



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Machine Id
LIEBHERR A934C 057446-1007
Component
Hydraulic System
Fluid
KLONDIKE AW 46 (350 LTR)

RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. The fluid was specified as KLONDIKE AW 46, however, a fluid match indicates that this fluid is ISO 32 AW Hydraulic Oil. Please confirm the oil type and grade on your next sample.

WEAR

All component wear rates are normal.

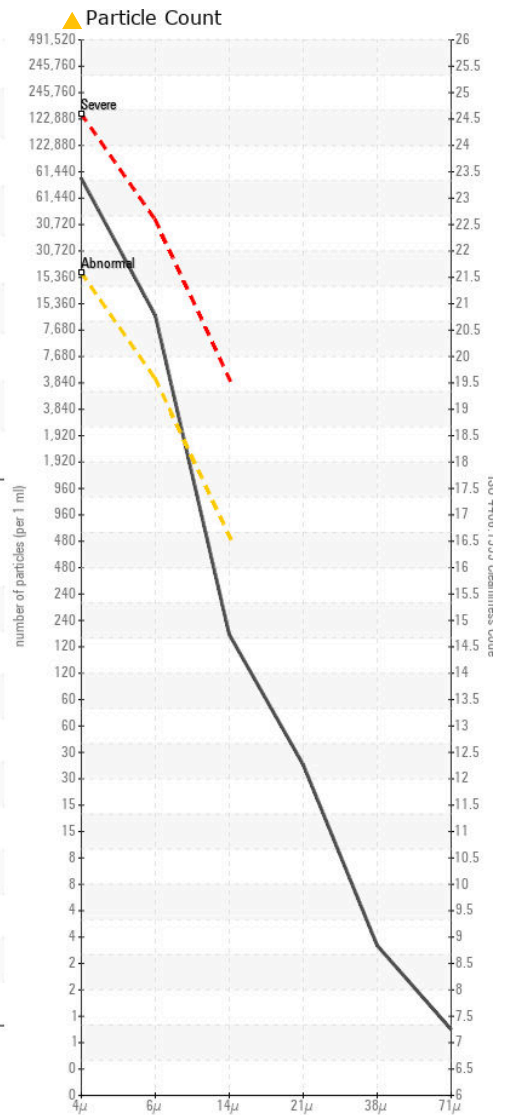
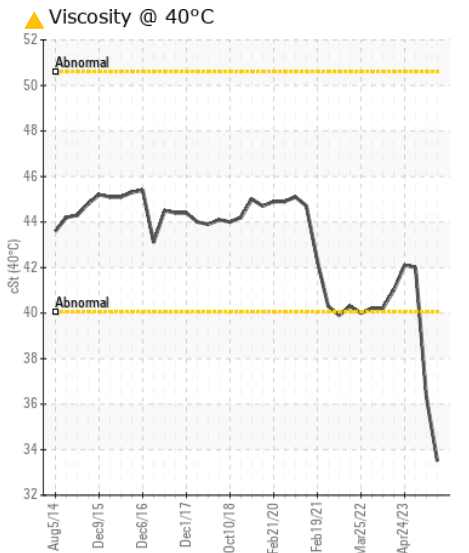
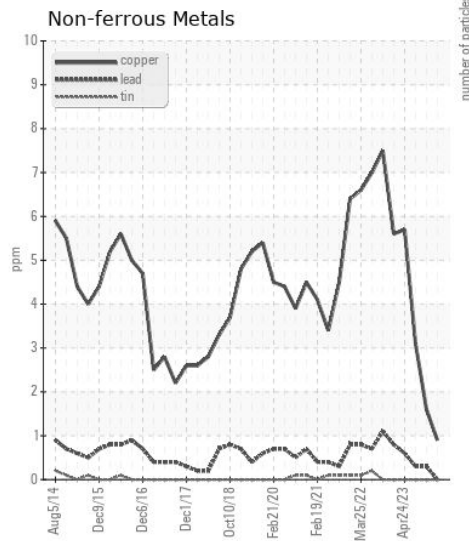
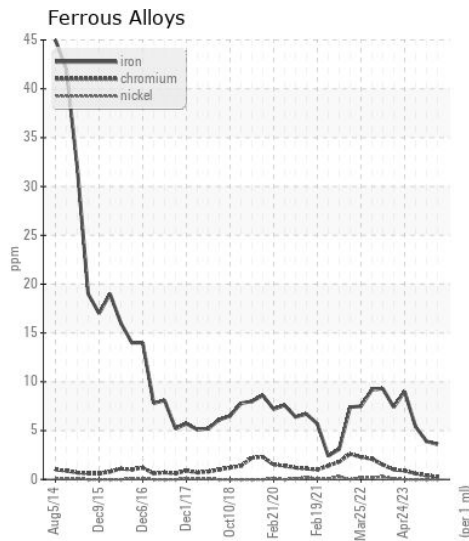
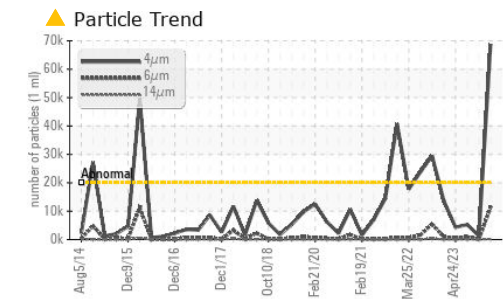
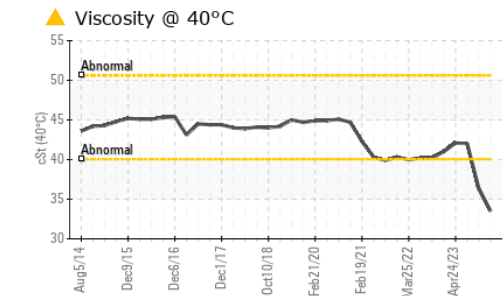
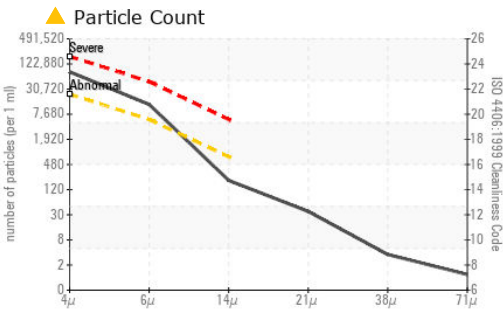
CONTAMINATION

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0276179	LH0281186	LH0213842
Sample Date		Client Info		21 Apr 2024	22 Jan 2024	11 Jul 2023
Machine Age	hrs	Client Info		26815	26482	25673
Oil Age	hrs	Client Info		0	0	0
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				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>70	4	4	5
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>2	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>5	0	<1	<1
Copper	ppm	ASTM D5185(m)	>15	<1	2	3
Tin	ppm	ASTM D5185(m)	>2	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>20	0	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	▲ 68742	1302	5258
Particles >6µm		ASTM D7647	>5000	▲ 11457	88	969
Particles >14µm		ASTM D7647	>640	176	11	77
Particles >21µm		ASTM D7647	>160	32	3	19
Particles >38µm		ASTM D7647	>40	3	1	1
Particles >71µm		ASTM D7647	>10	1	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 23/21/15	18/14/11	20/17/13
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*	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Boron	ppm	ASTM D5185(m)		<1	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		<1	<1	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		5	6	2
Calcium	ppm	ASTM D5185(m)		29	49	56
Phosphorus	ppm	ASTM D5185(m)		215	225	347
Zinc	ppm	ASTM D5185(m)		261	275	408
Sulfur	ppm	ASTM D5185(m)		1069	1093	938
Visc @ 40°C	cSt	ASTM D7279(m)		▲ 33.5	▲ 36.3	42.0



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0276179
Lab Number : 02630983
Unique Number : 5772136
Test Package : MOB 1 (Additional Tests: PrtCount)

Received : 23 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 24 Apr 2024 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

ABC RECYCLING
 8081 MEADOW AVE.
 BURNABY, BC
 CA V3N 2V9

Contact: John Anderson
 john.anderson@abcrcycling.com
 T: (778)988-9944
 F: