



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

Area  
**LES GRIMM**  
Machine Id  
**[LES GRIMM] 001 569145-1**  
Component  
**Port Main Engine**  
Fluid  
**CHEVRON DELO 710 LE (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0059877</b>	MW0059875	MW0059949
Sample Date		Client Info		<b>01 Jan 2024</b>	01 Dec 2023	01 Nov 2023
Machine Age	hrs	Client Info		<b>33275</b>	32539	32021
Oil Age	hrs	Client Info		<b>33275</b>	32539	32021
Filter Age	hrs	Client Info		<b>388</b>	1032	509
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>9</b>	8	8
Chromium	ppm	ASTM D5185m	>8	<b>1</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>18	<b>9</b>	9	8
Copper	ppm	ASTM D5185m	>80	<b>17</b>	19	15
Tin	ppm	ASTM D5185m	>14	<b>5</b>	5	5
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

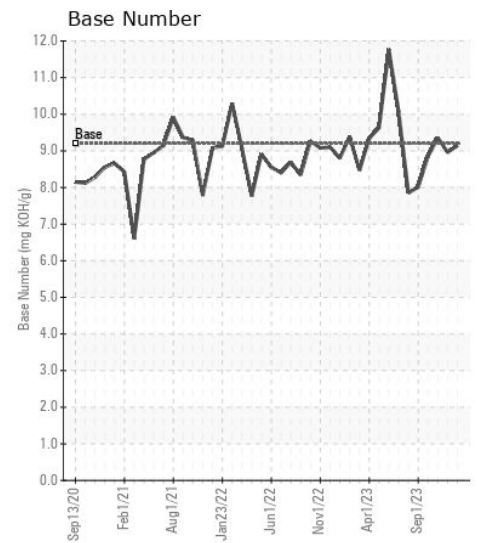
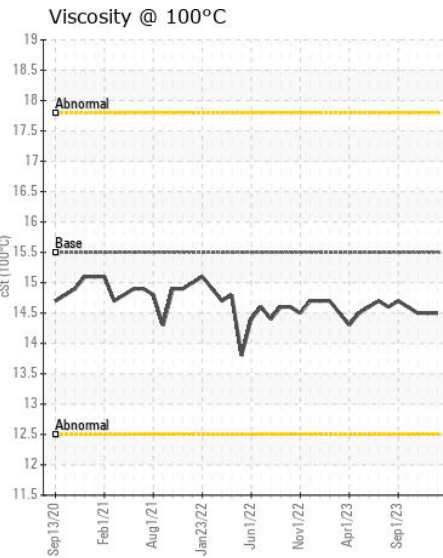
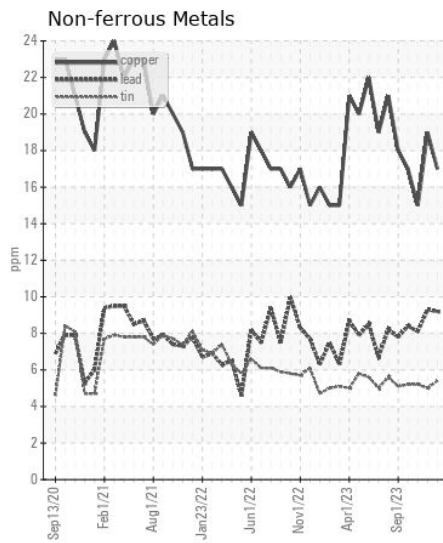
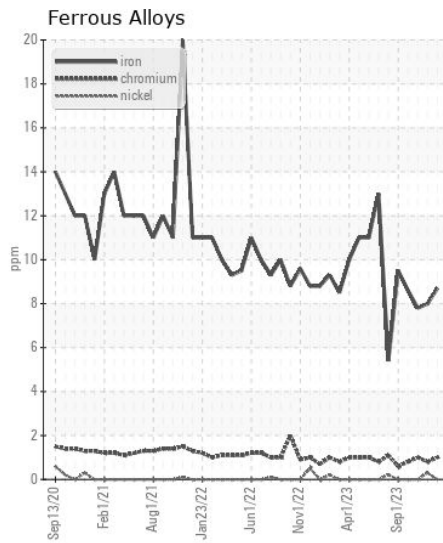
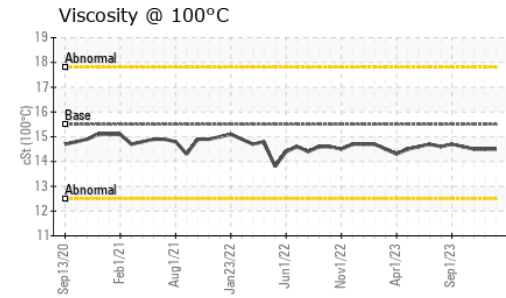
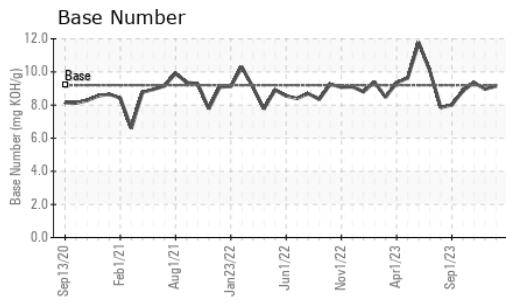
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>6</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	<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>0.7</b>	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.0</b>	9.1	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.3</b>	17.4	17.0
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>16</b>	21	12
Boron	ppm	ASTM D5185m		<b>29</b>	31	28
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>45</b>	44	42
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>15</b>	16	14
Calcium	ppm	ASTM D5185m		<b>3375</b>	3356	3251
Phosphorus	ppm	ASTM D5185m		<b>6</b>	5	6
Zinc	ppm	ASTM D5185m	10	<b>3</b>	0	1
Sulfur	ppm	ASTM D5185m		<b>2373</b>	2271	2253
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.3</b>	9.0	9.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.2	<b>9.14</b>	8.96	9.36
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.5</b>	14.5	14.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0059877 **Received** : 08 Jan 2024  
**Lab Number** : 06054108 **Diagnosed** : 09 Jan 2024  
**Unique Number** : 10820057 **Diagnostician** : Wes Davis  
**Test Package** : MAR 2

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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