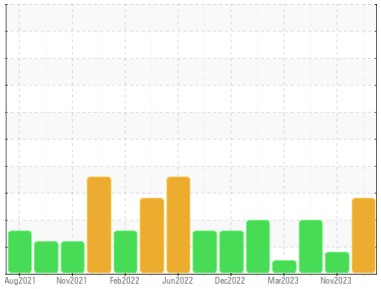
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
1000447080/ 2318-245 AMR Presizer
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (700 LTR)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. The fluid was specified as (GENERIC) AW HYDRAULIC OIL ISO 46, however, a fluid match indicates that this fluid is ISO 46 Hydraulic Oil (Food Grade). Please confirm the oil type and grade on your next sample. NOTE: The current sample results do not match this units historical trend, indicating the sample may not be from this component/unit.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0658847**	WC0878447	WC0835758
Sample Date		Client Info		**30 Dec 2023**	11 Nov 2023	09 Sep 2023
Machine Age	mths	Client Info		**0**	0	0
Oil Age	mths	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**1**	2	2
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	<1
Nickel	ppm	ASTM D5185(m)	>20	**0**	<1	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	**<1**	0	0
Lead	ppm	ASTM D5185(m)	>20	**0**	3	3
Copper	ppm	ASTM D5185(m)	>20	**4**	▲ 81	▲ 82
Tin	ppm	ASTM D5185(m)	>20	**0**	1	2
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	**0**	<1	<1
Barium	ppm	ASTM D5185(m)	5	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	5	**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)	25	**<1**	0	<1
Calcium	ppm	ASTM D5185(m)	200	**<1**	<1	2
Phosphorus	ppm	ASTM D5185(m)	300	**443**	155	179
Zinc	ppm	ASTM D5185(m)	370	▲ **5**	131	138
Sulfur	ppm	ASTM D5185(m)	2500	**722**	2900	3127
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**2**	2	2
Sodium	ppm	ASTM D5185(m)		**2**	4	3
Potassium	ppm	ASTM D5185(m)	>20	**2**	3	3
Water	%	ASTM D6304*	>0.05	▲ **0.214**	---	---
ppm Water	ppm	ASTM D6304*	>500	▲ **2147**	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **5163**	4658	▲ 38240
Particles >6µm		ASTM D7647	>1300	**547**	604	▲ 4758
Particles >14µm		ASTM D7647	>160	**25**	21	89
Particles >21µm		ASTM D7647	>40	**6**	6	18
Particles >38µm		ASTM D7647	>10	**1**	1	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/16/12**	19/16/12	▲ 22/19/14

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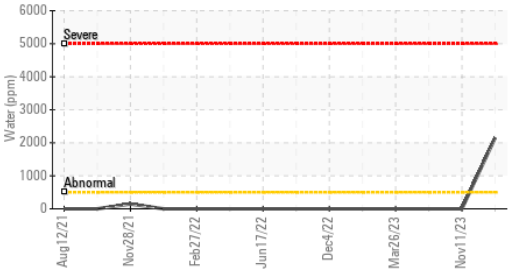
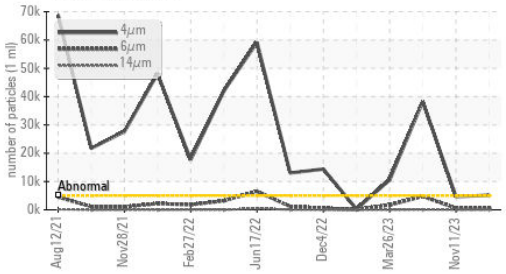
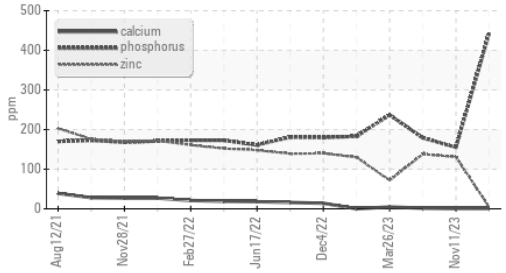
Water (KF)



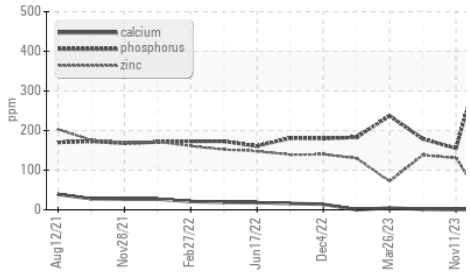
Particle Trend



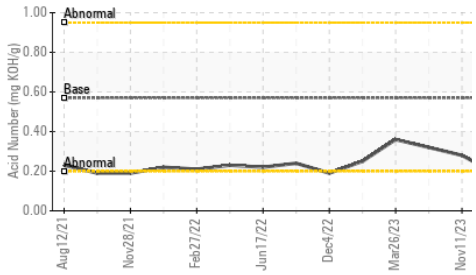
Additives



Additives



Acid Number

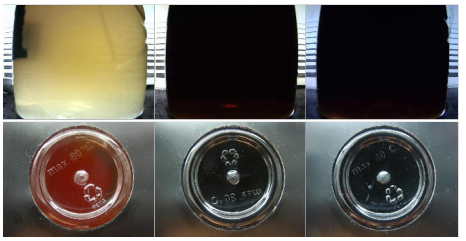


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	**0.19**	0.28	0.32

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
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	**WGOIL**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	▲ **.2%**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

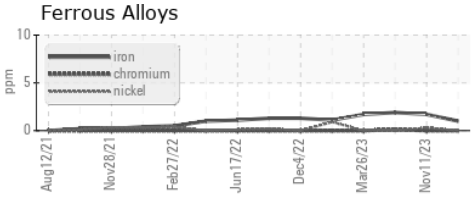
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	**44.6**	44.0	43.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

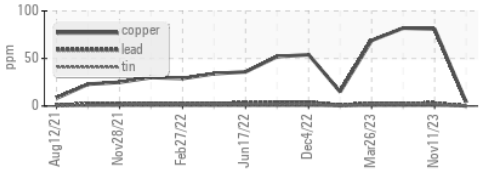


GRAPHS

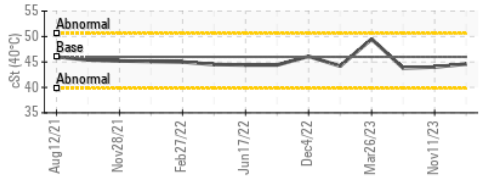
Ferrous Alloys



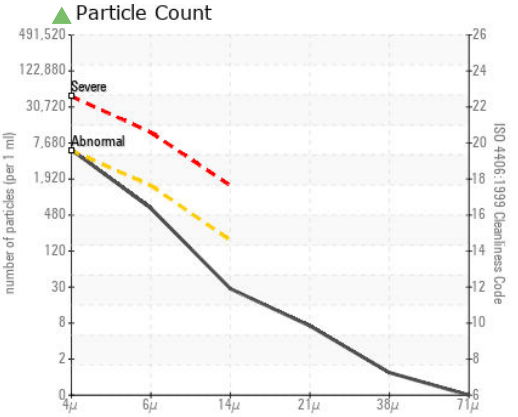
Non-ferrous Metals



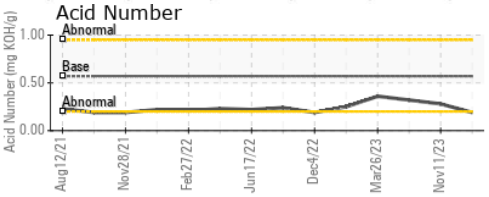
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0658847 **Recieved** : 23 Jan 2024
Lab Number : 02610618 **Diagnosed** : 29 Jan 2024
Unique Number : 5711704 **Diagnostician** : Bill Quesnel
Test Package : IND 2 (Additional Tests: KF)

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.

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