



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

Machine Id  
**MRC**  
Component  
**Port Main Engine**  
Fluid  
**CHEVRON DELO 400 XLE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW05934676</b>	MW05877870	MW05843065
Sample Date		Client Info		<b>24 Aug 2023</b>	19 Jun 2023	09 May 2023
Machine Age	hrs	Client Info		<b>7957</b>	7565	6841
Oil Age	hrs	Client Info		<b>2222</b>	1890	561
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>13</b>	10	6
Chromium	ppm	ASTM D5185m	>8	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>1</b>	2	5
Lead	ppm	ASTM D5185m	>18	<b>22</b>	12	10
Copper	ppm	ASTM D5185m	>80	<b>37</b>	6	2
Tin	ppm	ASTM D5185m	>14	<b>&lt;1</b>	<1	0
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**

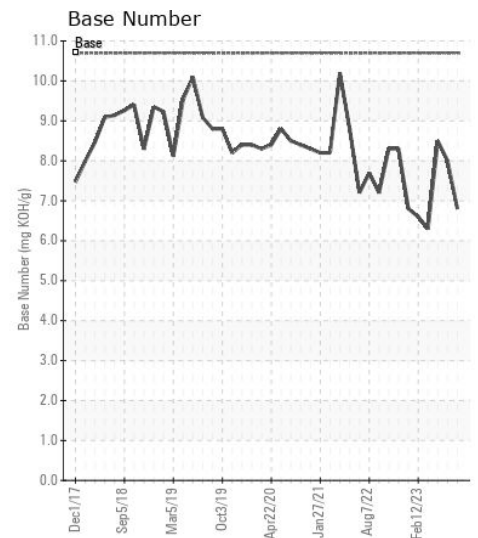
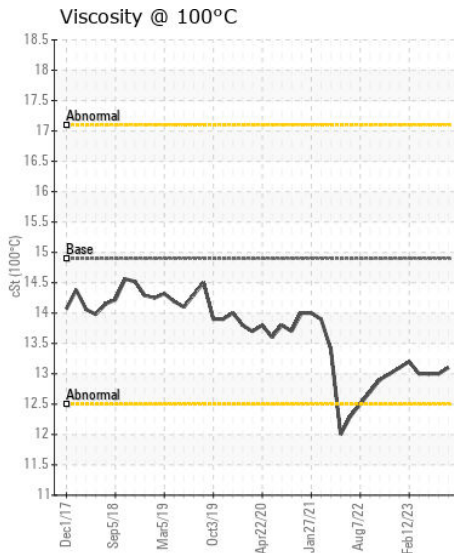
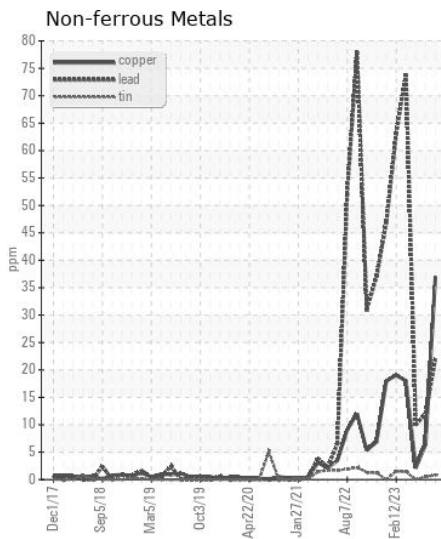
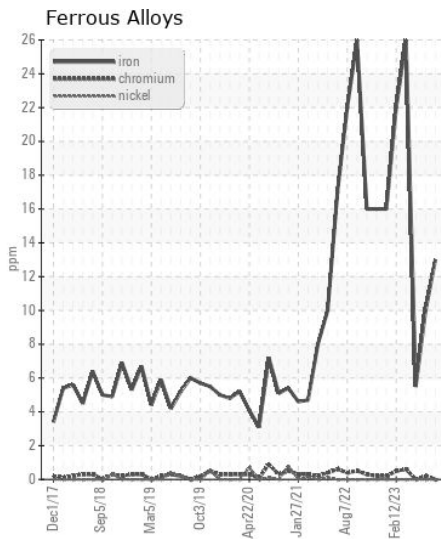
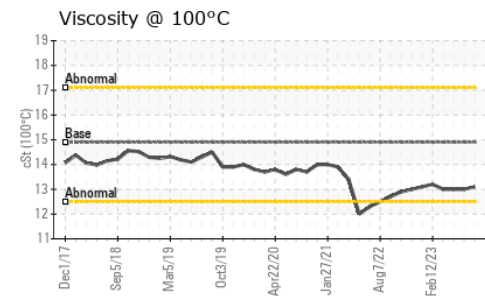
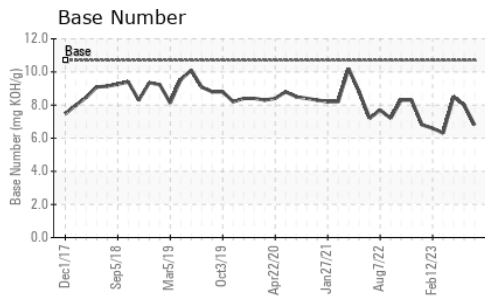
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	1
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.6</b>	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.8</b>	8.4	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.5</b>	23.5	22.7
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>75	<b>2</b>	0	<1
Boron	ppm	ASTM D5185m		<b>229</b>	245	272
Barium	ppm	ASTM D5185m		<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m		<b>106</b>	103	105
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>580</b>	508	585
Calcium	ppm	ASTM D5185m		<b>1803</b>	1586	1698
Phosphorus	ppm	ASTM D5185m	760	<b>806</b>	761	783
Zinc	ppm	ASTM D5185m	830	<b>975</b>	920	952
Sulfur	ppm	ASTM D5185m	2770	<b>3322</b>	2889	3013
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.5</b>	17.9	16.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>6.8</b>	8.0	8.5
Visc @ 100°C	cSt	ASTM D445	14.9	<b>13.1</b>	13.0	13.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW05934676  
**Lab Number** : 05934676  
**Unique Number** : 10619947  
**Test Package** : MAR 2  
**Received** : 25 Aug 2023  
**Tested** : 28 Aug 2023  
**Diagnosed** : 28 Aug 2023 - Don Baldrige

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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)