



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

Area

**DALE A HELLER**

Machine Id

**[DALE A HELLER] 011 - FLANKING 624201-11 - FL**

Component

**Hydraulic System**

Fluid

**CHEVRON RANDO HDZ 68 (--- 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>MW0055508</b>	MW06186650	MW0058849
Sample Date		Client Info		<b>28 May 2024</b>	01 May 2024	01 Nov 2023
Machine Age	hrs	Client Info		<b>75300</b>	74655	70500
Oil Age	hrs	Client Info		<b>0</b>	0	70500
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Not Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>3</b>	2	<1
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	0	0
Lead	ppm	ASTM D5185m	>20	<b>2</b>	2	<1
Copper	ppm	ASTM D5185m	>20	<b>22</b>	22	20
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

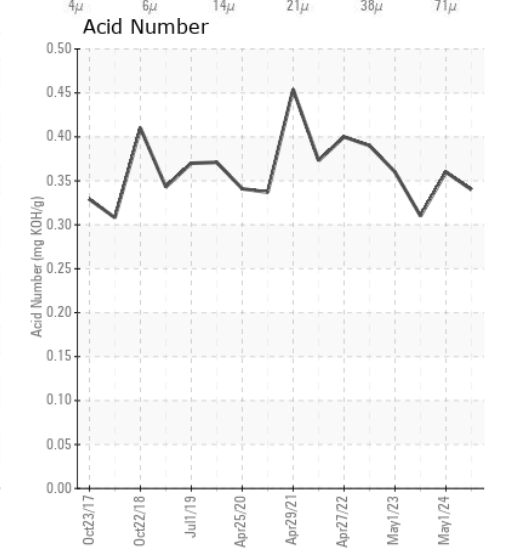
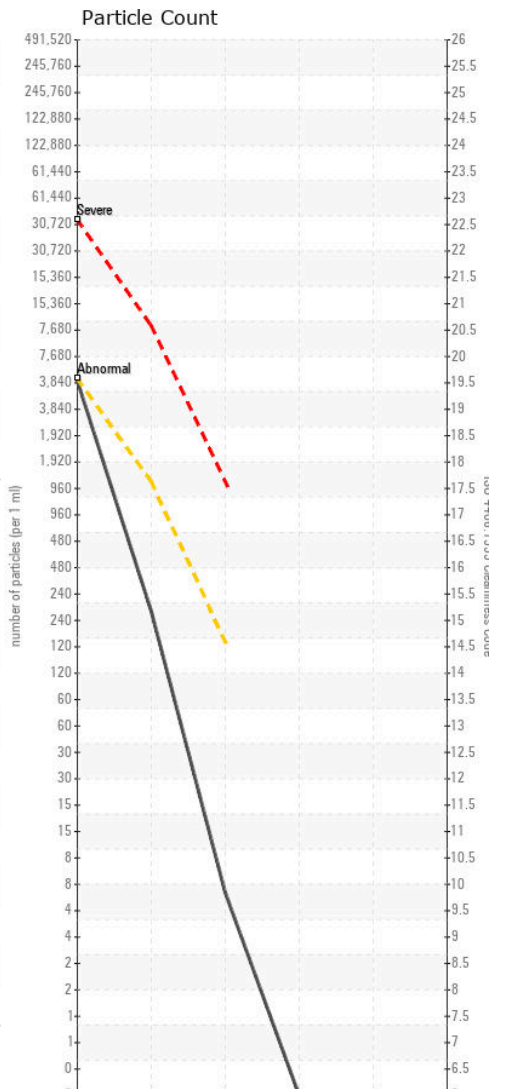
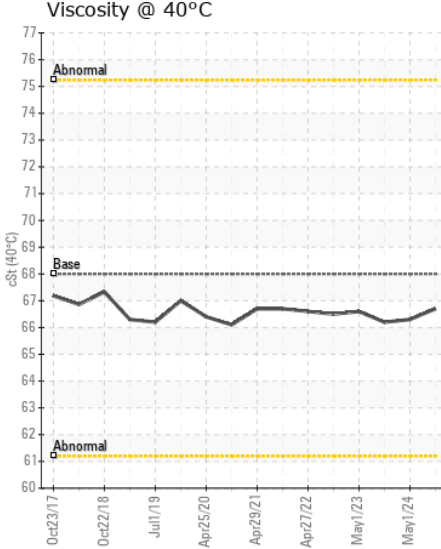
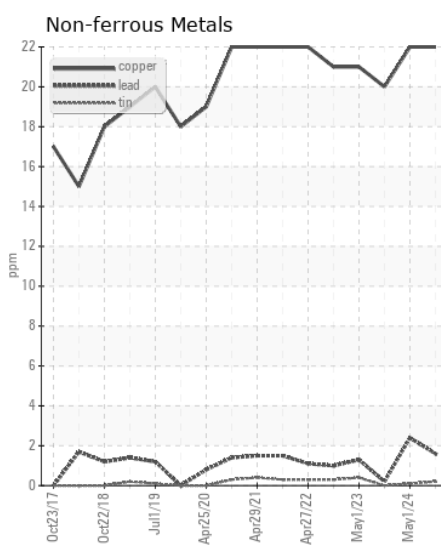
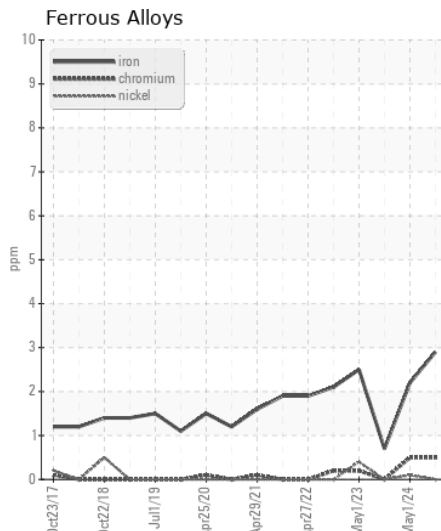
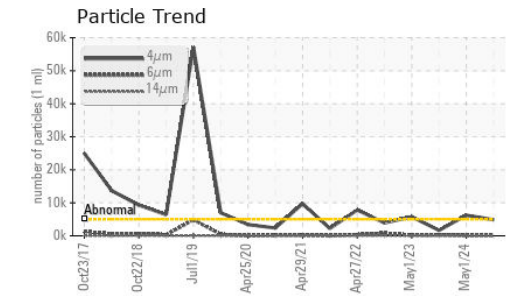
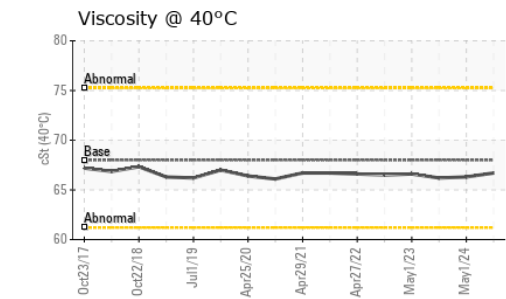
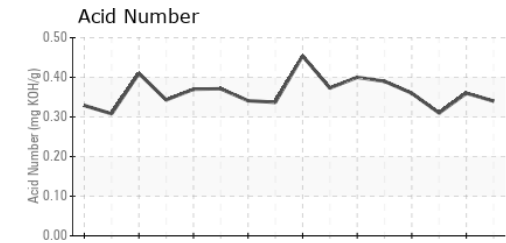
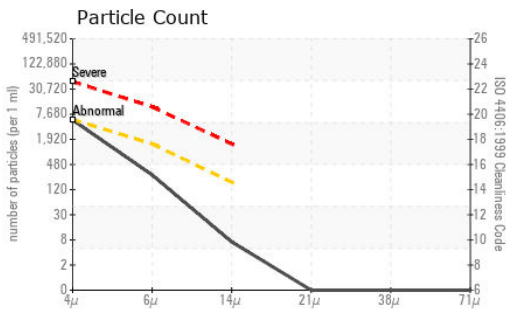
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>15	<b>1</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>4868</b>	6223	1650
Particles >6µm		ASTM D7647	>1300	<b>238</b>	159	289
Particles >14µm		ASTM D7647	>160	<b>6</b>	6	26
Particles >21µm		ASTM D7647	>40	<b>0</b>	1	5
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/15/10</b>	20/14/10	18/15/12
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	<1
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Calcium	ppm	ASTM D5185m	75	<b>46</b>	47	41
Phosphorus	ppm	ASTM D5185m	275	<b>390</b>	385	340
Zinc	ppm	ASTM D5185m	350	<b>485</b>	492	400
Sulfur	ppm	ASTM D5185m	550	<b>1020</b>	1102	953
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.34</b>	0.36	0.31
Visc @ 40°C	cSt	ASTM D445	68.0	<b>66.7</b>	66.3	66.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0055508  
**Lab Number** : 06210699  
**Unique Number** : 11083563  
**Test Package** : MAR 2  
**Received** : 14 Jun 2024  
**Tested** : 18 Jun 2024  
**Diagnosed** : 18 Jun 2024 - Wes Davis

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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)