



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

Area  
**GST**  
Machine Id  
**GST**  
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>MW0060875</b>	MW0054948	MW0054949
Sample Date		Client Info		<b>22 Apr 2024</b>	16 Nov 2023	29 Sep 2023
Machine Age	hrs	Client Info		<b>76062</b>	72572	71493
Oil Age	hrs	Client Info		<b>1150</b>	4691	3612
Filter Age	hrs	Client Info		<b>1150</b>	1293	249
Oil Changed		Client Info		<b>Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>17</b>	▲ 96	19
Chromium	ppm	ASTM D5185m	>8	<b>1</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>18	<b>4</b>	7	7
Copper	ppm	ASTM D5185m	>80	<b>9</b>	15	11
Tin	ppm	ASTM D5185m	>14	<b>4</b>	4	4
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

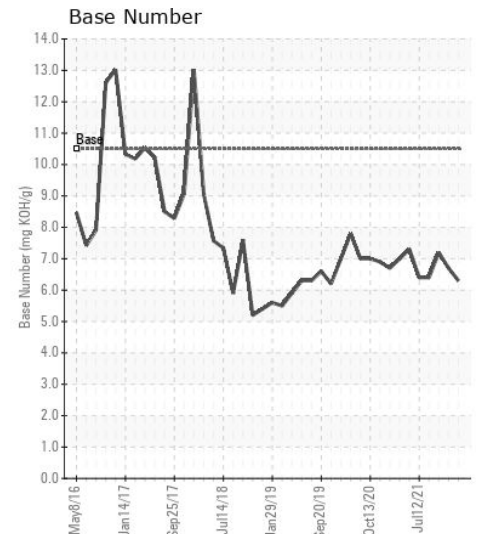
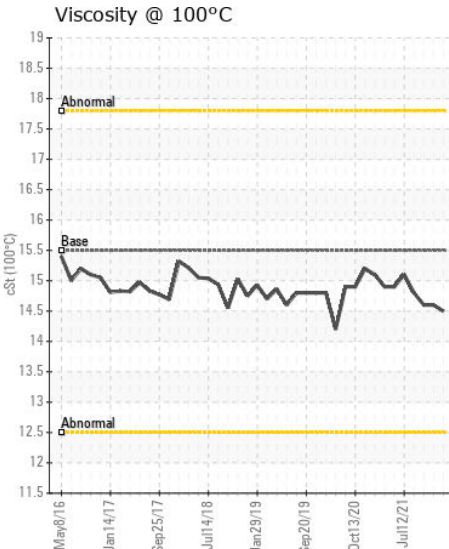
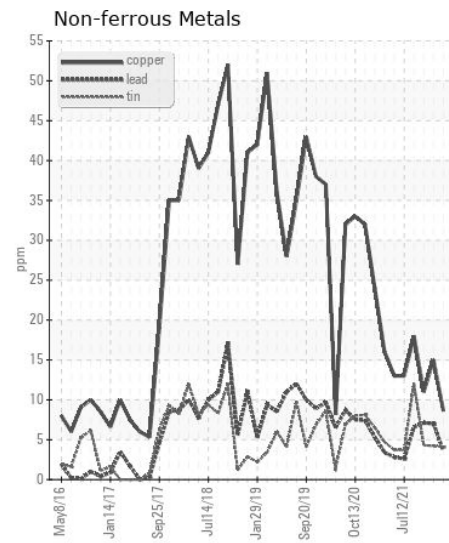
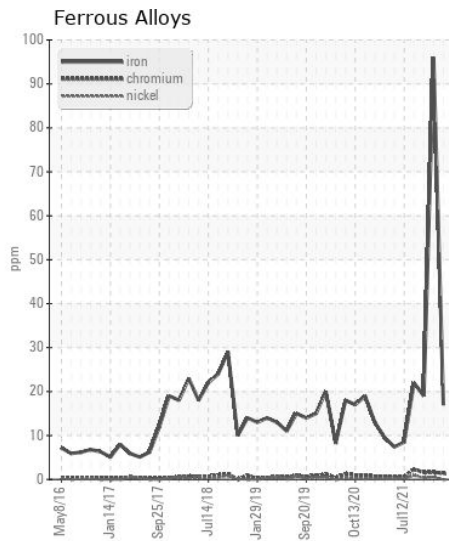
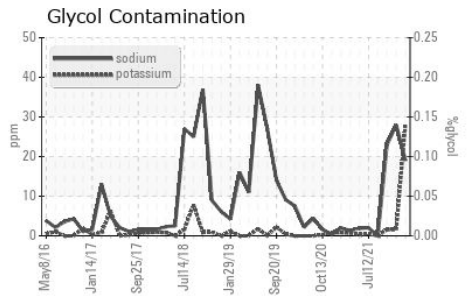
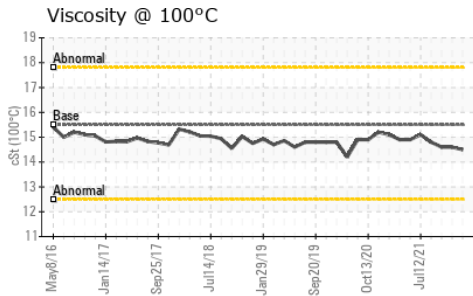
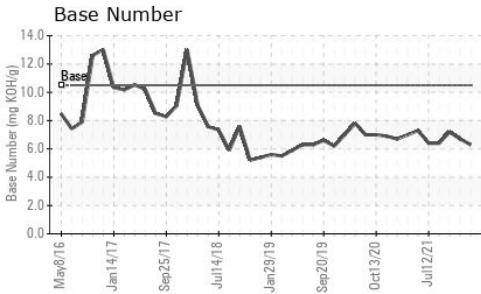
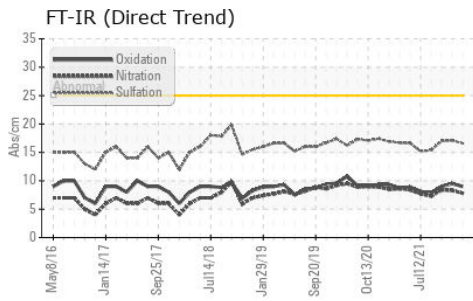
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	7	6
Potassium	ppm	ASTM D5185m	>20	<b>28</b>	2	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	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	8.3	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.6</b>	17.1	17.0
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>19</b>	28	23
Boron	ppm	ASTM D5185m		<b>35</b>	36	34
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>47</b>	41	40
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>10</b>	12	13
Calcium	ppm	ASTM D5185m		<b>3295</b>	3309	3312
Phosphorus	ppm	ASTM D5185m		<b>3</b>	4	4
Zinc	ppm	ASTM D5185m		<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>2350</b>	2287	2330
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.0</b>	9.5	9.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>6.3</b>	6.7	7.2
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.5</b>	14.6	14.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0060875  
**Lab Number** : 06194795  
**Unique Number** : 11056918  
**Test Package** : MAR 2 ( Additional Tests: Glycol )  
**Received** : 29 May 2024  
**Tested** : 31 May 2024  
**Diagnosed** : 31 May 2024 - Jonathan Hester

**AMERICAN RIVER TRANSPORTATION CO.**  
 P.O. BOX 2889  
 ST. LOUIS, MO  
 US 63111  
 Contact: BRIAN GRIEWING  
 brian.griewing@adm.com  
 T:  
 F: (314)481-5278

Certificate L2367  
 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)