OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
RMR-Somerset
Machine Id
18892 LIEBHERR A934 028807-935
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 68 (120 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

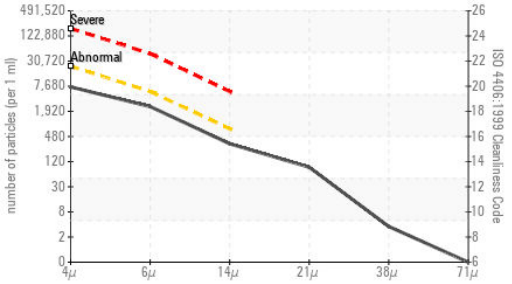
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

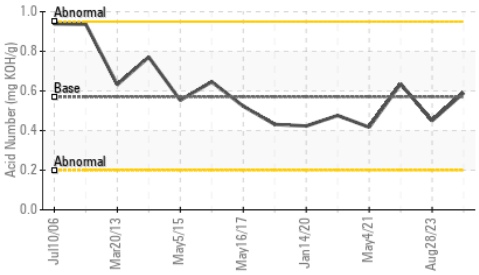
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0021699	DJJ0017781	DJJ0011942
Sample Date		Client Info		16 Apr 2024	28 Aug 2023	02 Nov 2021
Machine Age	hrs	Client Info		19831	19131	16982
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Changed	Not Changd
Sample Status				NORMAL	ATTENTION	NORMAL
Iron	ppm	ASTM D5185m	>50	9	13	7
Chromium	ppm	ASTM D5185m	>5	8	11	4
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>2	0	3	<1
Lead	ppm	ASTM D5185m	>5	<1	<1	<1
Copper	ppm	ASTM D5185m	>15	5	7	5
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	8	10	8
Potassium	ppm	ASTM D5185m	>20	2	3	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	6422	7675	3016
Particles >6µm		ASTM D7647	>5000	2183	618	668
Particles >14µm		ASTM D7647	>640	283	15	70
Particles >21µm		ASTM D7647	>160	78	3	16
Particles >38µm		ASTM D7647	>40	3	0	2
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/18/15	20/16/11	19/17/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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
Sodium	ppm	ASTM D5185m		5	5	5
Boron	ppm	ASTM D5185m	5	35	39	37
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	28	29	26
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	25	103	114	107
Calcium	ppm	ASTM D5185m	200	522	670	526
Phosphorus	ppm	ASTM D5185m	300	453	413	443
Zinc	ppm	ASTM D5185m	370	496	505	473
Sulfur	ppm	ASTM D5185m	2500	2089	2182	1678
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.59	0.45	0.635
Visc @ 40°C	cSt	ASTM D445	68	46.2	44.0	43.9

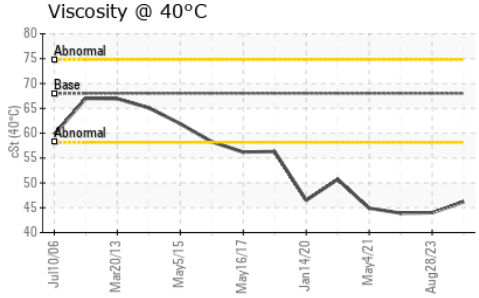
Particle Count



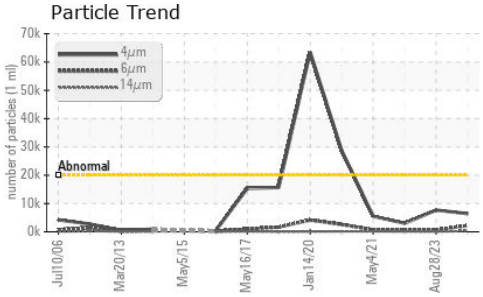
Acid Number



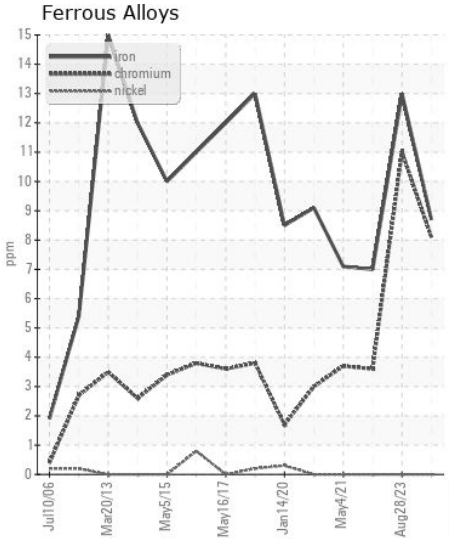
Viscosity @ 40°C



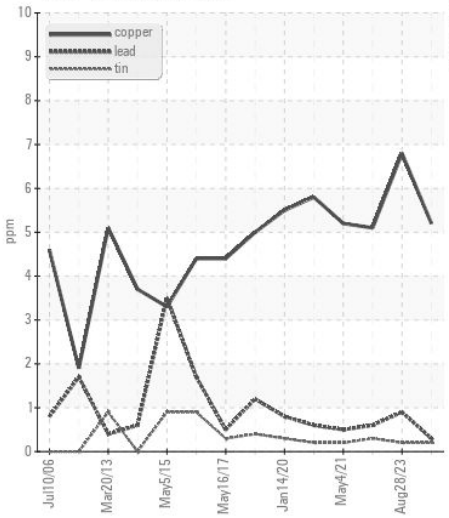
Particle Trend



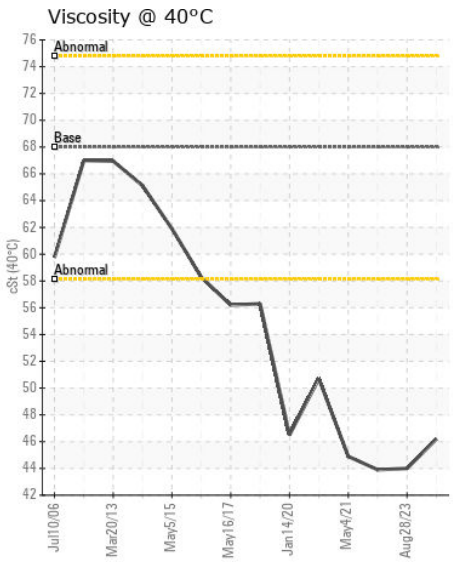
Ferrous Alloys



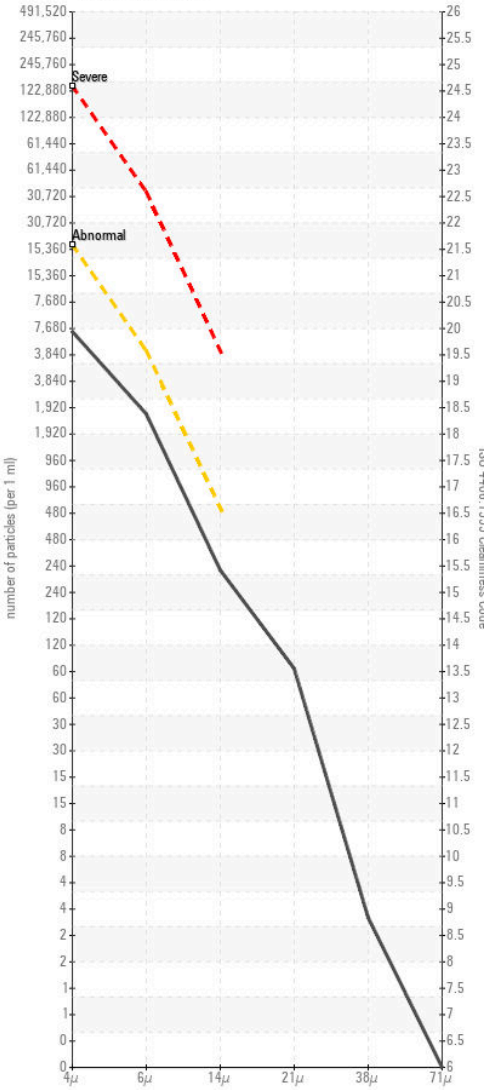
Non-ferrous Metals



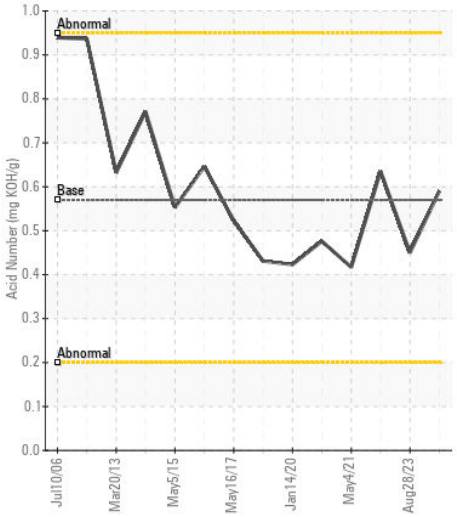
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0021699
Lab Number : 06154303
Unique Number : 10989726
Test Package : MOBCE

Received : 19 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 23 Apr 2024 - Jonathan Hester

RIVER METALS RECYCLING - SOMERSET
905 CRANE ROAD
SOMERSET, KY
US 42501
Contact: RYAN BOWDEN

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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