



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR 944B-HD C-41 (S/N 022530-744)
Component
Front Left Planetary
Fluid
CHEVRON MULTIGEAR EP5 80W90 (3 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0899776	WC0819319	WC0833549
Sample Date		Client Info		29 Jan 2024	07 Oct 2023	04 Aug 2023
Machine Age	hrs	Client Info		39252	37486	37154
Oil Age	hrs	Client Info		938	332	290
Filter Age	hrs	Client Info		0	332	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Not Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>750	166	113	132
Chromium	ppm	ASTM D5185m	>5	<1	1	<1
Nickel	ppm	ASTM D5185m	>3	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>15	2	4	4
Lead	ppm	ASTM D5185m	>25	0	<1	<1
Copper	ppm	ASTM D5185m	>45	4	2	4
Tin	ppm	ASTM D5185m	>3	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

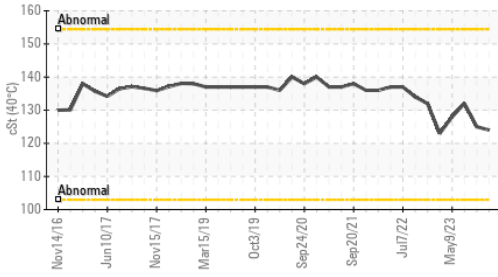
Silicon	ppm	ASTM D5185m	>75	15	14	18
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

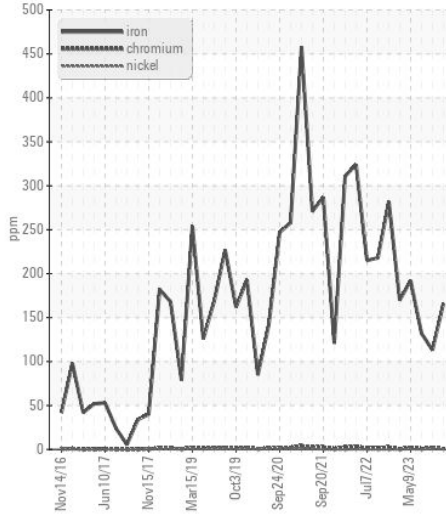
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	<1	0
Boron	ppm	ASTM D5185m		16	15	31
Barium	ppm	ASTM D5185m		<1	2	0
Molybdenum	ppm	ASTM D5185m		1	<1	2
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		8	7	8
Calcium	ppm	ASTM D5185m		37	31	45
Phosphorus	ppm	ASTM D5185m		459	430	351
Zinc	ppm	ASTM D5185m		5	17	10
Sulfur	ppm	ASTM D5185m		19677	18849	20396
Visc @ 40°C	cSt	ASTM D445		124	125	132

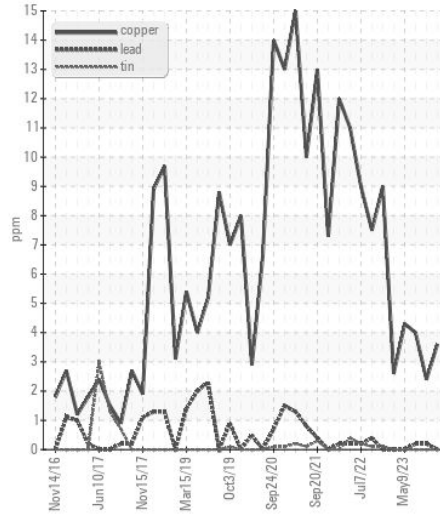
Viscosity @ 40°C



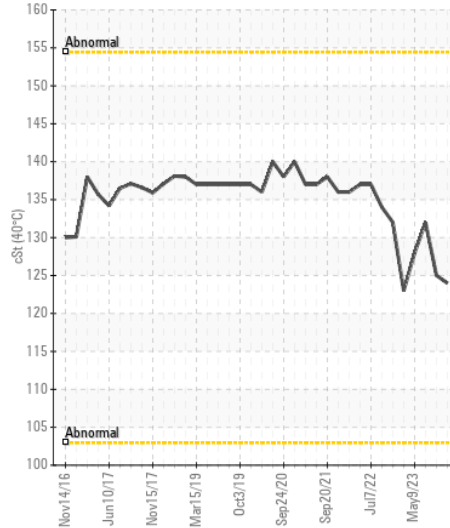
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0899776 **Received** : 01 Feb 2024
Lab Number : 06077235 **Diagnosed** : 02 Feb 2024
Unique Number : 10859326 **Diagnostician** : Wes Davis
Test Package : CONST

FRANKLIN IRON & METAL CORP
 1939 EAST 1ST ST
 DAYTON, OH
 US 45403
 Contact: BILL PITTL JR
 parts@frankliniron.com
 T: (937)253-8184
 F:

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)