



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

Area  
**ABE**  
Machine Id  
**ABE**  
Component  
**Hydraulic System**  
Fluid  
**CHEVRON HYDRAULIC AW ISO 68 (100 GAL)**

**RECOMMENDATION**

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0043647</b>	MW0043636	MW0039800
Sample Date		Client Info		<b>18 Feb 2024</b>	15 Nov 2023	26 Nov 2022
Machine Age	hrs	Client Info		<b>0</b>	0	21786
Oil Age	hrs	Client Info		<b>26040</b>	23866	21786
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>None</b>	N/A	None
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	2	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>20	<b>▲ 36</b>	▲ 36	● 18
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	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**

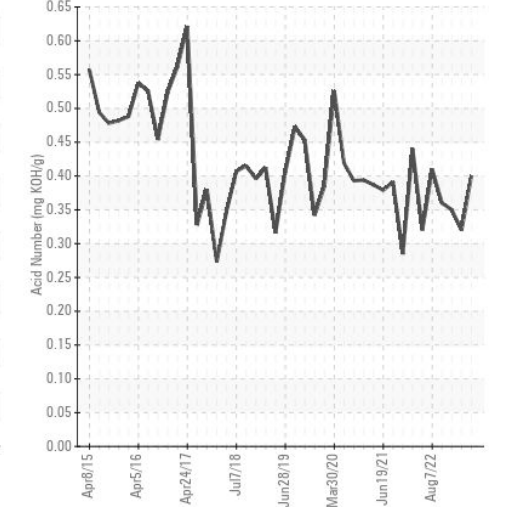
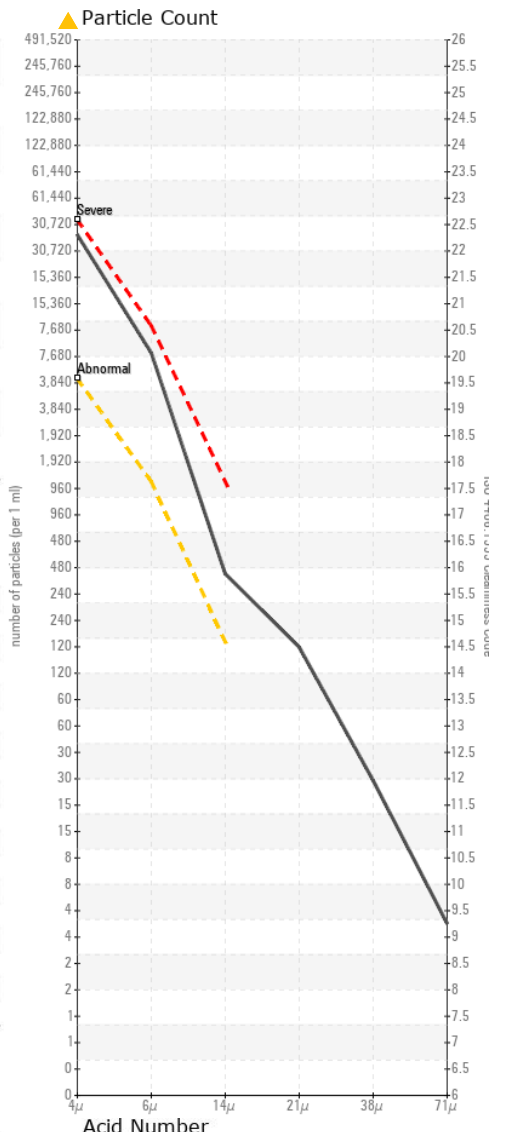
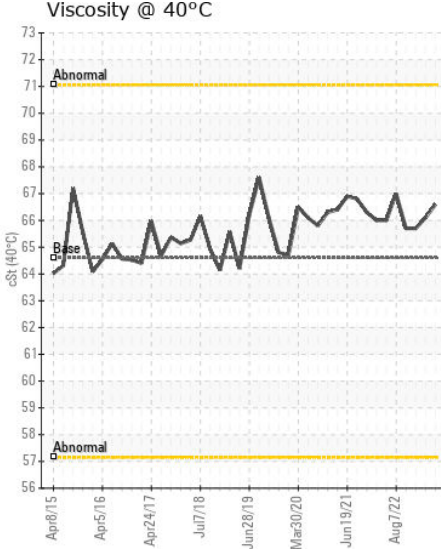
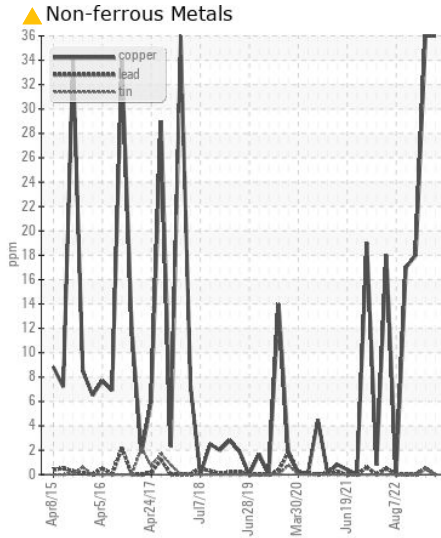
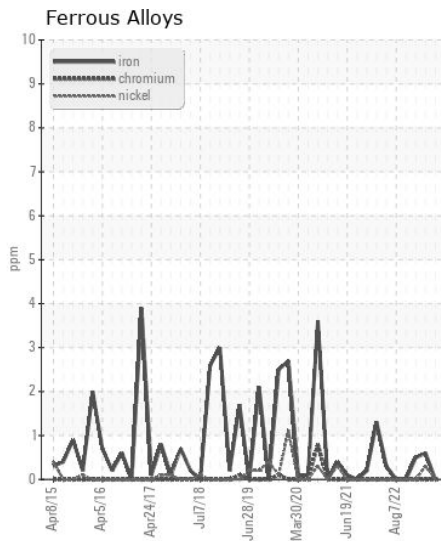
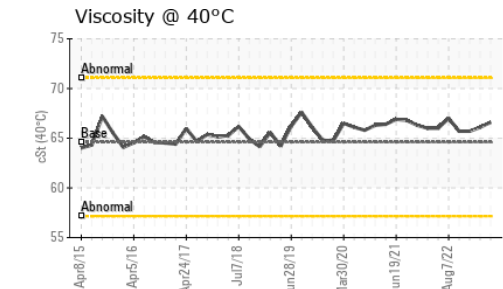
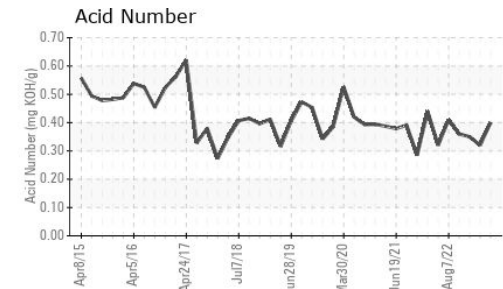
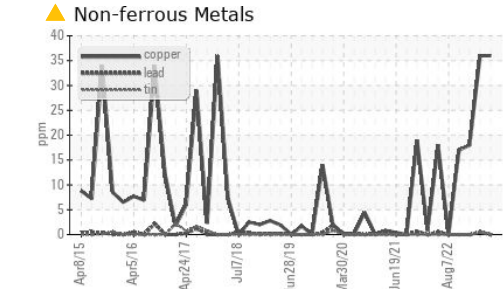
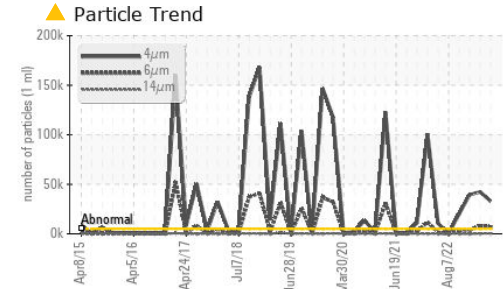
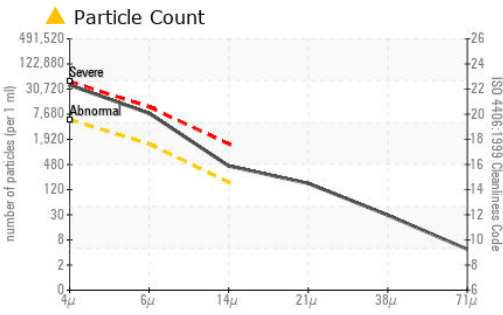
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 32896</b>	▲ 42343	▲ 39421
Particles >6µm		ASTM D7647	>1300	<b>▲ 7010</b>	▲ 7934	▲ 3671
Particles >14µm		ASTM D7647	>160	<b>▲ 389</b>	▲ 295	19
Particles >21µm		ASTM D7647	>40	<b>▲ 149</b>	▲ 93	3
Particles >38µm		ASTM D7647	>10	<b>▲ 26</b>	4	0
Particles >71µm		ASTM D7647	>3	<b>▲ 4</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 22/20/16</b>	▲ 23/20/15	▲ 22/19/11
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	>0.05	<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	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	2
Calcium	ppm	ASTM D5185m		<b>42</b>	47	48
Phosphorus	ppm	ASTM D5185m		<b>312</b>	277	357
Zinc	ppm	ASTM D5185m		<b>380</b>	407	423
Sulfur	ppm	ASTM D5185m		<b>727</b>	825	710
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.40</b>	0.32	0.35
Visc @ 40°C	cSt	ASTM D445	64.6	<b>66.6</b>	66.1	65.7



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0043647  
**Lab Number** : 06106009  
**Unique Number** : 10909506  
**Test Package** : MAR 2  
**Received** : 01 Mar 2024  
**Tested** : 05 Mar 2024  
**Diagnosed** : 05 Mar 2024 - Don Baldrige

**AMERICAN RIVER TRANSPORTATION CO.**  
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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)