



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

Machine Id  
**EMD KELLY LEE**  
Component  
**Port Main Engine**  
Fluid  
**CHEVRON DELO 710 LE (285 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0067047</b>	MW0067052	MW0066972
Sample Date		Client Info		<b>23 Jun 2024</b>	28 May 2024	09 May 2024
Machine Age	hrs	Client Info		<b>18572</b>	18095	17635
Oil Age	hrs	Client Info		<b>1500</b>	500	500
Filter Age	hrs	Client Info		<b>1500</b>	500	500
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>7</b>	6	6
Chromium	ppm	ASTM D5185m	>8	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>15	<b>3</b>	1	2
Lead	ppm	ASTM D5185m	>18	<b>1</b>	<1	1
Copper	ppm	ASTM D5185m	>80	<b>6</b>	6	6
Tin	ppm	ASTM D5185m	>14	<b>2</b>	1	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

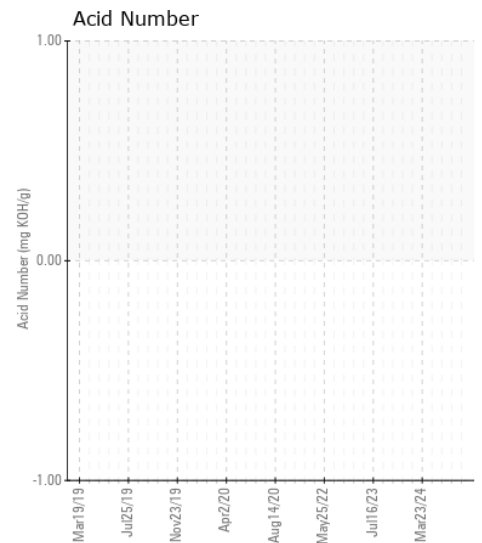
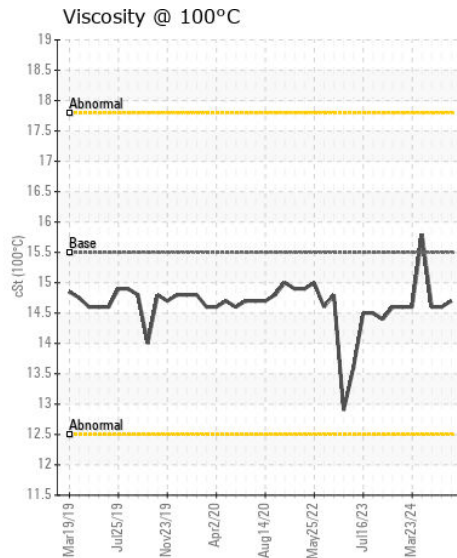
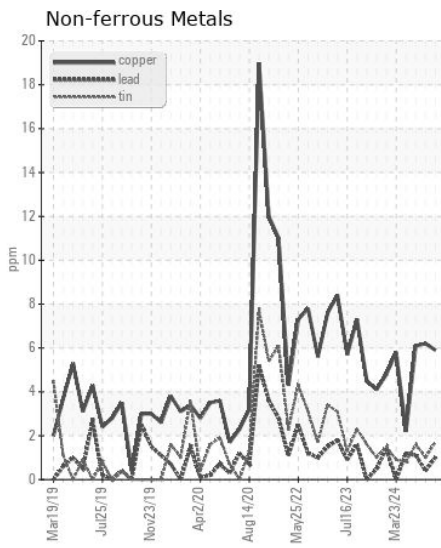
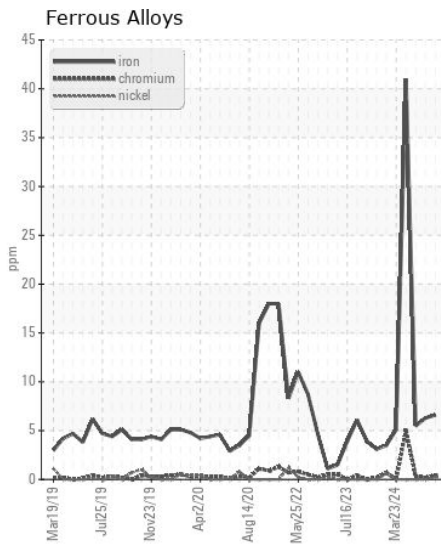
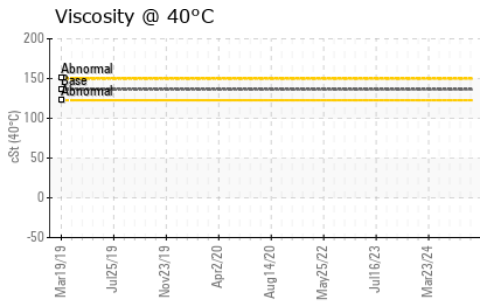
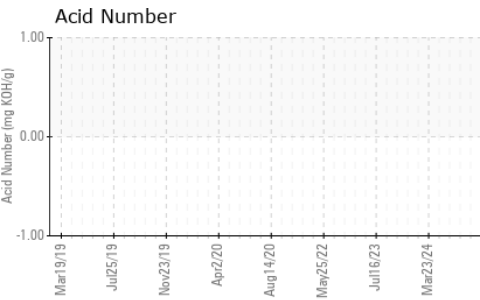
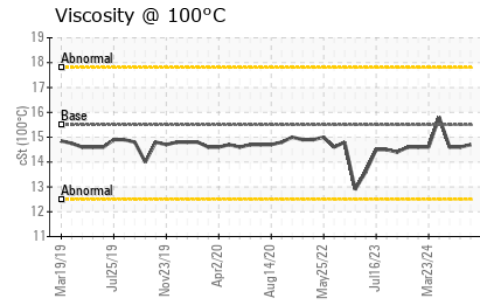
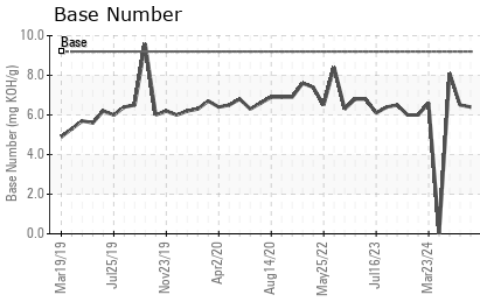
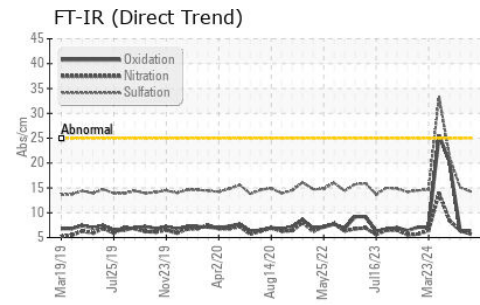
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	2	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	0.4
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.9	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.7</b>	6.4	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>14.3</b>	15.1	21.3
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>0</b>	<1	<1
Boron	ppm	ASTM D5185m		<b>42</b>	42	44
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>47</b>	43	43
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>31</b>	23	11
Calcium	ppm	ASTM D5185m		<b>3286</b>	3249	3212
Phosphorus	ppm	ASTM D5185m		<b>31</b>	23	15
Zinc	ppm	ASTM D5185m	10	<b>23</b>	27	4
Sulfur	ppm	ASTM D5185m		<b>1850</b>	2436	2312
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>6.3</b>	6.4	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.2	<b>6.4</b>	6.5	8.1
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.7</b>	14.6	14.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0067047  
**Lab Number** : 06225680  
**Unique Number** : 11103877  
**Test Package** : MAR 2 ( Additional Tests: KV40, TAN Man )

**MAGNOLIA MARINE TRANSPORT**  
 697 HAINING ROAD  
 VICKSBURG, MS  
 US 39183  
 Contact: MMT MAINTENANCE PLANNERS  
 mmtmaintenanceplanners@ergon.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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