



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

Area  
**SALLY BROMFIELD**  
Machine Id  
**[SALLY BROMFIELD] 010 501709-10**  
Component  
**Steering**  
Fluid  
**CHEVRON RANDO HDZ 68 (200 GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0052453</b>	MW0041759	MW0041623
Sample Date		Client Info		<b>30 Jul 2023</b>	30 Jan 2023	30 Jul 2022
Machine Age	hrs	Client Info		<b>0</b>	27127	22730
Oil Age	hrs	Client Info		<b>0</b>	0	22730
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>ATTENTION</b>	ABNORMAL	ATTENTION

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>10</b>	10	8
Tin	ppm	ASTM D5185m	>5	<b>0</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**

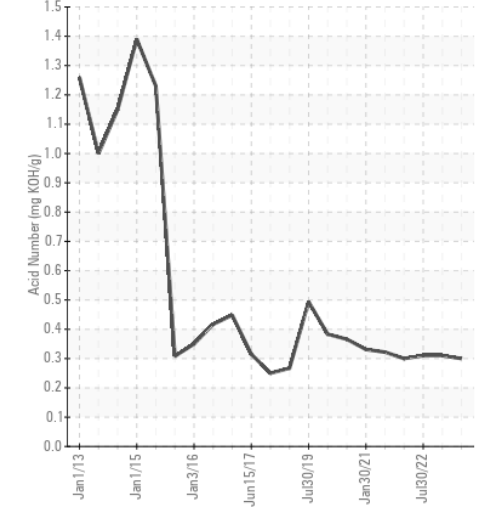
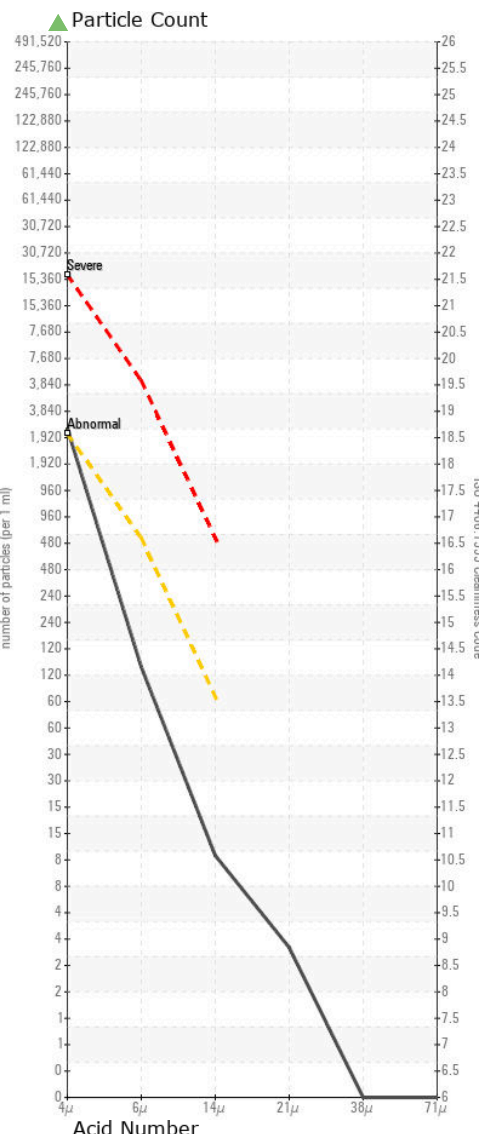
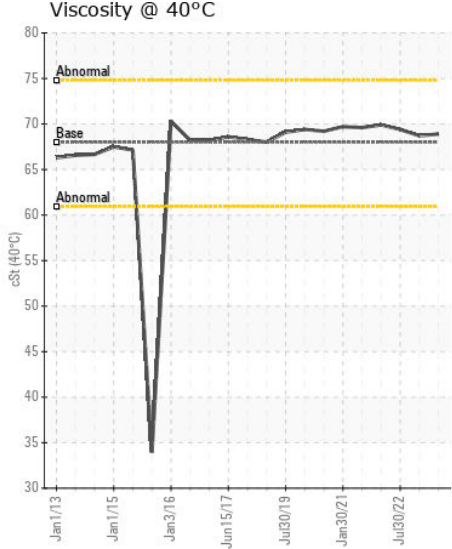
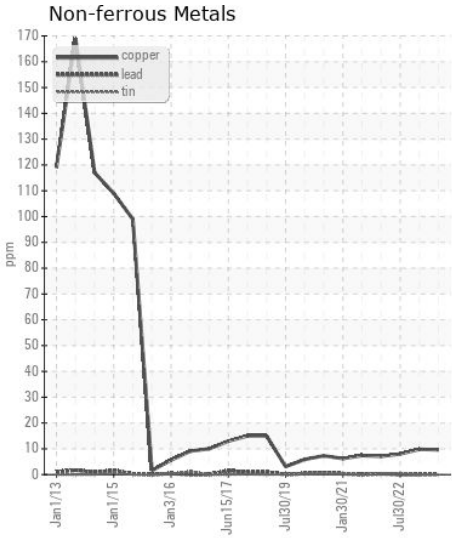
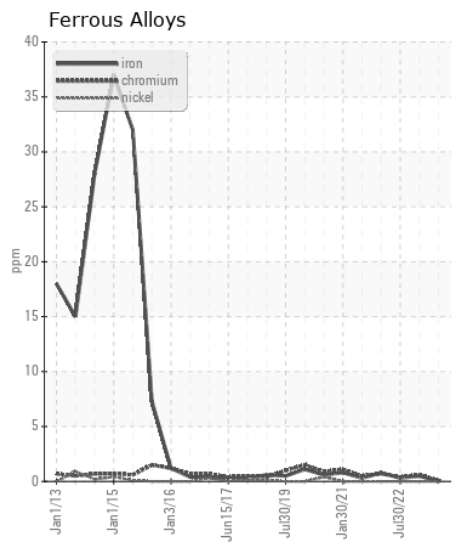
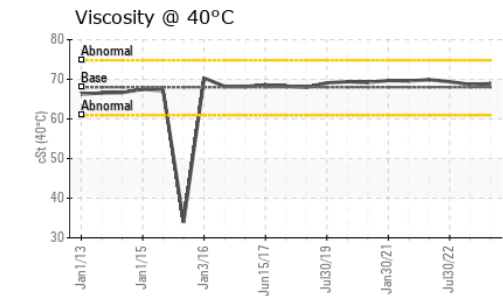
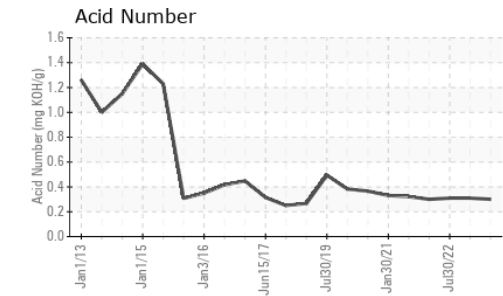
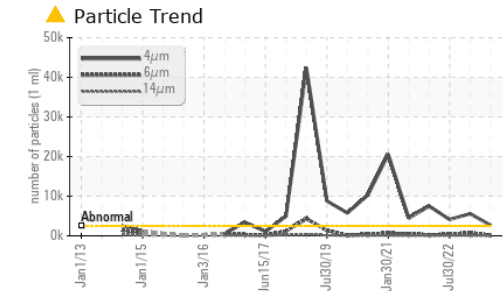
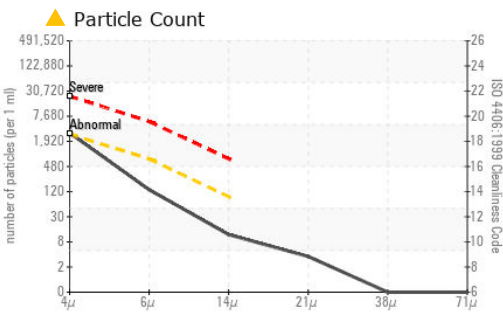
There is a moderate amount of silt (particulates < 14 microns in size) present in the fluid.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>2500	<b>▲ 2670</b>	▲ 5573	▲ 4114
Particles >6µm		ASTM D7647	>640	<b>118</b>	▲ 815	342
Particles >14µm		ASTM D7647	>80	<b>10</b>	32	50
Particles >21µm		ASTM D7647	>20	<b>3</b>	4	12
Particles >38µm		ASTM D7647	>4	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>▲ 19/14/10</b>	▲ 20/17/12	▲ 19/16/13
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	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	0	<b>0</b>	1	<1
Calcium	ppm	ASTM D5185m	75	<b>109</b>	109	101
Phosphorus	ppm	ASTM D5185m	275	<b>423</b>	406	375
Zinc	ppm	ASTM D5185m	350	<b>510</b>	489	455
Sulfur	ppm	ASTM D5185m	550	<b>1217</b>	1209	981
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.30</b>	0.31	0.31
Visc @ 40°C	cSt	ASTM D445	68.0	<b>68.9</b>	68.7	69.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0052453 **Received** : 07 Sep 2023  
**Lab Number** : 05945118 **Tested** : 08 Sep 2023  
**Unique Number** : 10635730 **Diagnosed** : 10 Sep 2023 - Don Baldrige  
**Test Package** : MAR 2 ( Additional Tests: PrtCount )

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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)