



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
AMR-12 Street
Machine Id
339324 LIEBHERR LH60 1204-86896
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (240 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0017275	DJJ0013836	DJJ0017126
Sample Date		Client Info		11 Jun 2024	03 Feb 2024	02 Feb 2024
Machine Age	hrs	Client Info		15501	15292	15292
Oil Age	hrs	Client Info		0	1250	1250
Filter Age	hrs	Client Info		0	250	250
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>60	3	8	7
Chromium	ppm	ASTM D5185m	>40	<1	2	2
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	<1	0	0
Lead	ppm	ASTM D5185m	>5	0	0	0
Copper	ppm	ASTM D5185m	>15	2	2	2
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

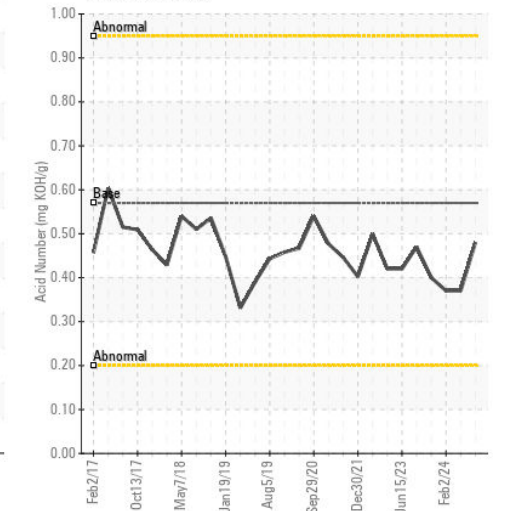
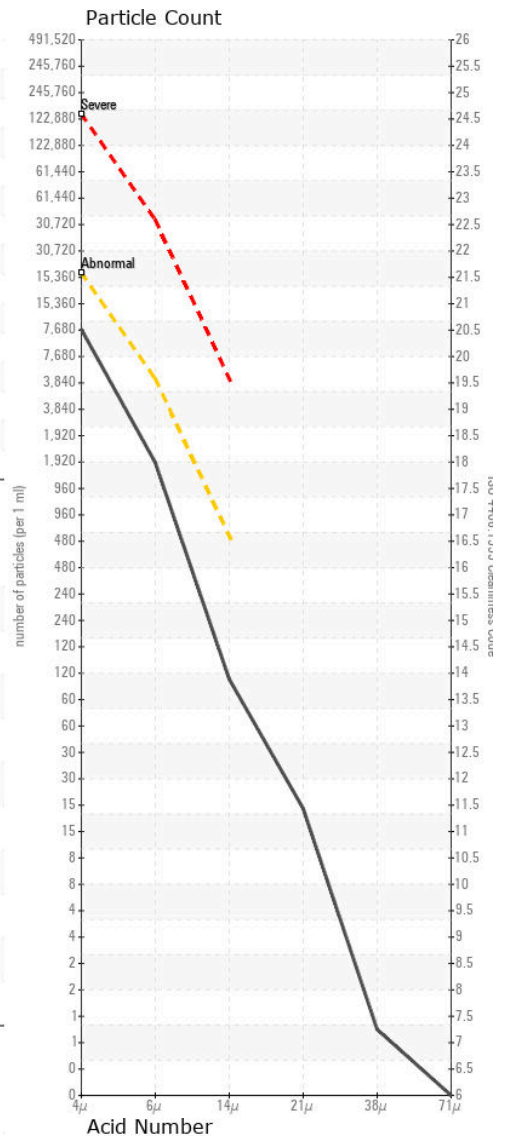
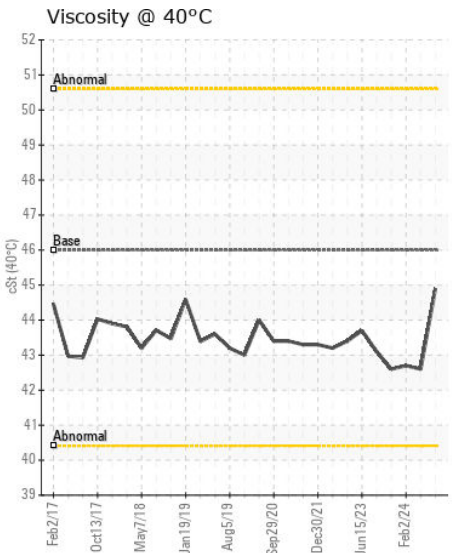
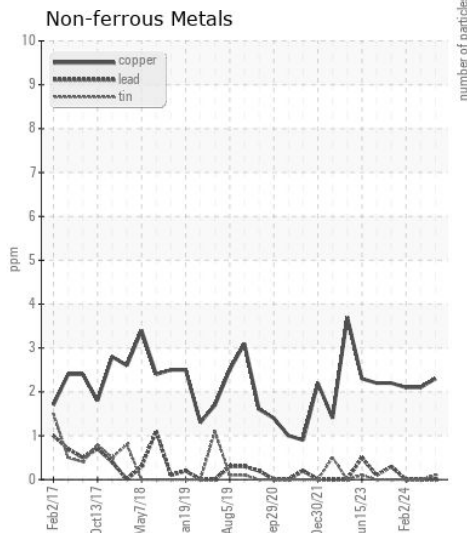
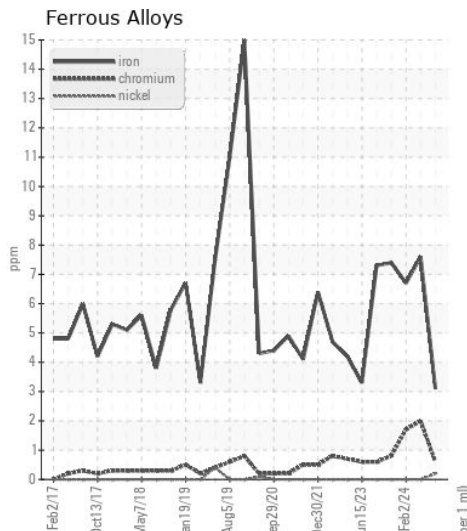
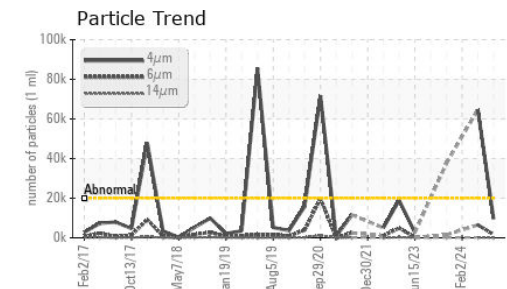
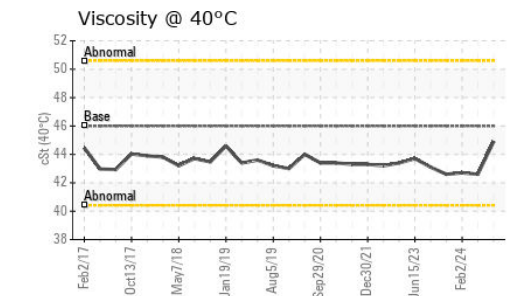
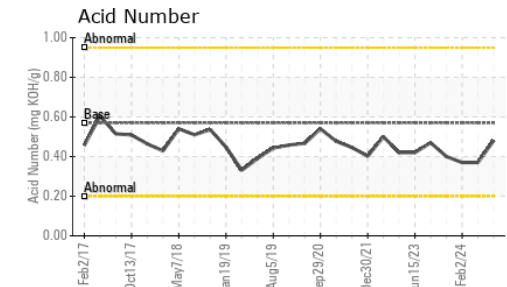
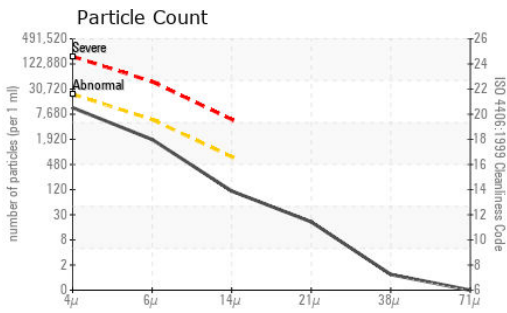
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>15	1	1	<1
Potassium	ppm	ASTM D5185m	>20	3	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	9546	▲ 64695	---
Particles >6µm		ASTM D7647	>5000	1667	● 6513	---
Particles >14µm		ASTM D7647	>640	98	178	---
Particles >21µm		ASTM D7647	>160	18	28	---
Particles >38µm		ASTM D7647	>40	1	1	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/18/14	▲ 23/20/15	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	▲ MODER
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

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	1	1
Boron	ppm	ASTM D5185m	5	7	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	25	12	0	0
Calcium	ppm	ASTM D5185m	200	93	69	81
Phosphorus	ppm	ASTM D5185m	300	374	328	331
Zinc	ppm	ASTM D5185m	370	460	405	411
Sulfur	ppm	ASTM D5185m	2500	1084	875	898
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.48	0.37	0.37
Visc @ 40°C	cSt	ASTM D445	46	44.9	42.6	42.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0017275
Lab Number : 06215757
Unique Number : 11088621
Test Package : CONST

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 2024 - Wes Davis

ADVANTAGE METALS RECYCLING - 12 STREET
 1153 S. 12TH STREET
 KANSAS CITY, KS
 US 66105

Contact: JOHN PEEK
 john.peek@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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