



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
AMR-Sedalia
 Machine Id
567149 LIEBHERR LH50 124549
 Component
Swing Drive
 Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0018461	DJJ0018631	DJJ0019056
Sample Date		Client Info		15 Mar 2024	14 Nov 2023	14 Jul 2023
Machine Age	hrs	Client Info		4584	4066	3531
Oil Age	hrs	Client Info		500	1000	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>400	2	135	33
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	1	0
Lead	ppm	ASTM D5185m	>50	<1	0	0
Copper	ppm	ASTM D5185m	>200	<1	50	40
Tin	ppm	ASTM D5185m	>10	<1	3	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

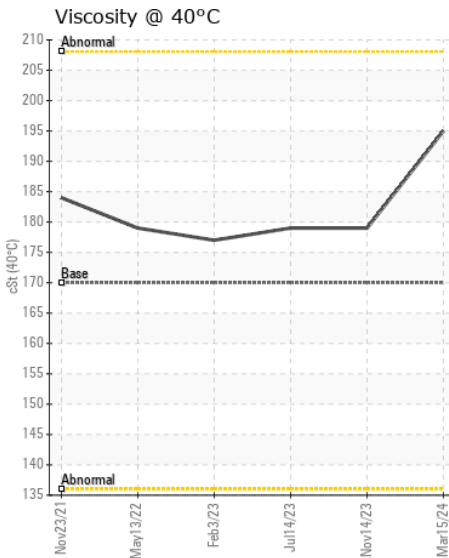
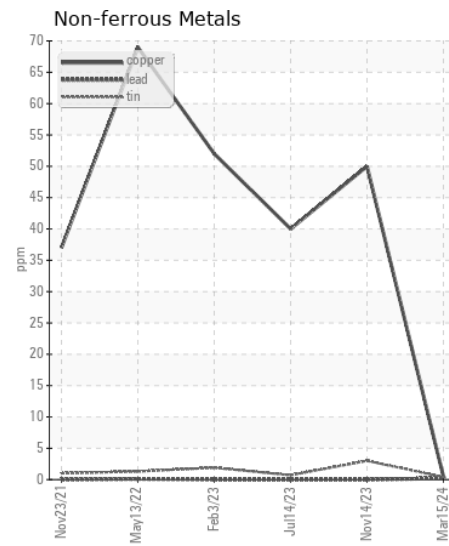
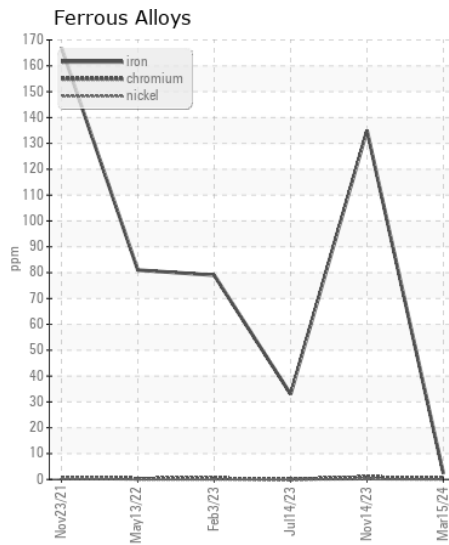
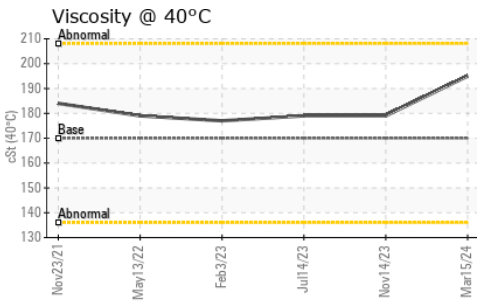
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	1	1	0
Potassium	ppm	ASTM D5185m	>20	2	2	<1
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	0	<1
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	0
Manganese	ppm	ASTM D5185m	0	0	<1	0
Magnesium	ppm	ASTM D5185m	<1	<1	<1	<1
Calcium	ppm	ASTM D5185m	<1	9	24	24
Phosphorus	ppm	ASTM D5185m	2143	2125	2287	2274
Zinc	ppm	ASTM D5185m	<1	5	20	22
Sulfur	ppm	ASTM D5185m	23468	29016	30226	33422
Visc @ 40°C	cSt	ASTM D445	170	195	179	179



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0018461
Lab Number : 06125180
Unique Number : 10939331
Test Package : CONST

Received : 21 Mar 2024
Tested : 24 Mar 2024
Diagnosed : 24 Mar 2024 - Wes Davis

ADVANTAGE METALS RECYCLING - SEDALIA
 300 N IRON AVE
 SEDALIA, MO
 US 65301

Contact: SCOTT TUTTLE
 scott.tuttle@advantagerecycling.com

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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