



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
RMR-Xenia
 Machine Id
18528 LIEBHERR R944 005448-651
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0017794	DJJ0018008	DJJ0004278
Sample Date		Client Info		24 May 2024	13 Mar 2023	11 Dec 2020
Machine Age	hrs	Client Info		10032	9577	9026
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	27	8	15
Chromium	ppm	ASTM D5185m	>15	7	6	12
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>8	<1	2	<1
Lead	ppm	ASTM D5185m	>5	<1	<1	0
Copper	ppm	ASTM D5185m	>15	5	4	5
Tin	ppm	ASTM D5185m	>5	0	<1	<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

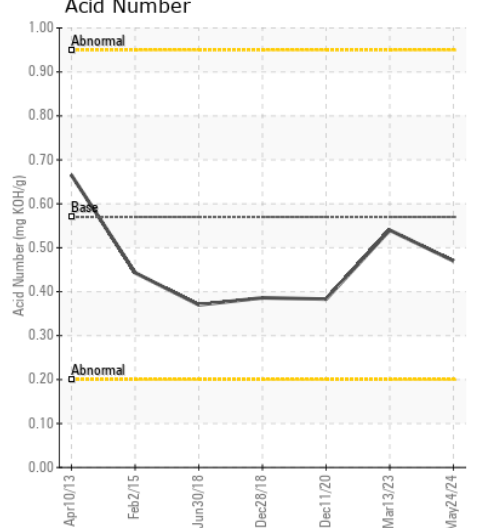
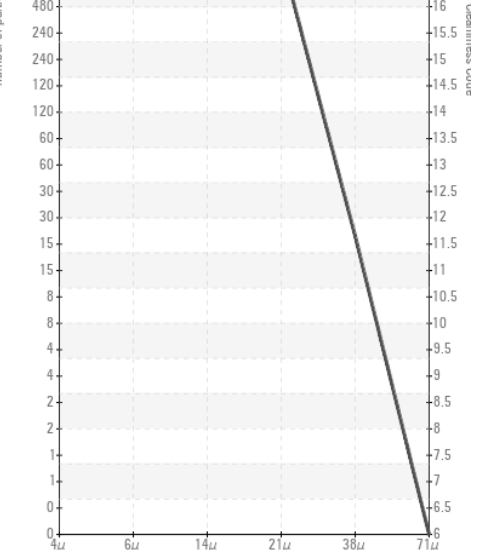
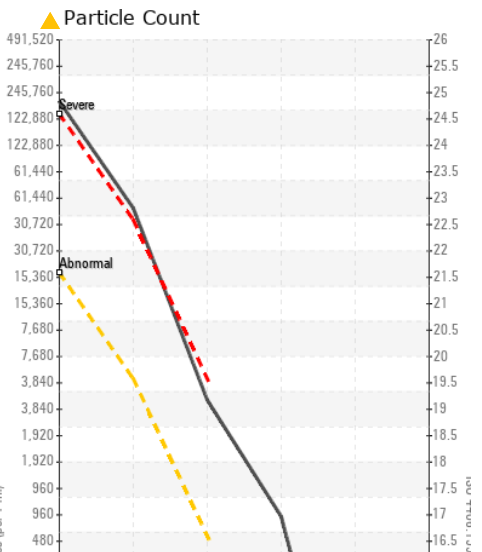
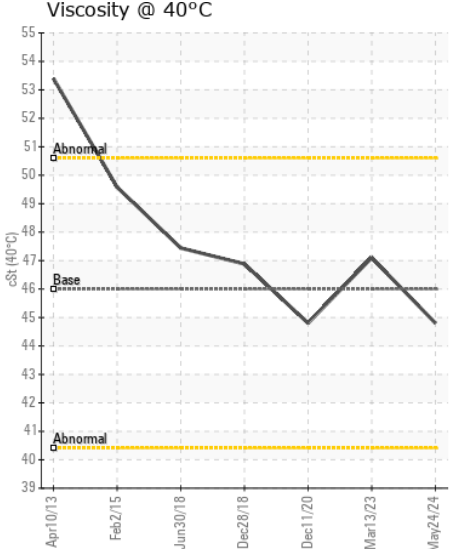
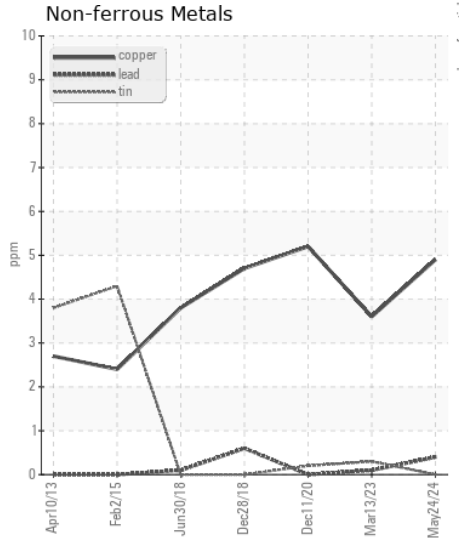
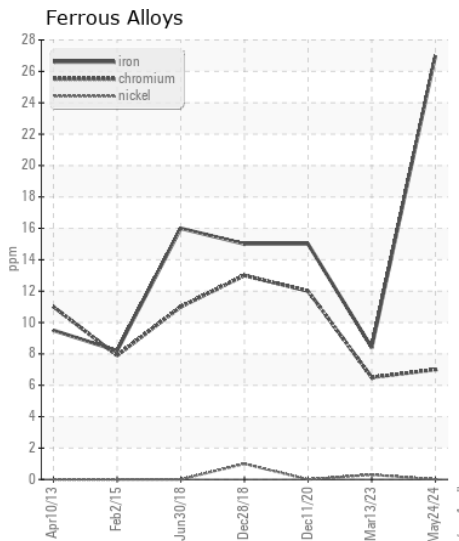
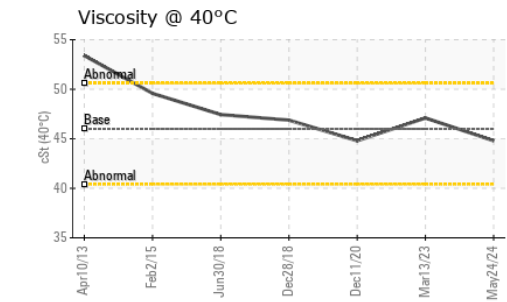
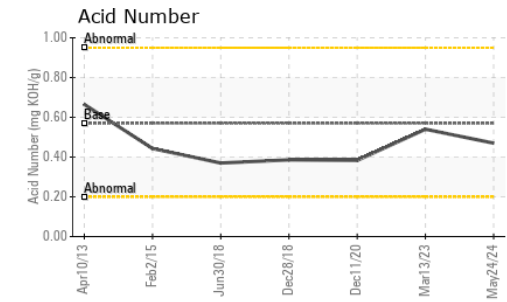
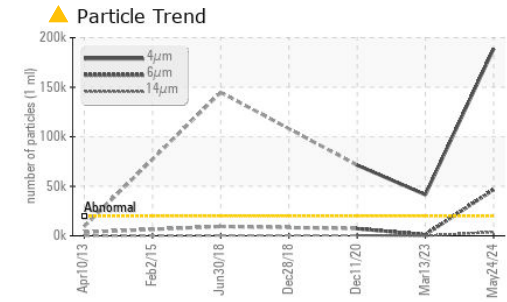
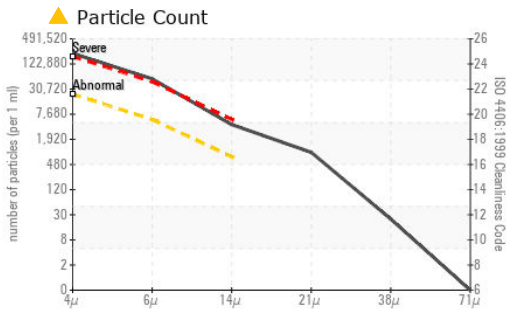
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	6	3	3
Potassium	ppm	ASTM D5185m	>20	<1	1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	▲ 188746	▲ 41464	▲ 71369
Particles >6µm		ASTM D7647	>5000	▲ 46594	1087	▲ 7205
Particles >14µm		ASTM D7647	>640	▲ 3787	31	575
Particles >21µm		ASTM D7647	>160	▲ 824	9	147
Particles >38µm		ASTM D7647	>40	21	1	7
Particles >71µm		ASTM D7647	>10	0	0	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 25/23/19	▲ 23/17/12	▲ 23/20/16
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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		5	3	8
Boron	ppm	ASTM D5185m	5	42	34	16
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	16	12	6
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	25	150	134	64
Calcium	ppm	ASTM D5185m	200	611	643	275
Phosphorus	ppm	ASTM D5185m	300	453	450	375
Zinc	ppm	ASTM D5185m	370	477	493	433
Sulfur	ppm	ASTM D5185m	2500	2969	2706	1963
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.47	0.54	0.383
Visc @ 40°C	cSt	ASTM D445	46	44.8	47.1	44.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0017794
Lab Number : 06196608
Unique Number : 11058731
Test Package : MOBCE
Received : 31 May 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Don Baldrige

RIVER METALS RECYCLING - XENIA
 840 JASPER RD
 XENIA, OH
 US 45385
 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)