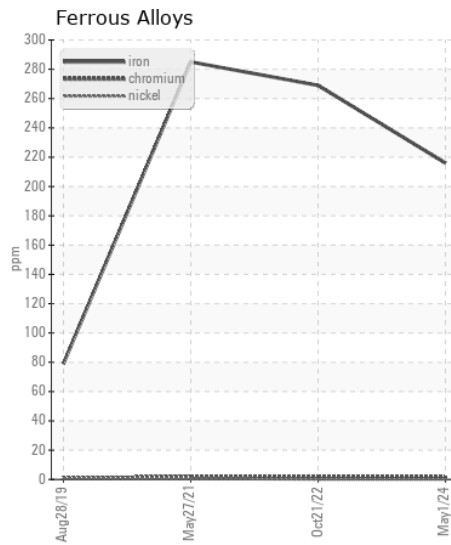
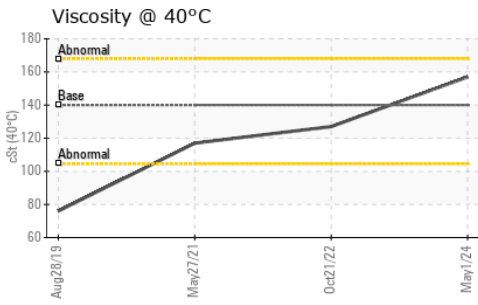
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	6	3	8
Potassium	ppm	ASTM D5185m	>20	0	0	2
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	LIGHT	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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	<1	4
Boron	ppm	ASTM D5185m	15	33	165	114
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	4	3
Manganese	ppm	ASTM D5185m		4	4	8
Magnesium	ppm	ASTM D5185m	0	4	9	16
Calcium	ppm	ASTM D5185m	5	25	63	143
Phosphorus	ppm	ASTM D5185m	600	1347	1518	1764
Zinc	ppm	ASTM D5185m	0	0	48	164
Sulfur	ppm	ASTM D5185m	22000	23588	22651	16174
Visc @ 40°C	cSt	ASTM D445	140	157	127	117



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0882743
Lab Number : 06177546
Unique Number : 11023599
Test Package : CONST

Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 15 May 2024 - Don Baldrige

SULLIVAN EASTERN INC
 2860 C SLATER RD
 MORRISVILLE, NC
 US 27560

Contact: SCOTT SULLIVAN
 ssullivan@sullivan-eastern.com

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)

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