CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR R954H DV C-35 (S/N 000369-569)
Component
Diesel Engine
Fluid
CONOCO PHILLIPS GUARDOL ECT 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

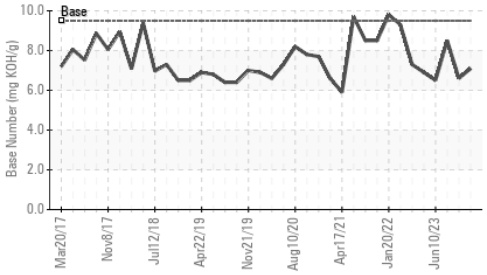
There is no indication of any contamination in the oil.

FLUID CONDITION

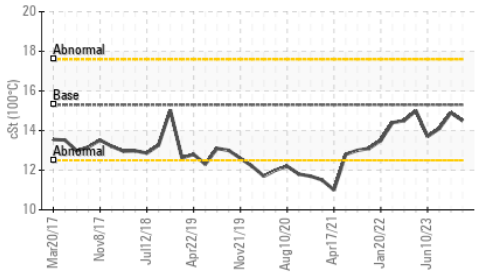
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0879517	WC0879503	WC0869312
Sample Date		Client Info		08 Feb 2024	26 Dec 2023	01 Nov 2023
Machine Age	hrs	Client Info		48381	48127	47859
Oil Age	hrs	Client Info		254	1002	254
Filter Age	hrs	Client Info		254	1002	254
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	16	17	10
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		98	83	84
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	4	2
Lead	ppm	ASTM D5185m	>30	2	3	<1
Copper	ppm	ASTM D5185m	>125	2	2	2
Tin	ppm	ASTM D5185m	>5	<1	2	<1
Vanadium	ppm	ASTM D5185m		1	2	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>60	7	7	11
Potassium	ppm	ASTM D5185m	>20	4	3	5
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	10.6	10.8	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	23.8	20.6
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
Sodium	ppm	ASTM D5185m		1	6	0
Boron	ppm	ASTM D5185m	85	128	114	142
Barium	ppm	ASTM D5185m		12	<1	5
Molybdenum	ppm	ASTM D5185m		2	10	8
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	350	429	545	442
Calcium	ppm	ASTM D5185m	1800	1913	1911	1731
Phosphorus	ppm	ASTM D5185m	1000	1116	1133	1034
Zinc	ppm	ASTM D5185m	1100	1274	1400	1217
Sulfur	ppm	ASTM D5185m	3500	4601	3988	3676
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.8	21.9	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	7.1	6.6	8.5
Visc @ 100°C	cSt	ASTM D445	15.3	14.5	14.9	14.1

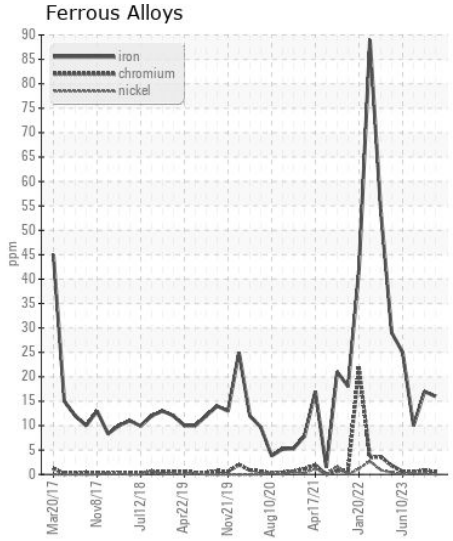
Base Number



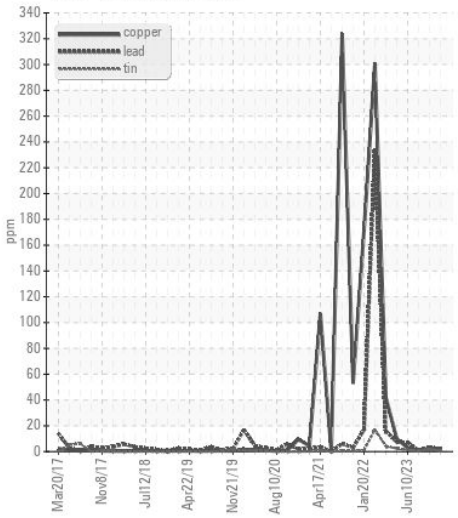
Viscosity @ 100°C



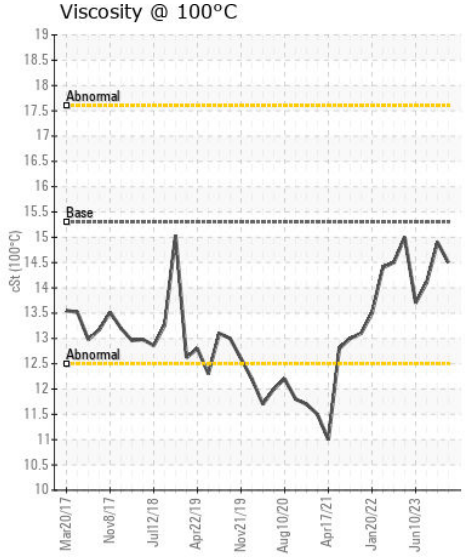
Ferrous Alloys



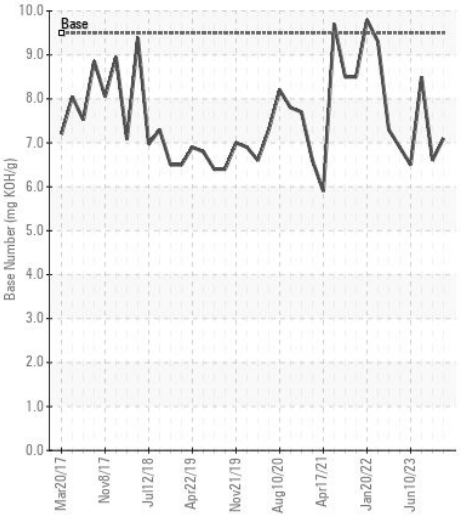
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0879517
Lab Number : 06088610
Unique Number : 10876055
Test Package : CONST (Additional Tests: TBN)

Received : 14 Feb 2024
Tested : 15 Feb 2024
Diagnosed : 15 Feb 2024 - Wes Davis

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)

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