



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

Area  
**DANIEL T MARTIN**  
Machine Id  
**[DANIEL T MARTIN] 001 608537-1**  
Component  
**Port Main Engine**  
Fluid  
**CHEVRON DELO 710 LE (250 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0055278</b>	MW0055284	MW0060205
Sample Date		Client Info		<b>01 Feb 2024</b>	01 Jan 2024	01 Aug 2023
Machine Age	hrs	Client Info		<b>36934</b>	36000	35570
Oil Age	hrs	Client Info		<b>0</b>	0	35570
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>18</b>	19	15
Chromium	ppm	ASTM D5185m	>8	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	2	3
Lead	ppm	ASTM D5185m	>18	<b>5</b>	5	5
Copper	ppm	ASTM D5185m	>80	<b>18</b>	21	20
Tin	ppm	ASTM D5185m	>14	<b>4</b>	4	4
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

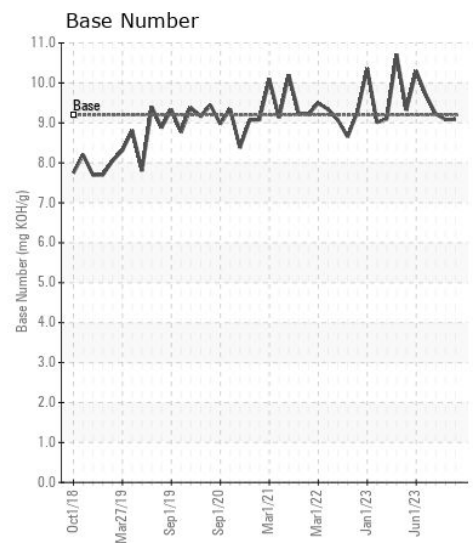
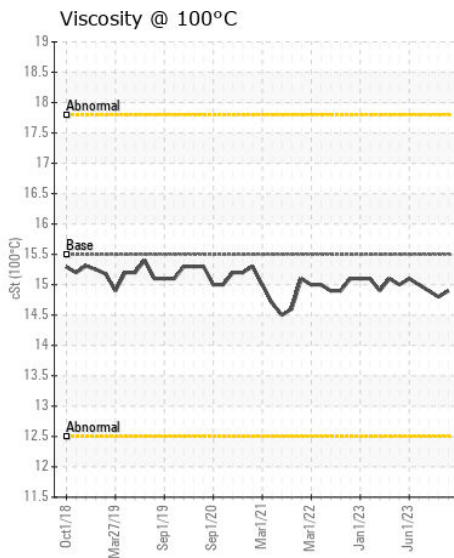
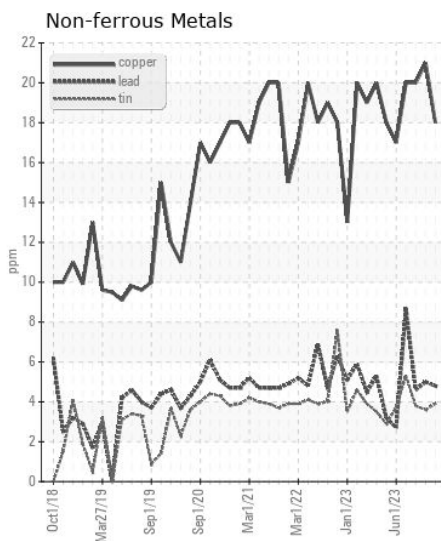
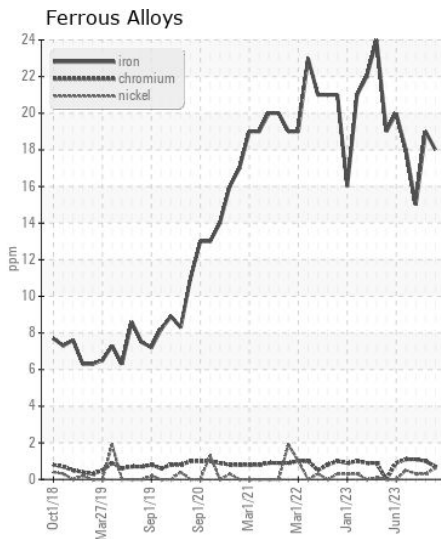
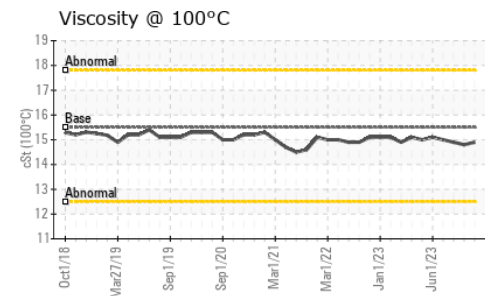
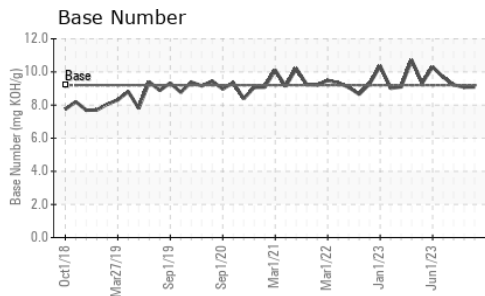
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	2
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>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.3</b>	8.2	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.1</b>	17.1	17.7
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>10</b>	10	12
Boron	ppm	ASTM D5185m		<b>40</b>	44	43
Barium	ppm	ASTM D5185m		<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m		<b>44</b>	47	48
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>16</b>	11	13
Calcium	ppm	ASTM D5185m		<b>3564</b>	3542	3825
Phosphorus	ppm	ASTM D5185m		<b>4</b>	17	4
Zinc	ppm	ASTM D5185m	10	<b>0</b>	0	<1
Sulfur	ppm	ASTM D5185m		<b>2449</b>	2780	2617
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>8.8</b>	8.7	10.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.2	<b>9.09</b>	9.08	9.22
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.9</b>	14.8	14.9



Certificate L2367

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

**Sample No.** : MW0055278

**Lab Number** : 06098657

**Unique Number** : 10896887

**Test Package** : MAR 2

**Received** : 23 Feb 2024

**Tested** : 26 Feb 2024

**Diagnosed** : 26 Feb 2024 - Wes Davis

**INGRAM BARGE**

900 S 3RD ST

PADUCAH, KY

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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)