CONST

CHALMERS
Lubrication Service
(704) 660-LUBE(5823)

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
BERGMAN 1034
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

WEAR

All component wear rates are normal.

CONTAMINATION

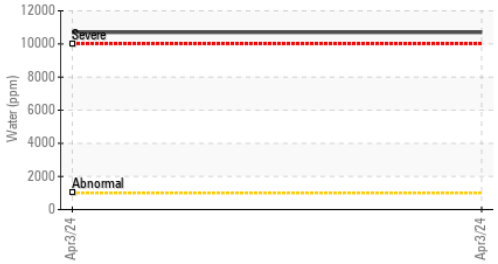
Appearance is milky. There is a moderate amount of visible silt present in the sample. There is a high concentration of water present in the oil.

FLUID CONDITION

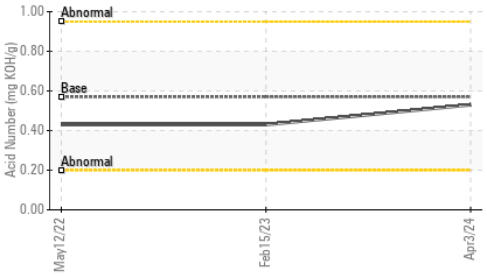
The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005277	CL0004027	CL0003194
Sample Date		Client Info		03 Apr 2024	15 Feb 2023	12 May 2022
Machine Age	hrs	Client Info		1710	1165	685
Oil Age	hrs	Client Info		1710	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	7	4	2
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	2	2	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	4	4	3
Tin	ppm	ASTM D5185m	>10	<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
Silicon	ppm	ASTM D5185m	>20	3	2	<1
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water	%	ASTM D6304	>0.1	▲ 1.07	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 10700	---	---
Particles >4µm		ASTM D7647	>5000	---	---	▲ 11937
Particles >6µm		ASTM D7647	>1300	---	---	441
Particles >14µm		ASTM D7647	>160	---	---	21
Particles >21µm		ASTM D7647	>40	---	---	6
Particles >38µm		ASTM D7647	>10	---	---	0
Particles >71µm		ASTM D7647	>3	---	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	---	---	▲ 21/16/12
Silt	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● MILKY	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	▲ 0.2%	NEG	NEG
Sodium	ppm	ASTM D5185m		0	<1	<1
Boron	ppm	ASTM D5185m	5	<1	0	1
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	2	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	25	2	0	0
Calcium	ppm	ASTM D5185m	200	204	41	50
Phosphorus	ppm	ASTM D5185m	300	388	315	332
Zinc	ppm	ASTM D5185m	370	476	427	426
Sulfur	ppm	ASTM D5185m	2500	3785	4198	3187
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.53	0.43	0.43
Visc @ 40°C	cSt	ASTM D445	46	48.6	45.6	45.6

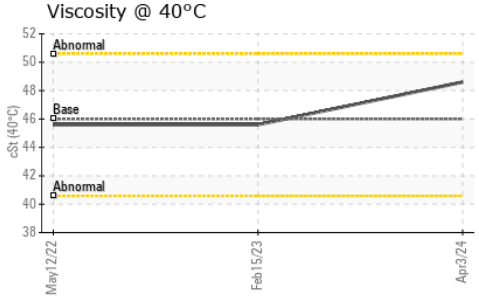
Water (KF)



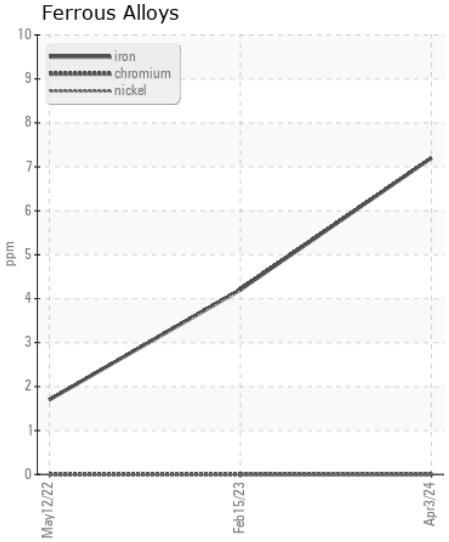
Acid Number



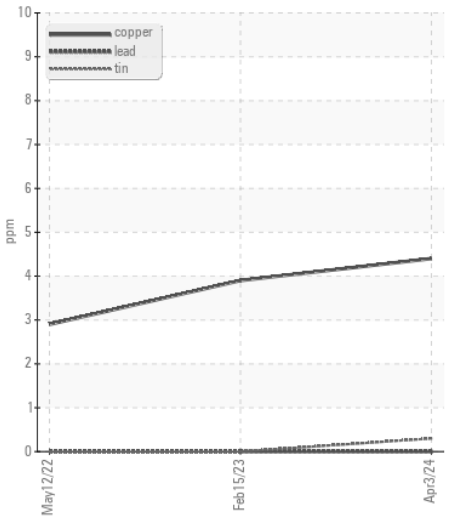
Viscosity @ 40°C



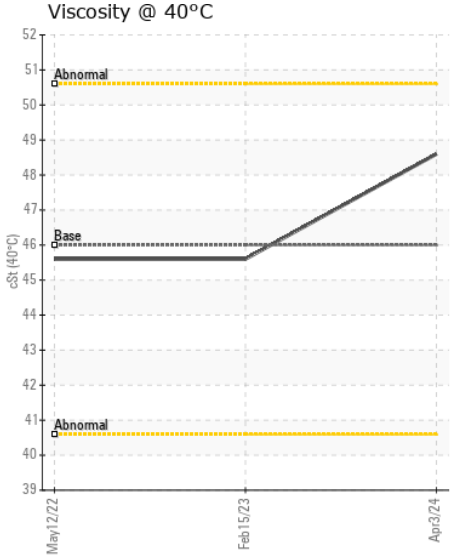
Ferrous Alloys



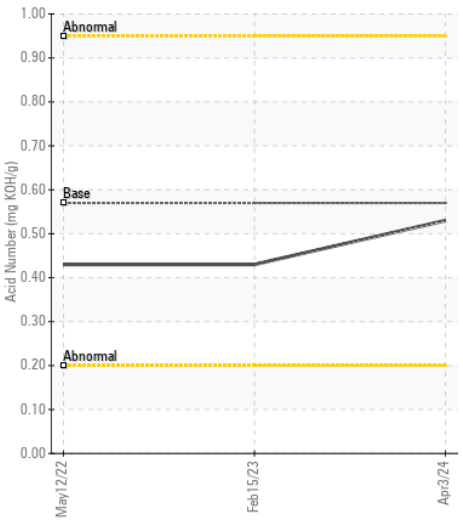
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CL0005277 **Received** : 10 Apr 2024
Lab Number : 06145261 **Tested** : 13 Apr 2024
Unique Number : 10970069 **Diagnosed** : 13 Apr 2024 - Don Baldridge
Test Package : CONST (Additional Tests: KF)

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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