



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

Area  
**CSP**  
Machine Id  
**CSP**  
Component  
**Port Main Engine**  
Fluid  
**CHEVRON DELO 710 LS (350 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0061150</b>	MW0043544	MW0043539
Sample Date		Client Info		<b>18 Dec 2023</b>	31 Aug 2023	26 Jun 2023
Machine Age	hrs	Client Info		<b>112211</b>	109584	108347
Oil Age	hrs	Client Info		<b>18116</b>	15517	14279
Filter Age	hrs	Client Info		<b>1271</b>	1261	1285
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
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	>75	<b>3</b>	7	6
Chromium	ppm	ASTM D5185m	>8	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>18	<b>3</b>	4	5
Copper	ppm	ASTM D5185m	>80	<b>9</b>	15	14
Tin	ppm	ASTM D5185m	>14	<b>3</b>	4	4
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

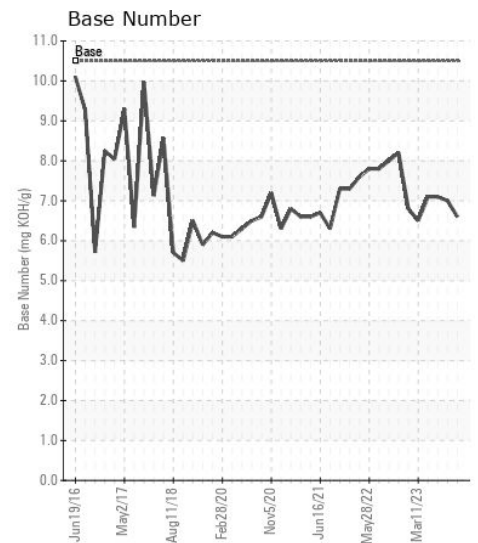
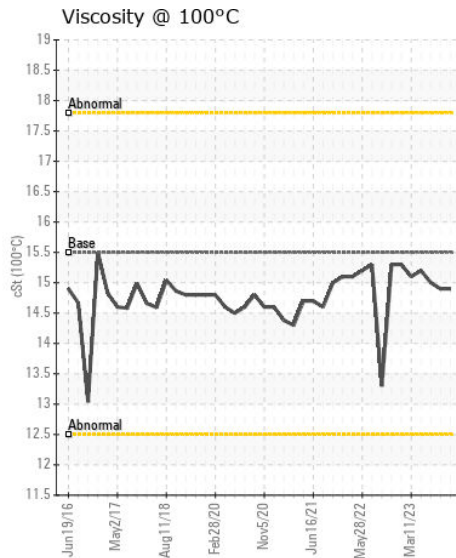
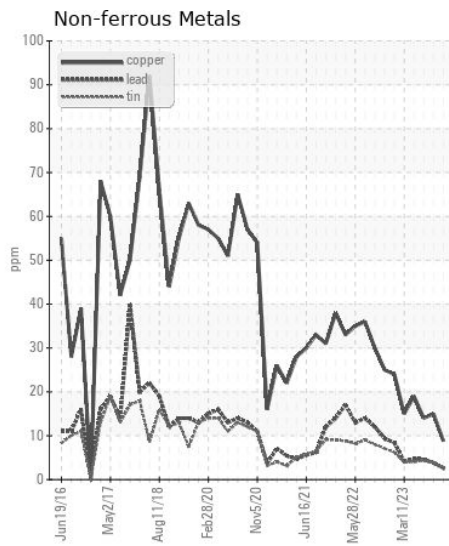
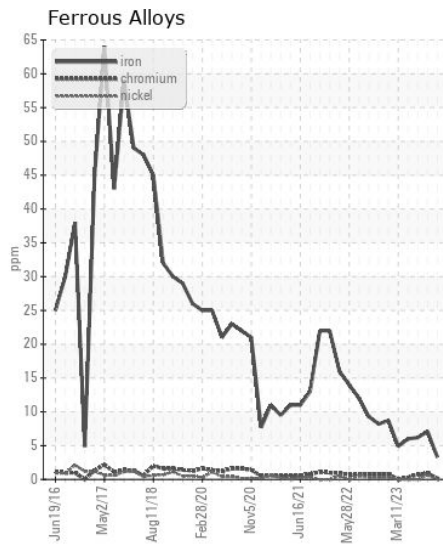
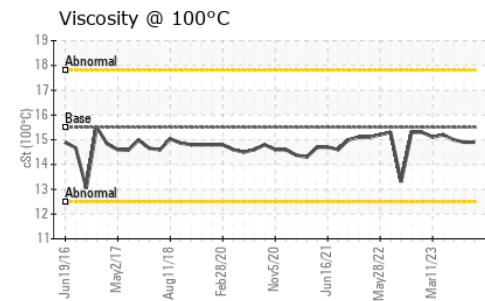
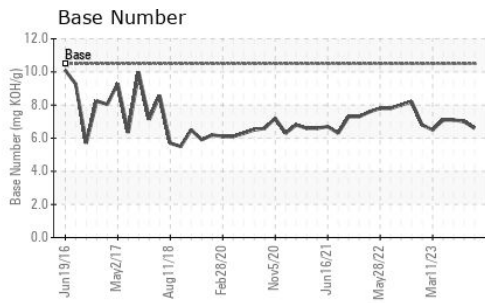
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	3	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	>3	<b>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	8.6	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>15.8</b>	16.3	16.5
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>	0	<1
Boron	ppm	ASTM D5185m		<b>36</b>	39	47
Barium	ppm	ASTM D5185m		<b>0</b>	12	0
Molybdenum	ppm	ASTM D5185m		<b>43</b>	49	51
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>11</b>	9	14
Calcium	ppm	ASTM D5185m		<b>3234</b>	3499	3681
Phosphorus	ppm	ASTM D5185m		<b>2</b>	30	5
Zinc	ppm	ASTM D5185m		<b>0</b>	4	0
Sulfur	ppm	ASTM D5185m		<b>1984</b>	2279	2616
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.2</b>	9.6	10.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>6.6</b>	7.0	7.1
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.9</b>	14.9	15.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0061150  
**Lab Number** : 06105820  
**Unique Number** : 10909317  
**Test Package** : MAR 2

**Received** : 01 Mar 2024  
**Tested** : 02 Mar 2024  
**Diagnosed** : 02 Mar 2024 - Wes Davis

**AMERICAN RIVER TRANSPORTATION CO.**  
 P.O. BOX 2889  
 ST. LOUIS, MO  
 US 63111  
 Contact: BRIAN GRIEWING  
 brian.griewing@adm.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)

T:  
 F: (314)481-5278