



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

Machine Id  
**RICHARD RILEY (S/N G614110003)**  
Component  
**Port Main Engine**  
Fluid  
**CHEVRON DELO 710 LS (300 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0062203</b>	MW0062117	MW0062126
Sample Date		Client Info		<b>27 Mar 2024</b>	06 Mar 2024	15 Feb 2024
Machine Age	hrs	Client Info		<b>56552</b>	56024	55555
Oil Age	hrs	Client Info		<b>1506</b>	978	500
Filter Age	hrs	Client Info		<b>0</b>	978	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>5</b>	5	5
Chromium	ppm	ASTM D5185m	>8	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m	>18	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>80	<b>2</b>	0	0
Tin	ppm	ASTM D5185m	>14	<b>&lt;1</b>	0	0
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**

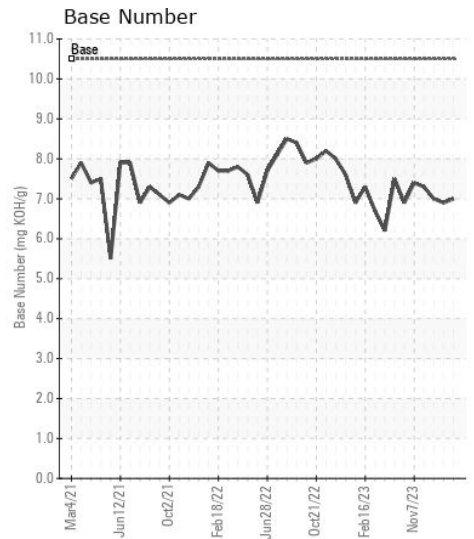
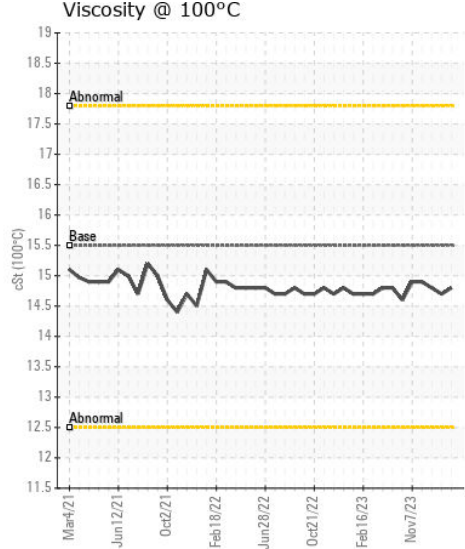
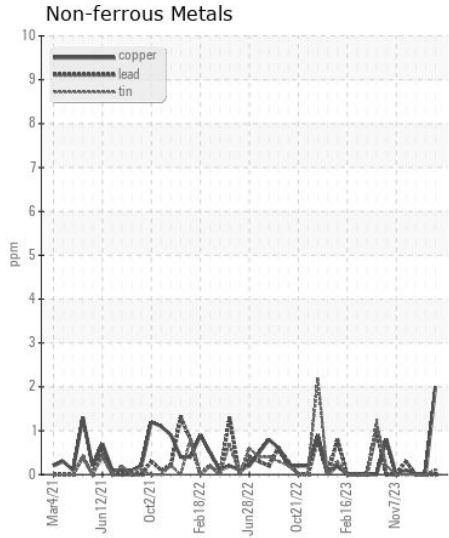
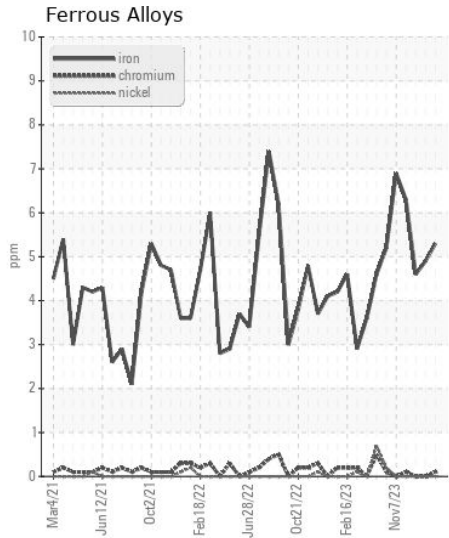
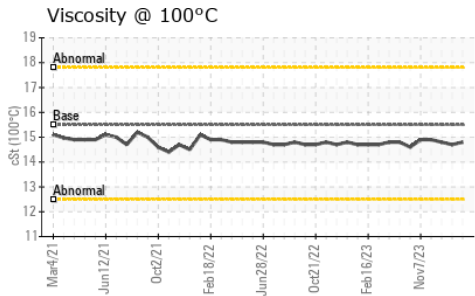
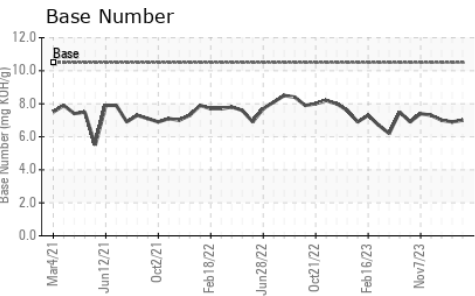
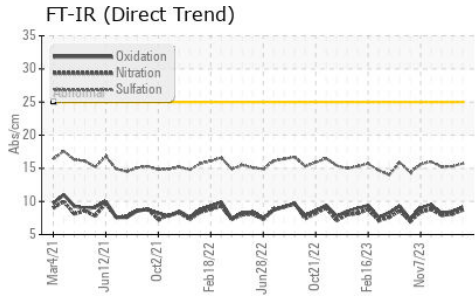
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	3	6
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	8	7
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>0.5</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	8.1	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>15.7</b>	15.3	15.2
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>3</b>	2	2
Boron	ppm	ASTM D5185m		<b>46</b>	39	39
Barium	ppm	ASTM D5185m		<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>46</b>	43	43
Manganese	ppm	ASTM D5185m		<b>1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>18</b>	12	12
Calcium	ppm	ASTM D5185m		<b>3632</b>	3335	3401
Phosphorus	ppm	ASTM D5185m		<b>5</b>	4	4
Zinc	ppm	ASTM D5185m		<b>6</b>	2	3
Sulfur	ppm	ASTM D5185m		<b>2537</b>	2389	2440
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.1</b>	8.5	8.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>7.0</b>	6.9	7.0
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.8</b>	14.7	14.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0062203  
**Lab Number** : 06155771  
**Unique Number** : 10991194  
**Test Package** : MAR 2

**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**AMERICAN COMMERCIAL LINES**  
 PO BOX 610, 1701 E. MARKET STREET  
 JEFFERSONVILLE, IN  
 US 47130  
 Contact: RONALD SCHNEIDER  
 ronald.schneider@bargaeacbl.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) F: (812)288-1644