



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

Area  
**MEV**  
Machine Id  
**MEV (S/N FLANKING)**  
Component  
**Hydraulic System**  
Fluid  
**CHEVRON RANDO HD 68 (200 GAL)**

**RECOMMENDATION**

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0055097</b>	MW0055091	MW0055088
Sample Date		Client Info		<b>12 Jan 2024</b>	09 Dec 2023	12 Oct 2023
Machine Age	hrs	Client Info		<b>8942</b>	8145	0
Oil Age	hrs	Client Info		<b>8942</b>	8145	6735
Filter Age	hrs	Client Info		<b>0</b>	8145	6735
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>None</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>0</b>	0	2
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	2
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
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**

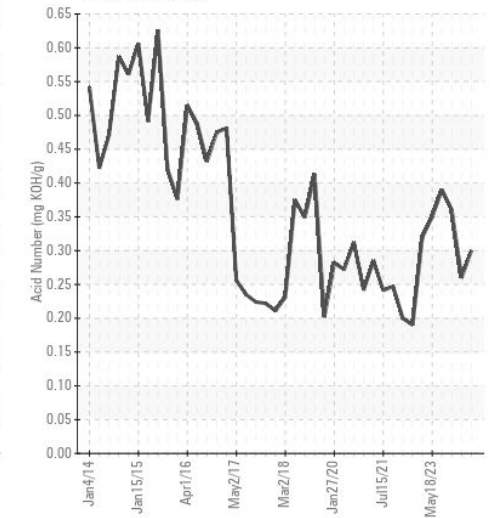
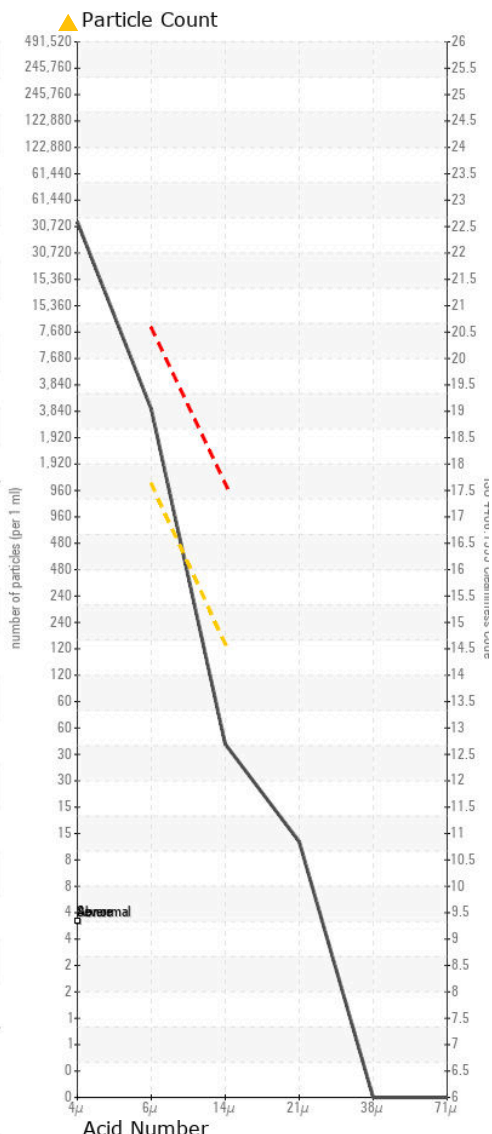
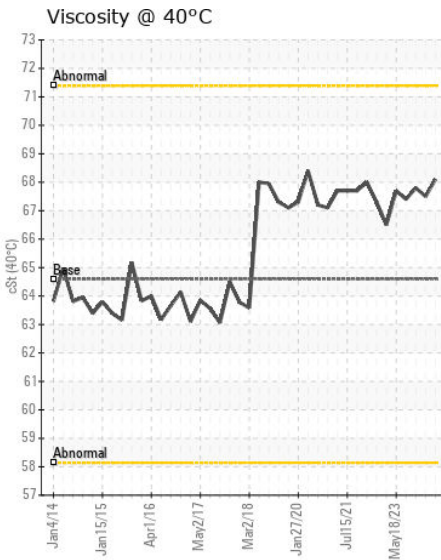
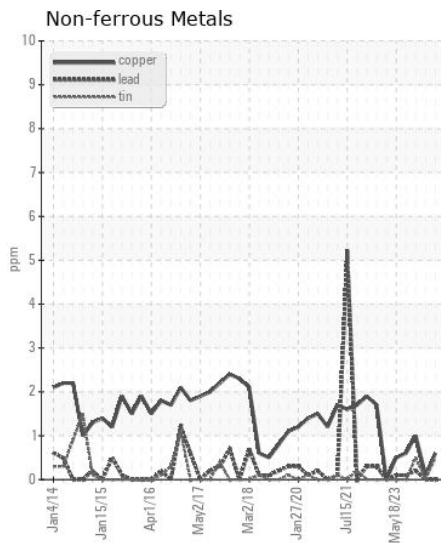
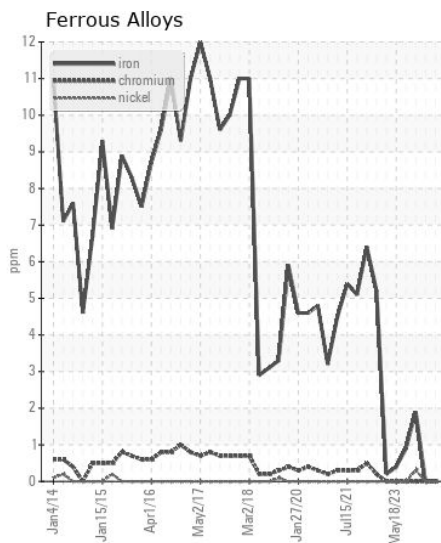
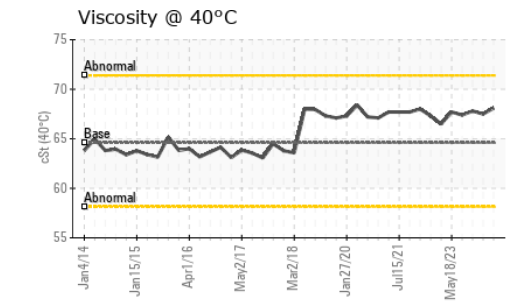
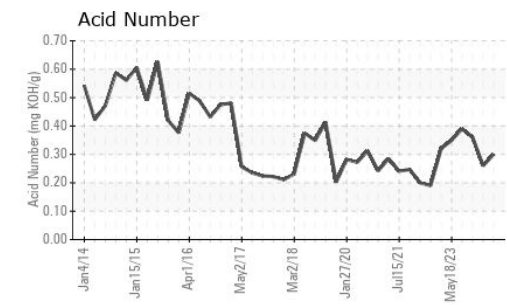
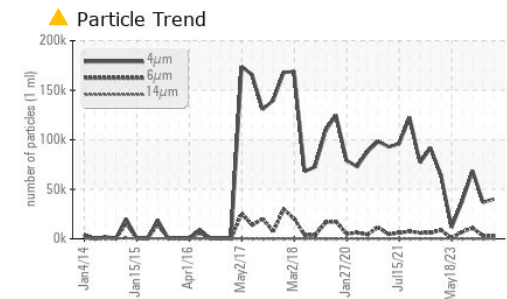
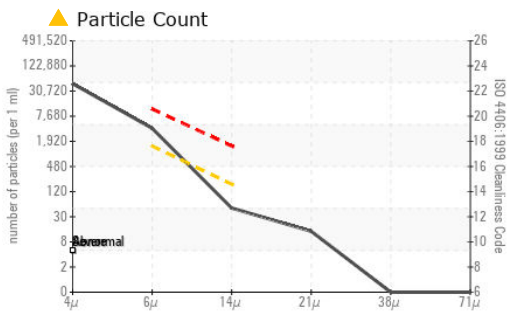
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

Silicon	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	2
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>40019</b>	36838	68664
Particles >6µm		ASTM D7647	>1300	<b>▲ 3448</b>	▲ 2897	● 10923
Particles >14µm		ASTM D7647	>160	<b>43</b>	14	75
Particles >21µm		ASTM D7647	>40	<b>12</b>	4	8
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/17/14	<b>▲ 23/19/13</b>	▲ 22/19/11	● 23/21/13
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 oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		<b>&lt;1</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>	0	1
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>44</b>	46	50
Phosphorus	ppm	ASTM D5185m		<b>319</b>	345	275
Zinc	ppm	ASTM D5185m		<b>392</b>	434	416
Sulfur	ppm	ASTM D5185m		<b>725</b>	769	884
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.30</b>	0.26	0.36
Visc @ 40°C	cSt	ASTM D445	64.6	<b>68.1</b>	67.5	67.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0055097  
**Lab Number** : 06083574  
**Unique Number** : 10871019  
**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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