



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**HYDREMA 40103**  
Component  
**Front Left Planetary**  
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		<b>WC0882742</b>	WC0563749	WC0370589
Sample Date		Client Info		<b>01 May 2024</b>	27 May 2021	28 Aug 2019
Machine Age	hrs	Client Info		<b>4363</b>	2710	1366
Oil Age	hrs	Client Info		<b>1500</b>	1000	1366
Filter Age	hrs	Client Info		<b>1500</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>152</b>	▲ 897	530
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	▲ 13	8
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	2	1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	3	<1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>75	<b>0</b>	2	3
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>MODER</b>	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

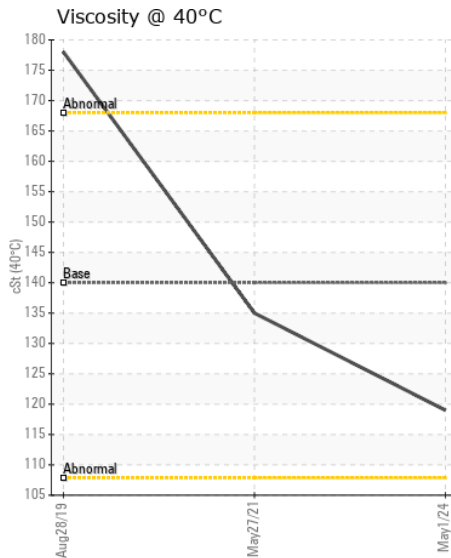
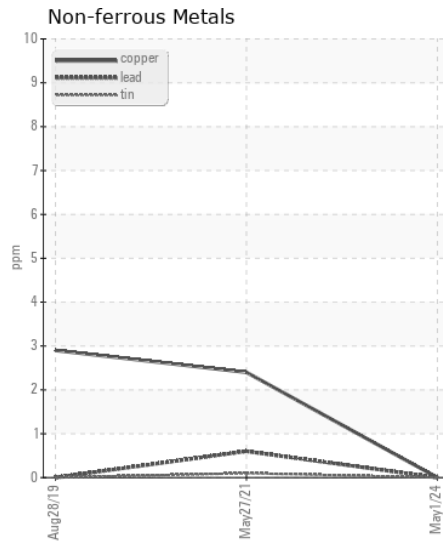
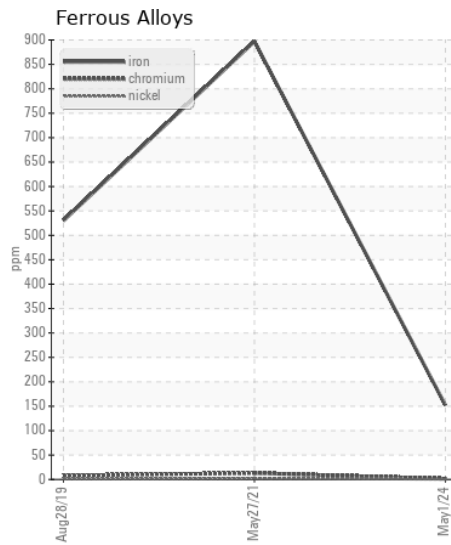
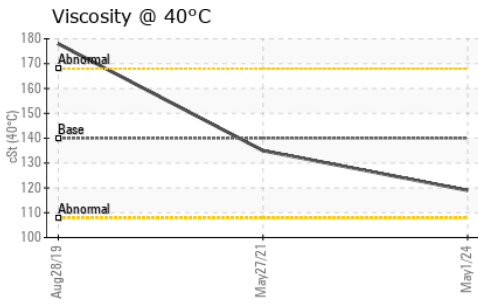
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>2</b>	13	10
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	4
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>MODER</b>	NONE	VLITE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>0</b>	2	1
Boron	ppm	ASTM D5185m		<b>27</b>	120	4
Barium	ppm	ASTM D5185m		<b>4</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	3	0
Manganese	ppm	ASTM D5185m		<b>2</b>	10	8
Magnesium	ppm	ASTM D5185m		<b>3</b>	9	0
Calcium	ppm	ASTM D5185m		<b>15</b>	74	106
Phosphorus	ppm	ASTM D5185m		<b>431</b>	1663	1975
Zinc	ppm	ASTM D5185m		<b>2</b>	70	93
Sulfur	ppm	ASTM D5185m		<b>29989</b>	21039	27338
Visc @ 40°C	cSt	ASTM D445	140	<b>119</b>	135	178



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : WC0882742

**Lab Number** : 06177549

**Unique Number** : 11023602

**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

T: (919)484-8993

F: (919)484-2136

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)