



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
AMR-Columbus
Machine Id
17571 LIEBHERR R924CEW 031533-1069
Component
Swing Drive
Fluid
LIEBHERR GEAR BASIC 90 LS (2 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0017218	DJJ0017120	DJJ0017118
Sample Date		Client Info		08 Apr 2024	27 Nov 2023	27 Jul 2023
Machine Age	hrs	Client Info		14011	13372	12824
Oil Age	hrs	Client Info		500	1000	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
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	>750	56	21	13
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	0
Lead	ppm	ASTM D5185m	>5	0	0	0
Copper	ppm	ASTM D5185m	>250	12	12	12
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

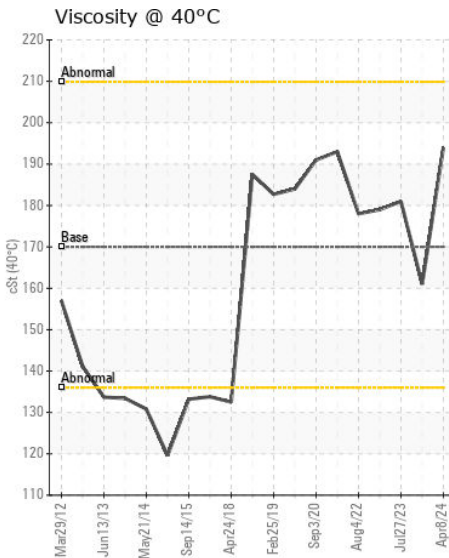
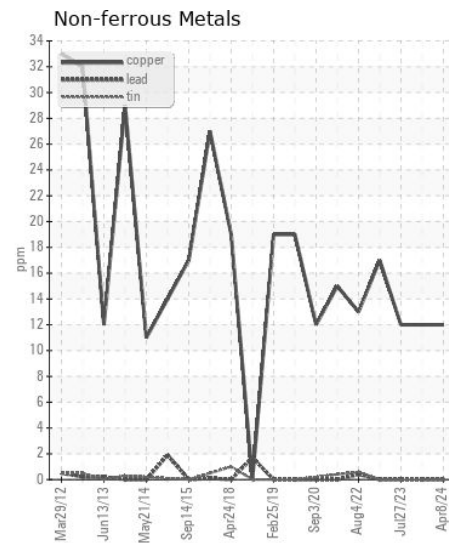
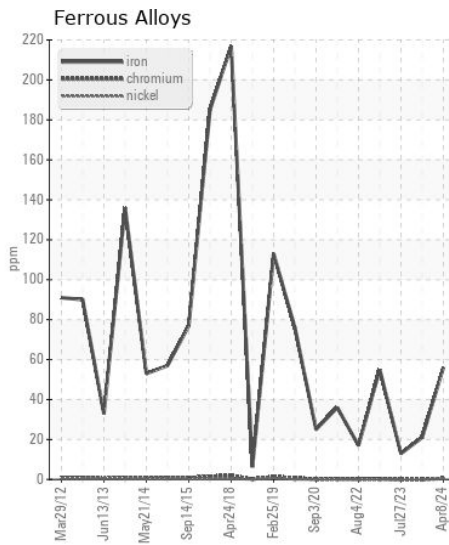
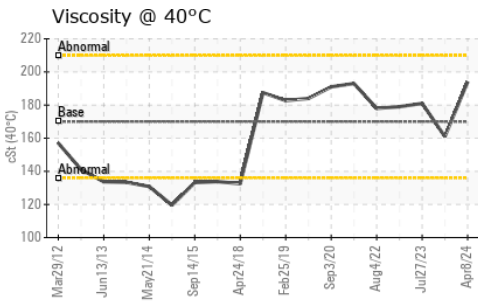
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	4	1	<1
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
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		3	4	4
Boron	ppm	ASTM D5185m	0	<1	0	0
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	<1	9	0	0
Calcium	ppm	ASTM D5185m	<1	31	43	32
Phosphorus	ppm	ASTM D5185m	2143	2359	2073	2437
Zinc	ppm	ASTM D5185m	<1	13	46	1
Sulfur	ppm	ASTM D5185m	23468	52973	26650	36901
Visc @ 40°C	cSt	ASTM D445	170	194	161	181



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : DJJ0017218

Lab Number : 06150747

Unique Number : 10980825

Test Package : CONST

Received : 16 Apr 2024

Tested : 17 Apr 2024

Diagnosed : 18 Apr 2024 - Don Baldrige

ADVANTAGE METALS RECYCLING - COLUMBUS

2466 NW K-7 HWY

COLUMBUS, KS

US 66725

Contact: TERRY PROFFITT

terry.proffitt@advantagerecycling.com

T: (620)674-3800

F: (620)674-3822

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)