



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

Machine Id  
**AMESTL PGE**  
Component  
**Port Genset**  
Fluid  
**CHEVRON MARINE DELO 477 SAE 20W40 (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0017040</b>	MWC028497	MWC037702
Sample Date		Client Info		<b>29 Oct 2023</b>	14 Feb 2004	23 Jun 2003
Machine Age	hrs	Client Info		<b>7216</b>	2812	980
Oil Age	hrs	Client Info		<b>239</b>	916	980
Filter Age	hrs	Client Info		<b>239</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>4</b>	36	55
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>12	<b>1</b>	5	3
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</b>	2	7
Copper	ppm	ASTM D5185m	>70	<b>0</b>	2	7
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	6
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

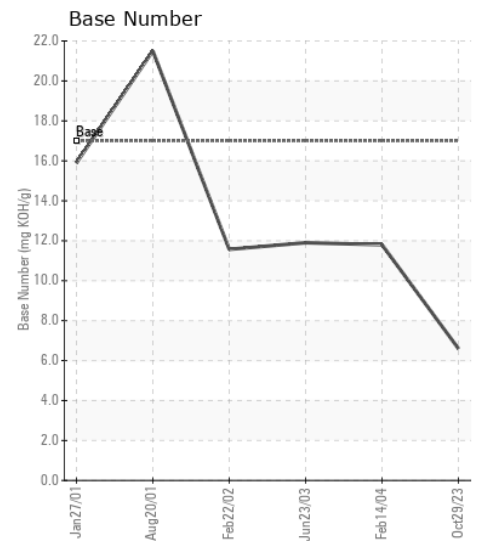
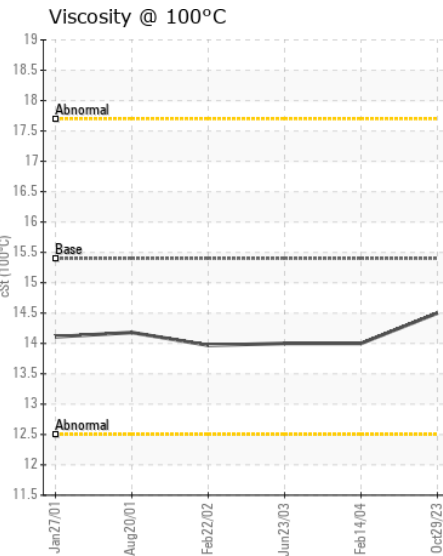
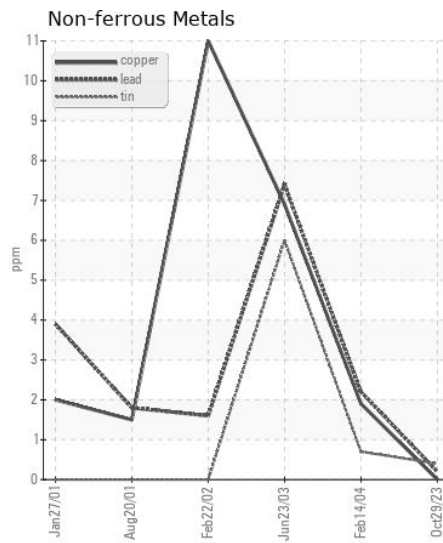
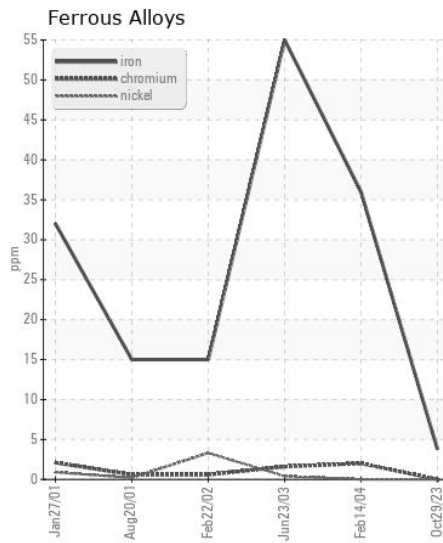
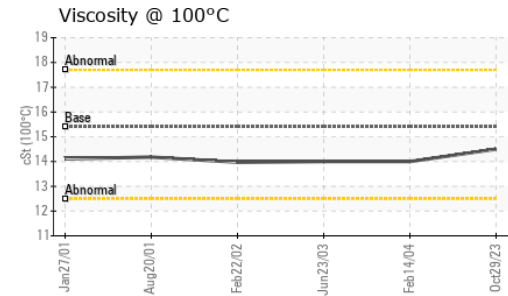
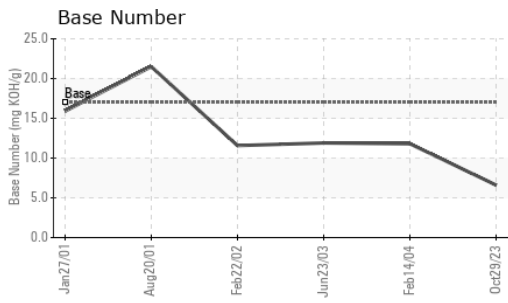
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	5	7
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	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>0.3</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.7</b>	8	8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>14.7</b>	20	18
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		<b>&lt;1</b>	4	6
Boron	ppm	ASTM D5185m		<b>34</b>	<1	1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>46</b>	107	109
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>10</b>	23	21
Calcium	ppm	ASTM D5185m		<b>3339</b>	6189	5878
Phosphorus	ppm	ASTM D5185m		<b>6</b>	2	7
Zinc	ppm	ASTM D5185m	10	<b>0</b>	2	13
Sulfur	ppm	ASTM D5185m		<b>2221</b>	6802	6754
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>8.2</b>	9	8
Base Number (BN)	mg KOH/g	ASTM D2896	17.0	<b>6.6</b>	11.8	11.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.5</b>	14.00	14.00



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0017040 **Received** : 10 Jan 2024  
**Lab Number** : 06056339 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10822288 **Diagnostician** : Wes Davis  
**Test Package** : MAR 2

**AMERICAN RIVER TRANSPORTATION CO.**  
P.O. BOX 2889  
ST. LOUIS, MO  
US 63111  
Contact: Neil Piatt  
n\_piatt@admworld.com  
T: (314)457-2119  
F: (314)481-5278

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)