



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
LIEBHERR A934C-HD-LI C-48 (S/N 045988-1007)
Component
Front Left Planetary
Fluid
CHEVRON MULTIGEAR EP5 80W90 (1 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0920326	WC0849436	WC0828419
Sample Date		Client Info		26 Jun 2024	20 Oct 2023	23 Jun 2023
Machine Age	hrs	Client Info		26123	25439	25091
Oil Age	hrs	Client Info		2000	348	1124
Filter Age	hrs	Client Info		0	348	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Not Changed	N/A	Changed
Sample Status				ATTENTION	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	22	14	12
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	0
Lead	ppm	ASTM D5185m	>25	0	<1	0
Copper	ppm	ASTM D5185m	>75	4	2	2
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

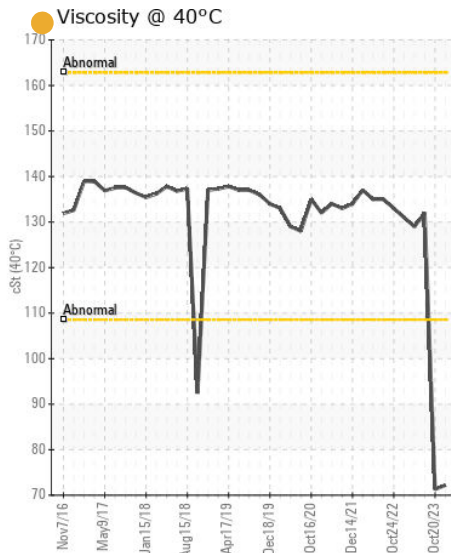
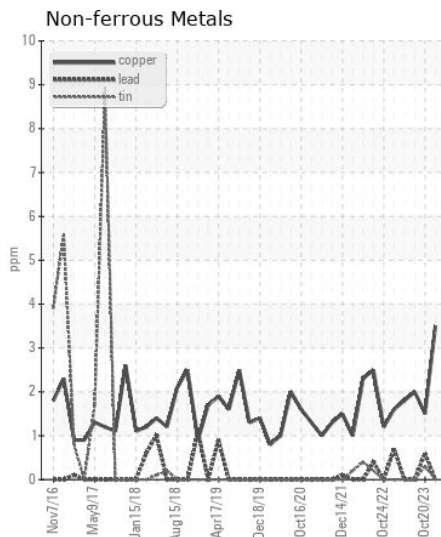
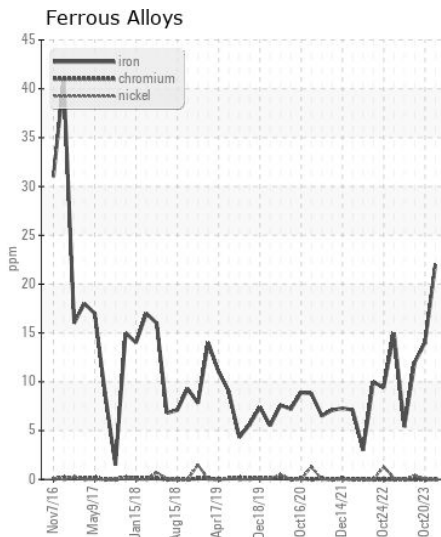
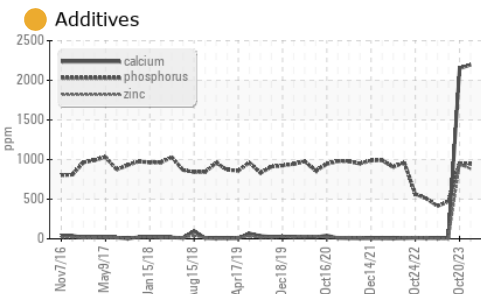
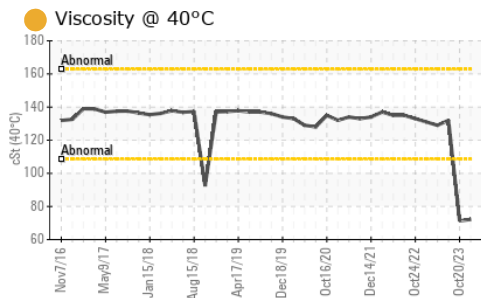
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	10	6	<1
Potassium	ppm	ASTM D5185m	>20	2	2	2
Water		WC Method	>0.2	NEG	NEG	NEG
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 oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		1	<1	0
Boron	ppm	ASTM D5185m		102	103	73
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		10	12	<1
Calcium	ppm	ASTM D5185m		2196	2150	7
Phosphorus	ppm	ASTM D5185m		945	950	473
Zinc	ppm	ASTM D5185m		884	938	8
Sulfur	ppm	ASTM D5185m		10493	8324	18717
Visc @ 40°C	cSt	ASTM D445		72.2	71.3	132



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0920326

Lab Number : 06223880

Unique Number : 11102077

Test Package : CONST

Received : 28 Jun 2024

Tested : 29 Jun 2024

Diagnosed : 30 Jun 2024 - Don Baldrige

FRANKLIN IRON & METAL CORP

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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)