



Area

**NDA**

Machine Id

**NDA (S/N STEERING)**

Component

**Hydraulic System**

Fluid

**CHEVRON RANDO HD 68 (400 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>MW0060739</b>	MW0070067	MW0060749
Sample Date		Client Info		<b>10 Jul 2024</b>	22 Apr 2024	22 Jan 2024
Machine Age	hrs	Client Info		<b>37006</b>	35044	4576
Oil Age	hrs	Client Info		<b>37006</b>	35044	4576
Filter Age	hrs	Client Info		<b>37006</b>	35044	4576
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	N/A	Not Changd
Sample Status				<b>ATTENTION</b>	ATTENTION	ATTENTION

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>1</b>	0	2
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>4</b>	0	2
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<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**

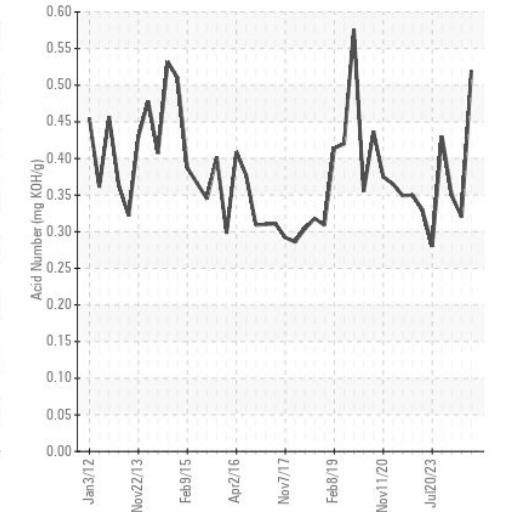
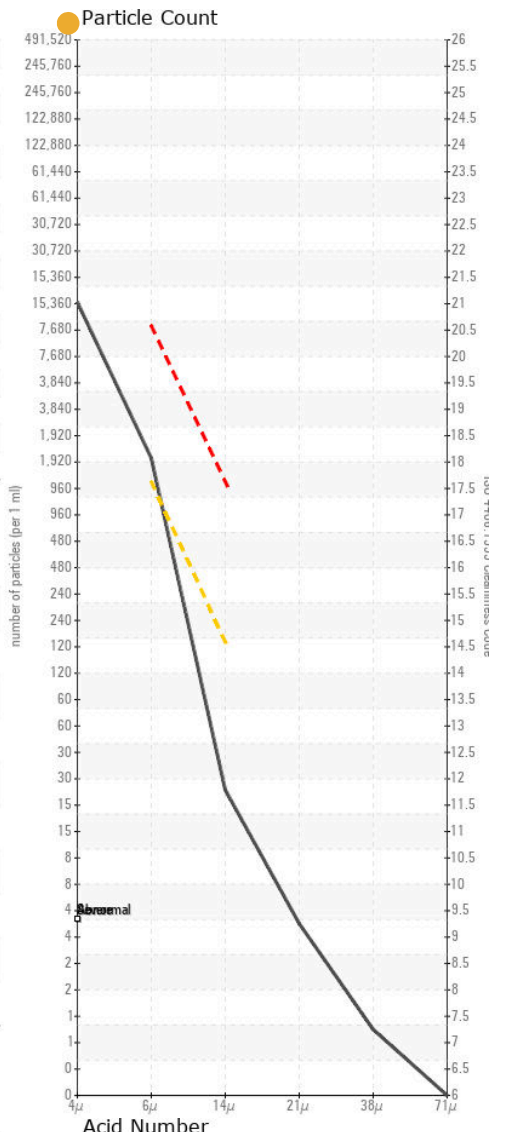
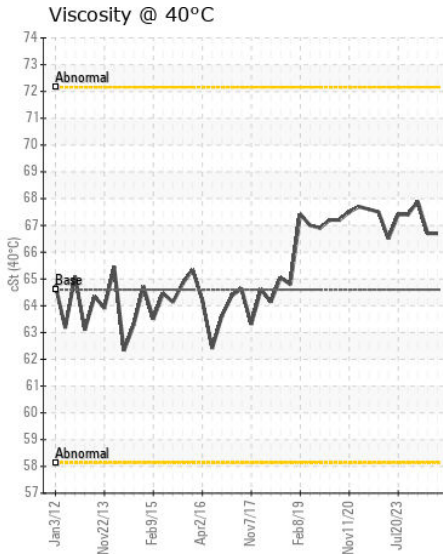
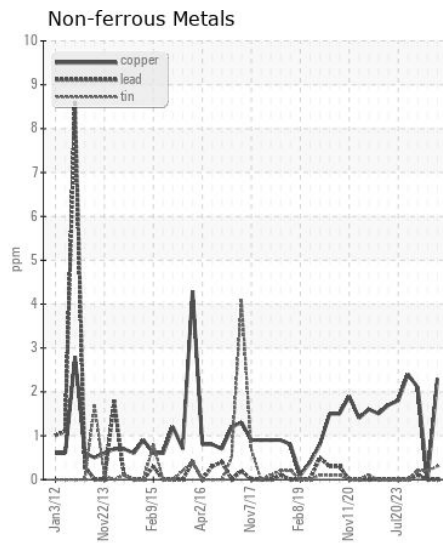
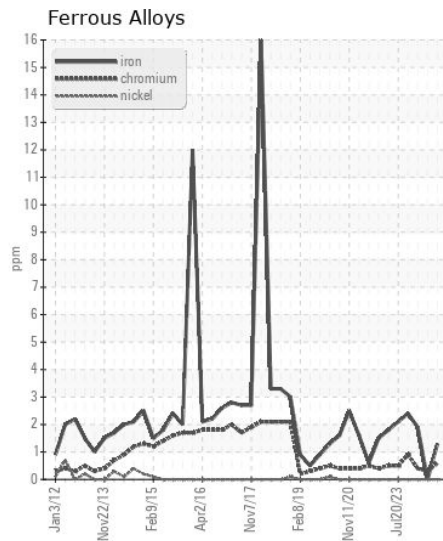
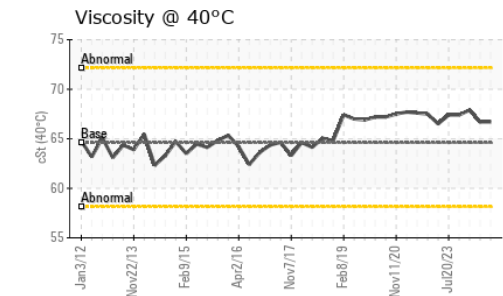
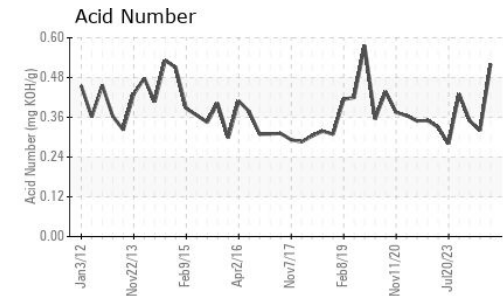
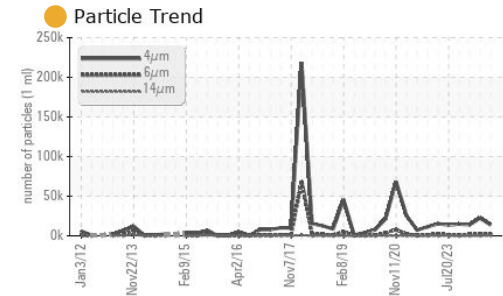
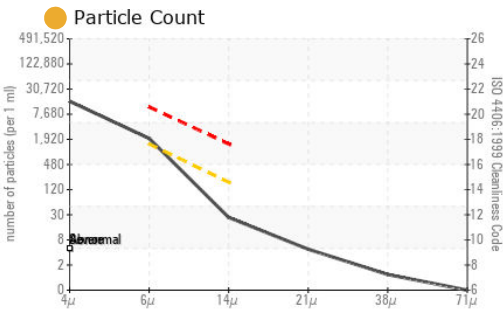
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	2
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>13634</b>	22426	13902
Particles >6µm		ASTM D7647	>1300	<b>1769</b>	2022	1708
Particles >14µm		ASTM D7647	>160	<b>23</b>	30	47
Particles >21µm		ASTM D7647	>40	<b>4</b>	6	13
Particles >38µm		ASTM D7647	>10	<b>1</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/17/14	<b>21/18/12</b>	22/18/12	21/18/13
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 condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	<1	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185m		<b>39</b>	43	48
Phosphorus	ppm	ASTM D5185m		<b>313</b>	347	288
Zinc	ppm	ASTM D5185m		<b>423</b>	412	410
Sulfur	ppm	ASTM D5185m		<b>822</b>	874	852
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.52</b>	0.32	0.35
Visc @ 40°C	cSt	ASTM D445	64.6	<b>66.7</b>	66.7	67.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0060739  
**Lab Number** : 06240256  
**Unique Number** : 11129090  
**Test Package** : MAR 2  
**Received** : 18 Jul 2024  
**Tested** : 19 Jul 2024  
**Diagnosed** : 19 Jul 2024 - Wes Davis

**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)