



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
CHIP LACEY
Machine Id
[CHIP LACEY] 012 529830-12
Component
Auxiliary Steering
Fluid
CHEVRON RANDO HDZ 68 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0026017	MW0005383	MWM541314
Sample Date		Client Info		01 Feb 2024	01 Feb 2021	08 Jan 2021
Machine Age	hrs	Client Info		0	12267	11693
Oil Age	hrs	Client Info		0	12267	11693
Filter Age	hrs	Client Info		0	12267	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	0	<1	0
Chromium	ppm	ASTM D5185m	>15	<1	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	1	0	0
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>50	13	12	12
Tin	ppm	ASTM D5185m	>5	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

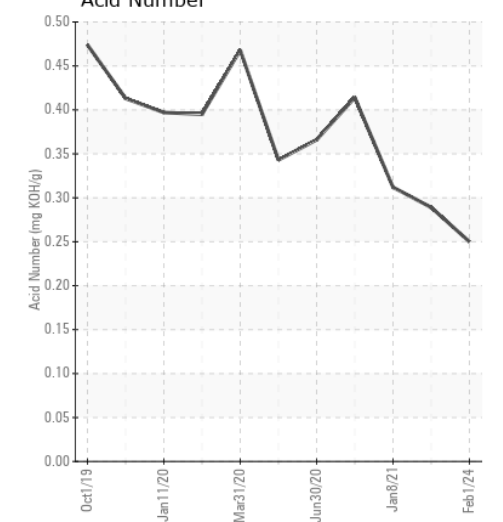
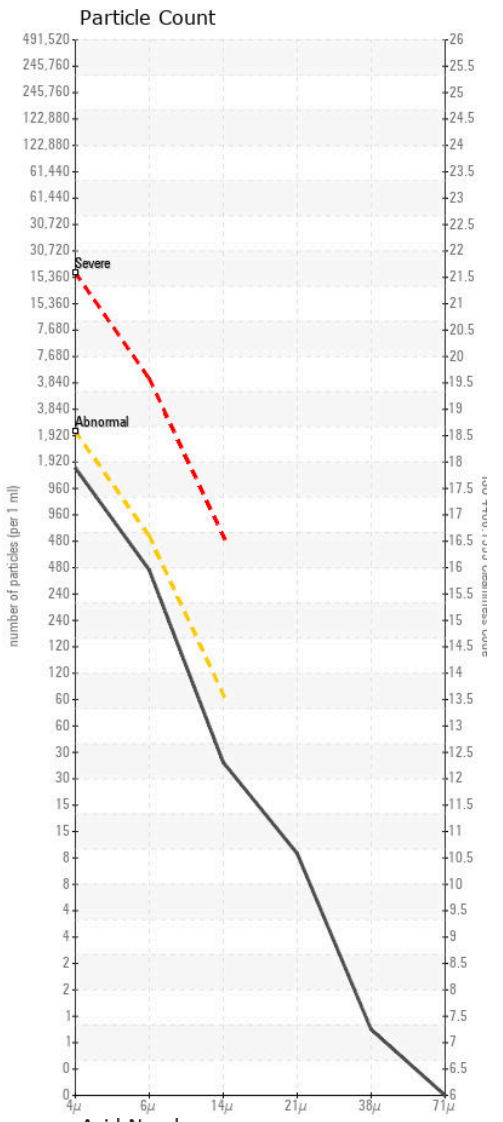
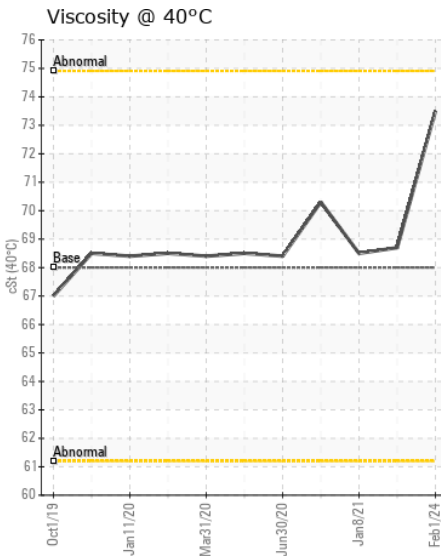
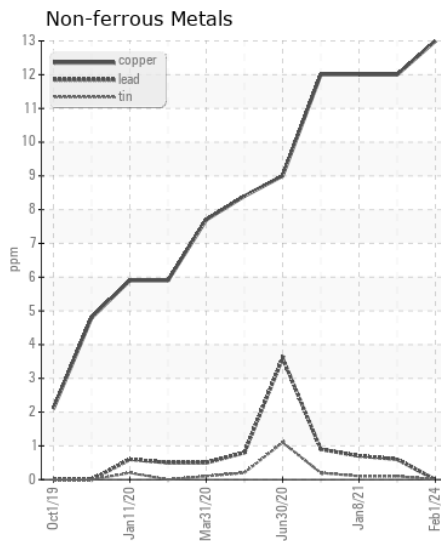
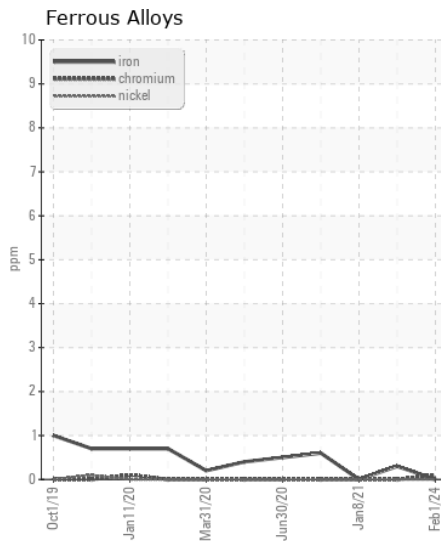
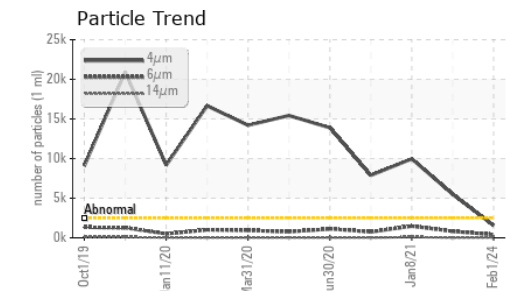
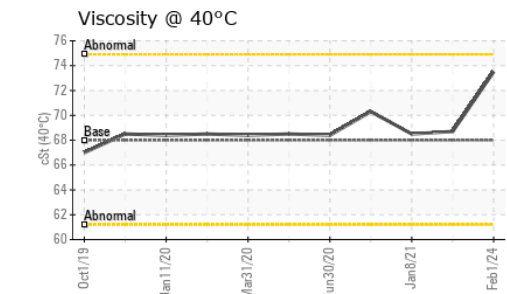
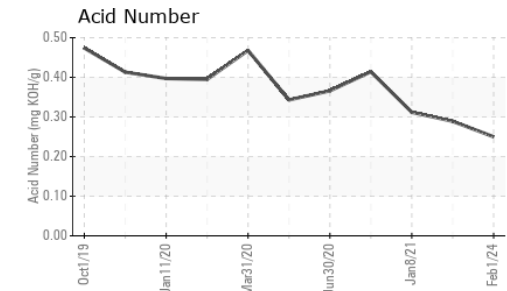
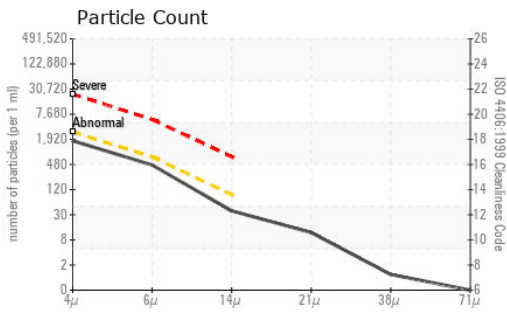
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185m	>15	0	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>2500	1556	▲ 5504	▲ 9965
Particles >6µm		ASTM D7647	>640	409	▲ 819	▲ 1481
Particles >14µm		ASTM D7647	>80	33	25	▲ 94
Particles >21µm		ASTM D7647	>20	10	7	▲ 39
Particles >38µm		ASTM D7647	>4	1	0	▲ 6
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	18/16/12	▲ 20/17/12	▲ 20/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	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		0	0	0
Boron	ppm	ASTM D5185m	0	0	<1	<1
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	0	1	0	0
Calcium	ppm	ASTM D5185m	75	50	62	60
Phosphorus	ppm	ASTM D5185m	275	316	368	364
Zinc	ppm	ASTM D5185m	350	366	441	442
Sulfur	ppm	ASTM D5185m	550	957	862	859
Acid Number (AN)	mg KOH/g	ASTM D8045		0.25	0.289	0.312
Visc @ 40°C	cSt	ASTM D445	68.0	73.5	68.7	68.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0026017
Lab Number : 06089526
Unique Number : 10876971
Test Package : MAR 2 (Additional Tests: PrtCount)

Received : 14 Feb 2024
Tested : 15 Feb 2024
Diagnosed : 16 Feb 2024 - Don Baldrige

INGRAM BARGE
 900 S 3RD ST
 PADUCAH, KY
 US 42003

Contact: ANTHONY VAN CURA
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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)

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