



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

Area  
**GATEWAY EXPRESS**

Machine Id

**GEX**

Component

**Starboard Reduction Gear**

Fluid

**CHEVRON DELO 710 LS (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0065130</b>	MW0061008	MW0054812
Sample Date		Client Info		<b>02 Feb 2024</b>	09 Nov 2023	14 Jul 2023
Machine Age	hrs	Client Info		<b>21999</b>	20387	18513
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>54</b>	66	50
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>1</b>	<1	<1
Lead	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
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**

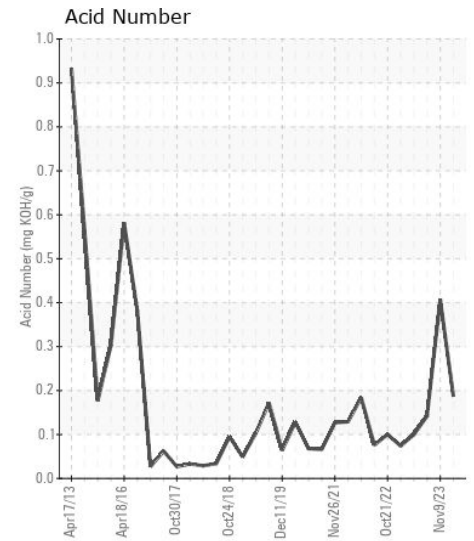
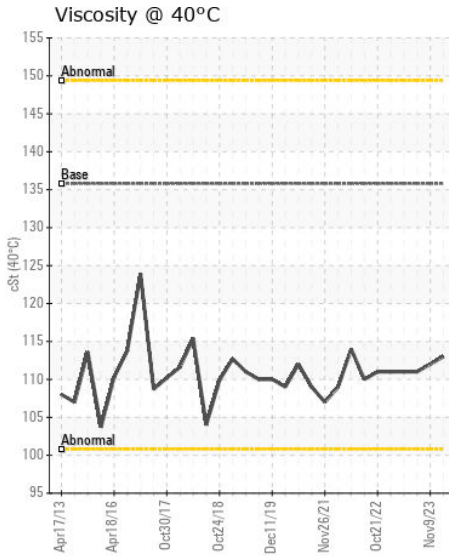
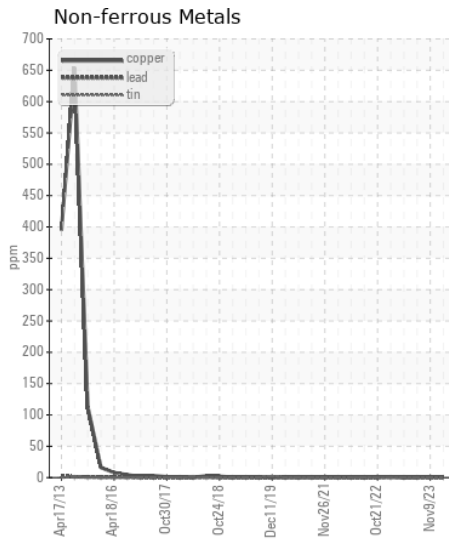
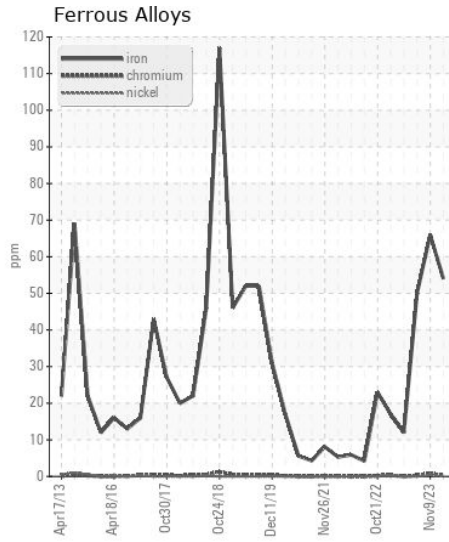
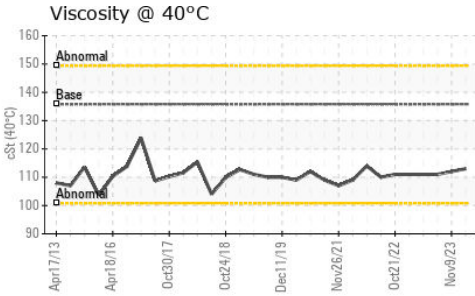
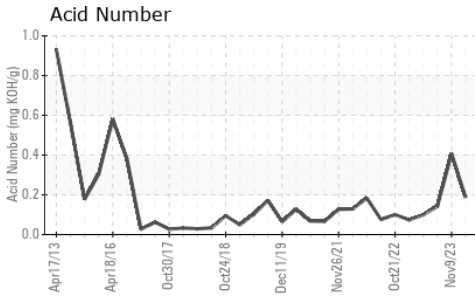
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m		<b>2</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
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	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	2
Boron	ppm	ASTM D5185m		<b>44</b>	54	50
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Molybdenum	ppm	ASTM D5185m		<b>45</b>	46	43
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>9</b>	8	13
Calcium	ppm	ASTM D5185m		<b>3408</b>	3412	3348
Phosphorus	ppm	ASTM D5185m		<b>0</b>	5	5
Zinc	ppm	ASTM D5185m		<b>3</b>	0	3
Sulfur	ppm	ASTM D5185m		<b>2393</b>	2446	2523
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.187</b>	0.407	0.142
Visc @ 40°C	cSt	ASTM D445	135.8	<b>113</b>	112	111



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0065130  
**Lab Number** : 06083808  
**Unique Number** : 10871253  
**Test Package** : MAR 2

**Received** : 08 Feb 2024  
**Tested** : 09 Feb 2024  
**Diagnosed** : 09 Feb 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)

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