



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

Machine Id  
**MV GLADYS G**  
Component  
**Port Reduction Gear**  
Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (13 GAL)**

**RECOMMENDATION**

Oil and 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		<b>MW0038988</b>	MW0062707	MW0036730
Sample Date		Client Info		<b>17 Apr 2024</b>	24 Oct 2023	01 Jul 2023
Machine Age	hrs	Client Info		<b>14044</b>	12476	10754
Oil Age	hrs	Client Info		<b>0</b>	750	500
Filter Age	hrs	Client Info		<b>0</b>	750	500
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>7</b>	5	4
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	2
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	3	2
Lead	ppm	ASTM D5185m	>100	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>▲ 102</b>	▲ 104	▲ 110
Tin	ppm	ASTM D5185m	>10	<b>1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

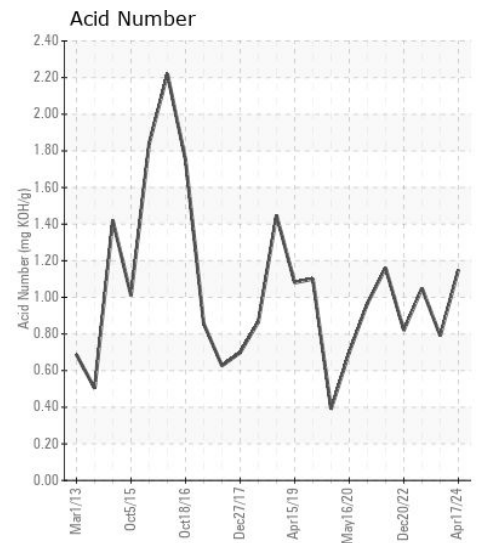
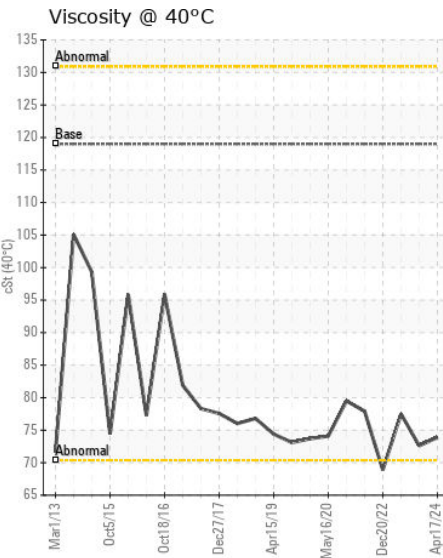
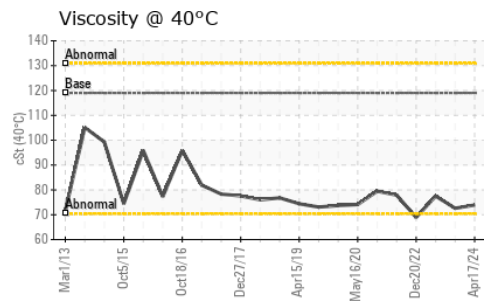
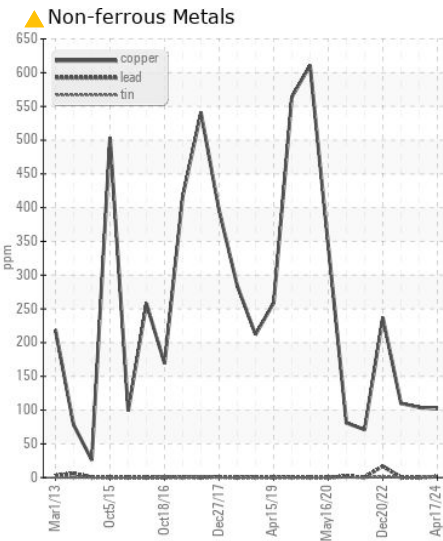
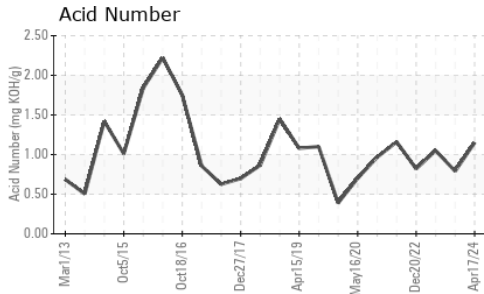
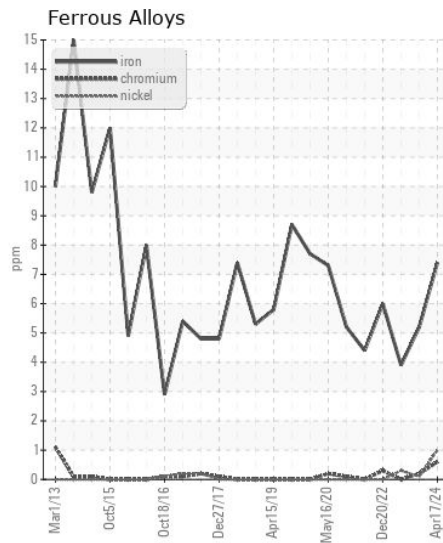
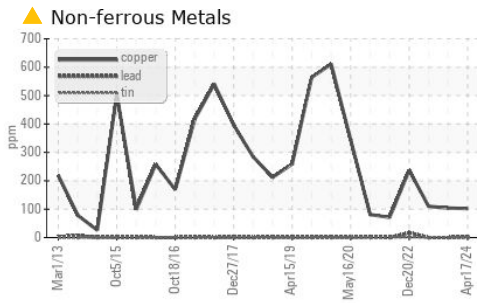
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>7</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	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	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>1</b>	0	0
Boron	ppm	ASTM D5185m	151	<b>383</b>	365	457
Barium	ppm	ASTM D5185m	0.4	<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185m	250	<b>127</b>	130	137
Manganese	ppm	ASTM D5185m		<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m	0	<b>630</b>	630	628
Calcium	ppm	ASTM D5185m	2046	<b>1450</b>	1392	1495
Phosphorus	ppm	ASTM D5185m	1043	<b>767</b>	762	751
Zinc	ppm	ASTM D5185m	943	<b>835</b>	830	838
Sulfur	ppm	ASTM D5185m	5012	<b>2986</b>	2966	2722
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.15</b>	0.79	1.05
Visc @ 40°C	cSt	ASTM D445	119	<b>73.9</b>	72.6	77.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0038988  
**Lab Number** : 06159838  
**Unique Number** : 10995261  
**Test Package** : MAR 2

**Received** : 24 Apr 2024  
**Tested** : 25 Apr 2024  
**Diagnosed** : 26 Apr 2024 - Don Baldrige

**C & B MARINE**  
 50 E RIVERCENTER BLVD, SUITE 1180  
 COVINGTON, KY  
 US 41011

Contact: DAVID WESTRICH  
 dwestrich@carlislebray.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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