



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
AMR-Sedalia
Machine Id
233141 LIEBHERR LH50M 1203-75764
Component
Front Differential
Fluid
LIEBHERR GEAR BASIC 90 LS (7 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0019067	DJJ0018643	DJJ0018423
Sample Date		Client Info		09 Apr 2024	01 Dec 2023	31 Jul 2023
Machine Age	hrs	Client Info		14835	14337	13834
Oil Age	hrs	Client Info		500	0	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
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	>150	<1	<1	34
Chromium	ppm	ASTM D5185m	>2	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>4	<1	0	0
Aluminum	ppm	ASTM D5185m	>7	1	0	3
Lead	ppm	ASTM D5185m	>4	3	0	0
Copper	ppm	ASTM D5185m	>135	2	14	7
Tin	ppm	ASTM D5185m	>3	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

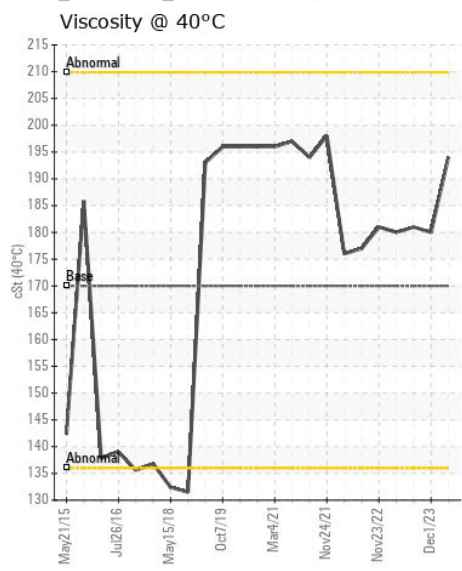
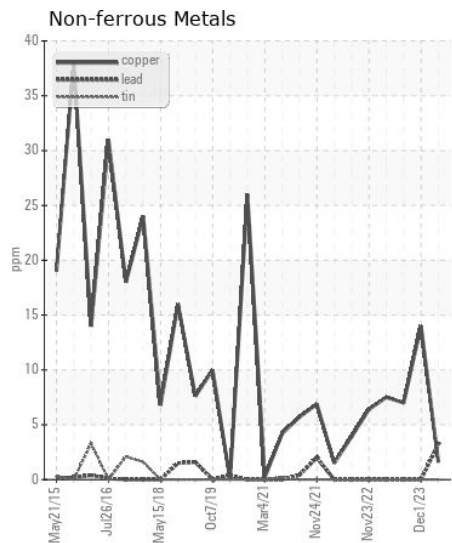
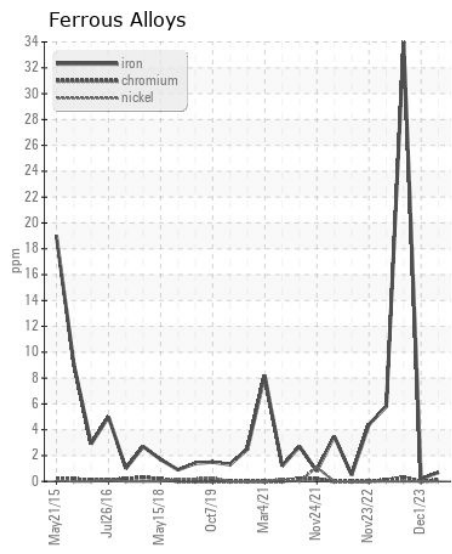
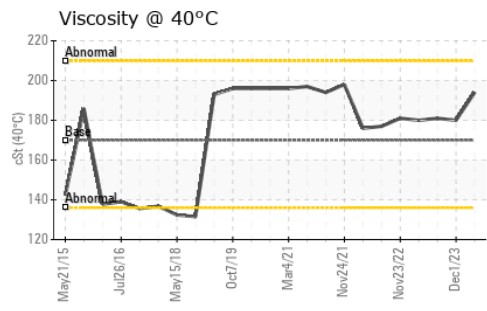
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<1	<1	8
Potassium	ppm	ASTM D5185m	>20	<1	6	2
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	LIGHT
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		4	5	2
Boron	ppm	ASTM D5185m	0	0	0	1
Barium	ppm	ASTM D5185m	0	3	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0	<1
Magnesium	ppm	ASTM D5185m	<1	5	0	5
Calcium	ppm	ASTM D5185m	<1	22	27	58
Phosphorus	ppm	ASTM D5185m	2143	2329	2282	2637
Zinc	ppm	ASTM D5185m	<1	13	10	34
Sulfur	ppm	ASTM D5185m	23468	49404	28453	40516
Visc @ 40°C	cSt	ASTM D445	170	194	180	181



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0019067
Lab Number : 06150722
Unique Number : 10980800
Test Package : CONST
Received : 16 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 18 Apr 2024 - Don Baldrige

ADVANTAGE METALS RECYCLING - SEDALIA
 300 N IRON AVE
 SEDALIA, MO
 US 65301
 Contact: SCOTT TUTTLE
 scott.tuttle@advantagerecycling.com
 T: (660)827-1873
 F: (660)827-5304

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)