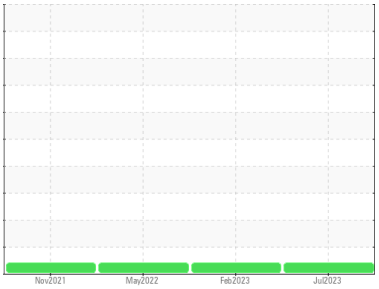
PROBLEM SUMMARY

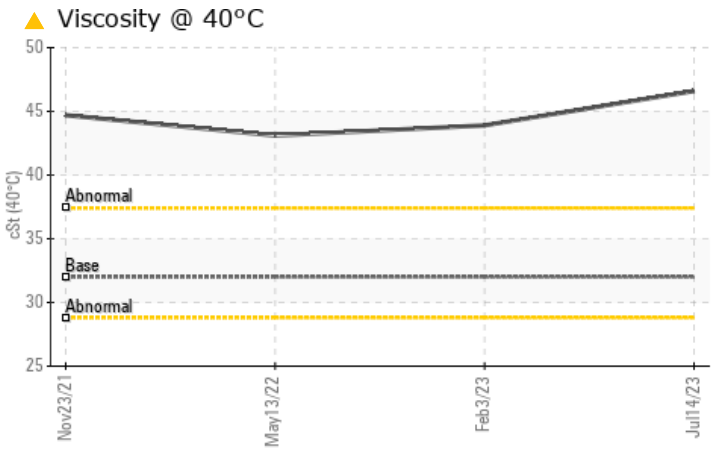
Area
AMR-Sedalia
Machine Id
LIEBHERR LH50 124549
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 32 (--- GAL)

Sample Rating Trend



VISCOSITY

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	ATTENTION	ATTENTION
Visc @ 40°C	cSt	ASTM D445	32	▲ **46.6**	▲ 43.9	▲ 43.1

Customer Id: ADVSED
Sample No.: DJJ0019054
Lab Number: 05903724
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

03 Feb 2023 Diag: Don Baldridge

VISCOSITY

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report

13 May 2022 Diag: Don Baldridge

VISCOSITY

Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report

23 Nov 2021 Diag: Don Baldridge

ISO

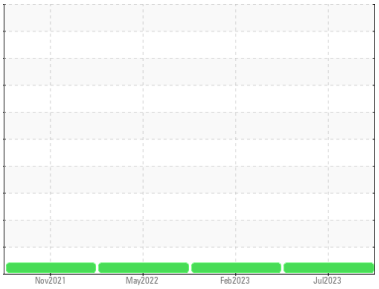
The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Area
AMR-Sedalia
Machine Id
LIEBHERR LH50 124549
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 32 (--- GAL)

Sample Rating Trend



VISCOSITY

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition
Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**DJJ0019054**	DJJ0018619	DJJ0015129
Sample Date		Client Info		**14 Jul 2023**	03 Feb 2023	13 May 2022
Machine Age	hrs	Client Info		**3531**	2654	1398
Oil Age	hrs	Client Info		**500**	2000	1000
Oil Changed		Client Info		**Not Changd**	Changed	Not Changd
Sample Status				**ATTENTION**	ATTENTION	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**15**	36	19
Chromium	ppm	ASTM D5185m	>5	**0**	<1	0
Nickel	ppm	ASTM D5185m	>2	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>2	**<1**	0	0
Lead	ppm	ASTM D5185m	>4	**0**	<1	0
Copper	ppm	ASTM D5185m	>10	**<1**	3	2
Tin	ppm	ASTM D5185m	>2	**0**	0	0
Antimony	ppm	ASTM D5185m	>2	**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	**0**	0	0
Barium	ppm	ASTM D5185m	5	**0**	0	0
Molybdenum	ppm	ASTM D5185m	5	**0**	<1	0
Manganese	ppm	ASTM D5185m		**<1**	<1	0
Magnesium	ppm	ASTM D5185m	25	**0**	2	0
Calcium	ppm	ASTM D5185m	200	**174**	696	1299
Phosphorus	ppm	ASTM D5185m	300	**364**	430	627
Zinc	ppm	ASTM D5185m	370	**482**	519	659
Sulfur	ppm	ASTM D5185m	2500	**1377**	2311	3124

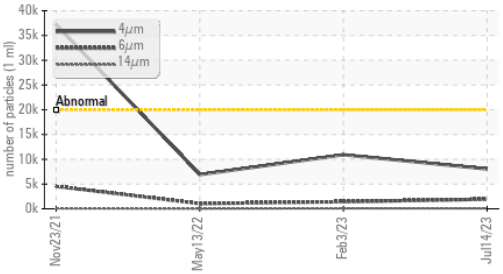
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>17	**0**	1	0
Sodium	ppm	ASTM D5185m		**<1**	1	2
Potassium	ppm	ASTM D5185m	>20	**0**	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	**8064**	10916	6913
Particles >6µm		ASTM D7647	>5000	**1937**	1438	1055
Particles >14µm		ASTM D7647	>640	**84**	98	43
Particles >21µm		ASTM D7647	>160	**17**	20	8
Particles >38µm		ASTM D7647	>40	**0**	1	0
Particles >71µm		ASTM D7647	>10	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**20/18/14**	21/18/14	20/17/13

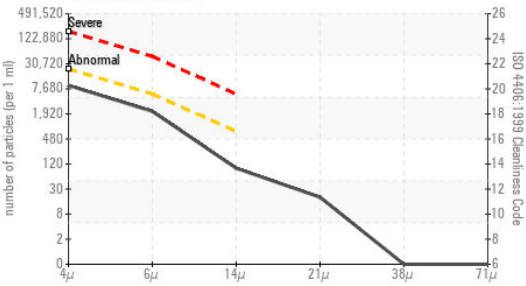
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	**0.54**	0.71	1.223

OIL ANALYSIS REPORT

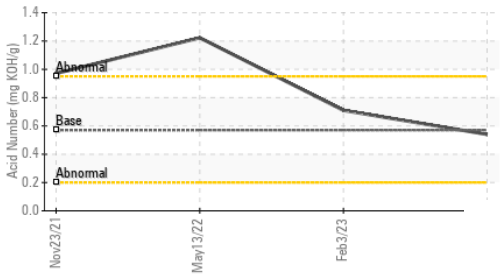
Particle Trend



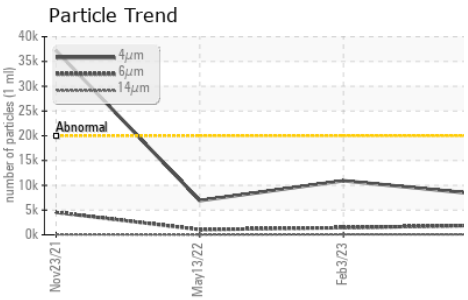
Particle Count



Acid Number



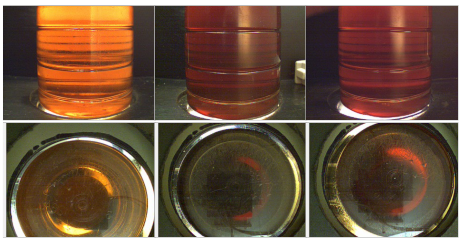
Particle Trend



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
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	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

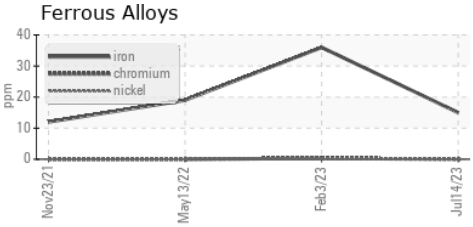
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	▲ **46.6**	▲ 43.9	▲ 43.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

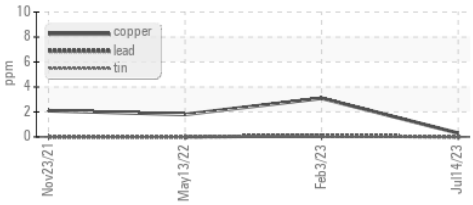


GRAPHS

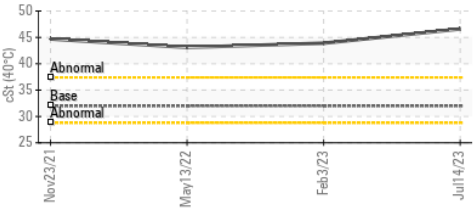
Ferrous Alloys



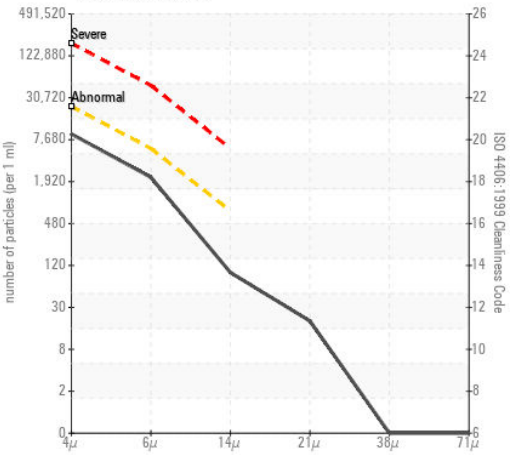
Non-ferrous Metals



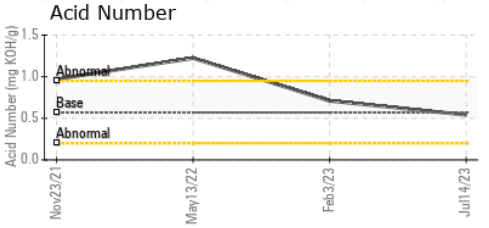
▲ Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0019054
Lab Number : 05903724
Unique Number : 10565080
Test Package : CONST

Received : 20 Jul 2023
Diagnosed : 24 Jul 2023
Diagnostician : Don Baldridge

Certificate L2367

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)

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