



Area
LB EDGIN
Machine Id
[LB EDGIN] 010 601230-10
Component
Steering
Fluid
CHEVRON RANDO HDZ 68 (--- 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		MW0055213	MW0055354	MW0061680
Sample Date		Client Info		05 May 2024	01 Nov 2023	01 Oct 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		1359	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	5	2	<1
Chromium	ppm	ASTM D5185m	>15	0	0	3
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	0	0	<1
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>50	0	0	<1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

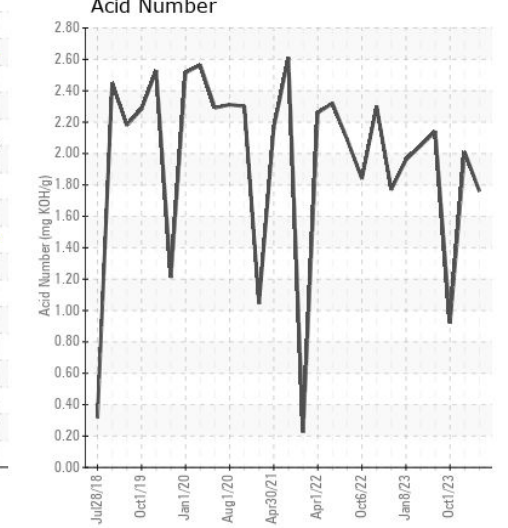
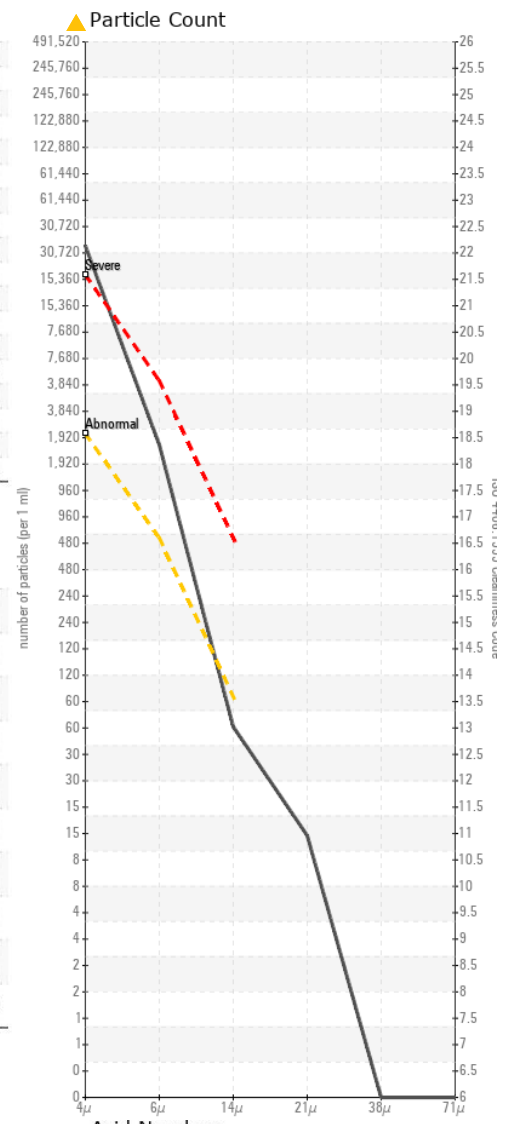
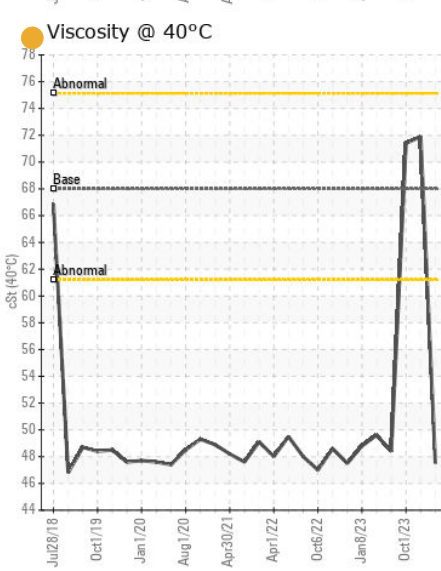
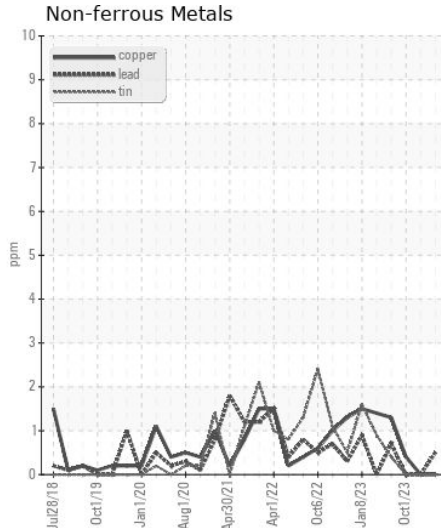
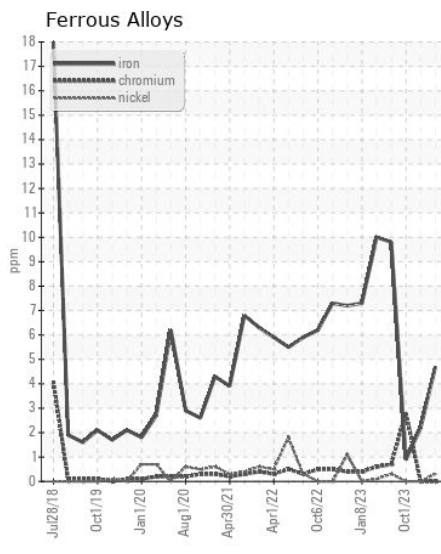
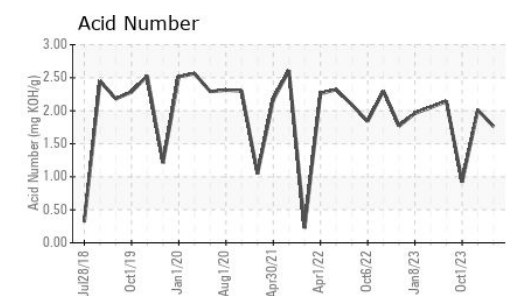
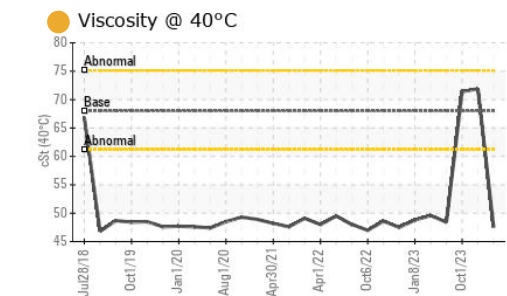
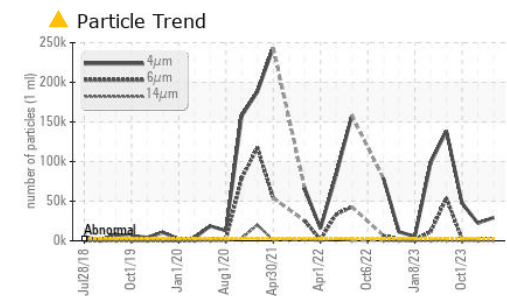
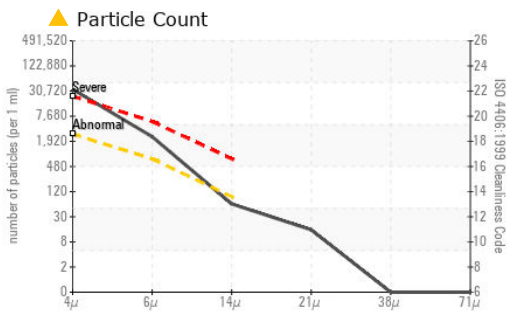
There is a high amount of silt (particulates < 14 microns in size) present in the fluid.

Silicon	ppm	ASTM D5185m	>15	3	2	2
Potassium	ppm	ASTM D5185m	>20	3	0	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>2500	▲ 29259	▲ 22331	▲ 47542
Particles >6µm		ASTM D7647	>640	▲ 2166	▲ 1226	▲ 1981
Particles >14µm		ASTM D7647	>80	54	55	64
Particles >21µm		ASTM D7647	>20	13	19	21
Particles >38µm		ASTM D7647	>4	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ 22/18/13	▲ 22/17/13	▲ 23/18/13
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

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		3	<1	2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	0	1	0	0
Calcium	ppm	ASTM D5185m	75	10	5	2
Phosphorus	ppm	ASTM D5185m	275	99	89	12
Zinc	ppm	ASTM D5185m	350	18	18	0
Sulfur	ppm	ASTM D5185m	550	770	625	685
Acid Number (AN)	mg KOH/g	ASTM D8045		1.76	2.01	0.92
Visc @ 40°C	cSt	ASTM D445	68.0	47.52	71.9	71.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0055213 **Received** : 10 May 2024
Lab Number : 06176067 **Tested** : 22 May 2024
Unique Number : 11022120 **Diagnosed** : 22 May 2024 - Jonathan Hester
Test Package : MAR 2 (Additional Tests: FT-IR, KV100, PrtCount, TBN)

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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)