



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ATTENTION</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**KB4039 - BEACON**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 32 (--- QTS)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0812273</b>	WC0778087	WC0679388
Sample Date		Client Info		<b>08 Jan 2024</b>	24 May 2023	07 Jul 2022
Machine Age	mths	Client Info		<b>0</b>	0	0
Oil Age	mths	Client Info		<b>0</b>	0	0
Filter Age	mths	Client Info		<b>0</b>	12	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Not Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	2	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

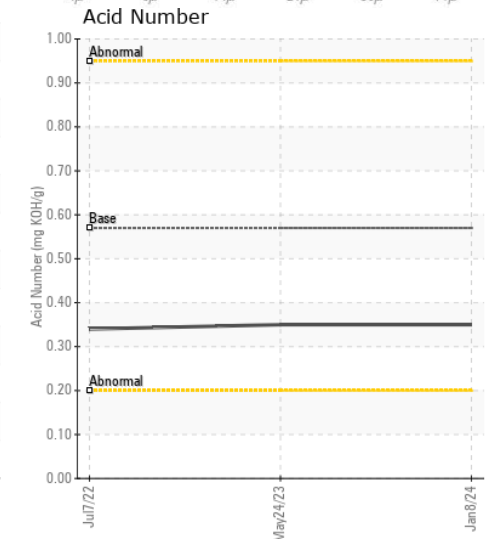
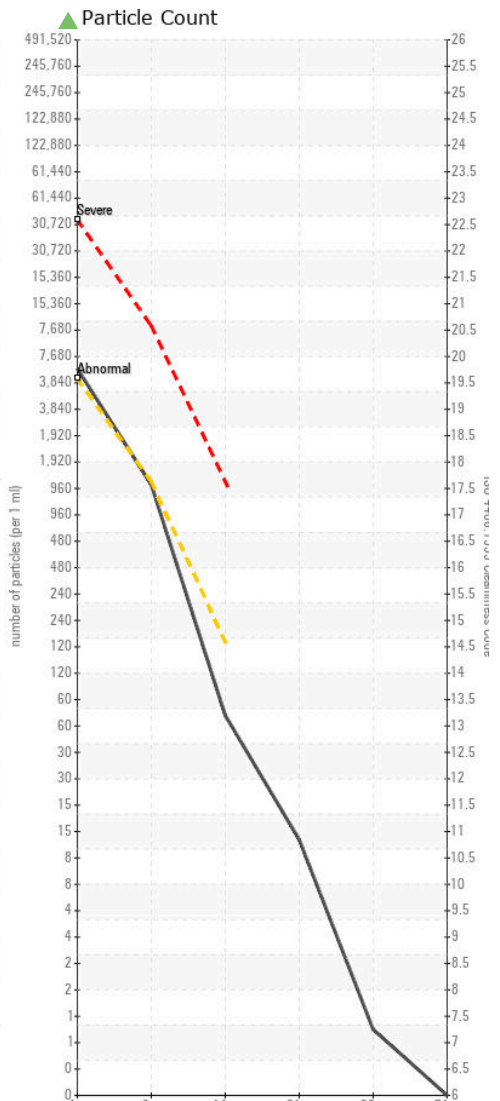
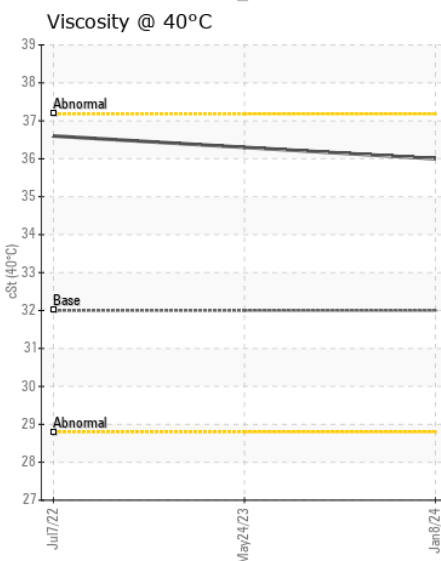
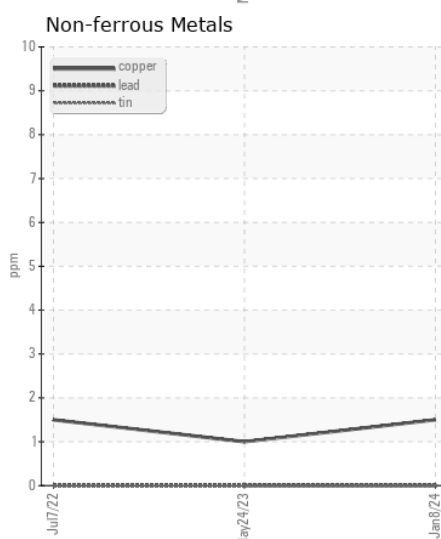
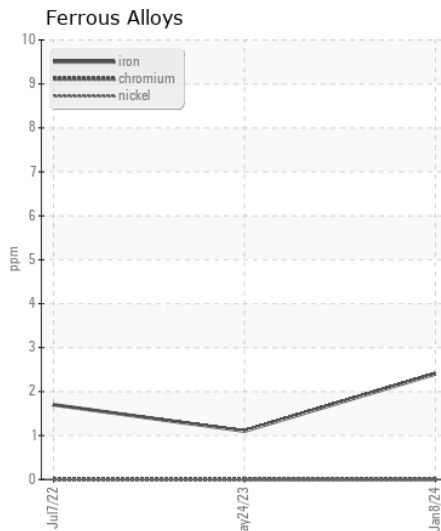
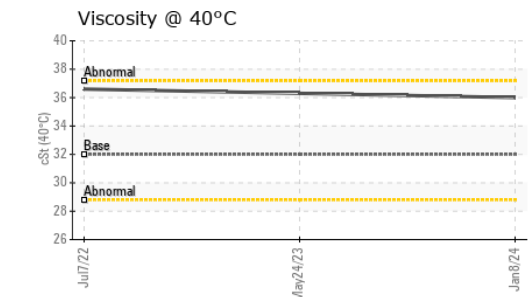
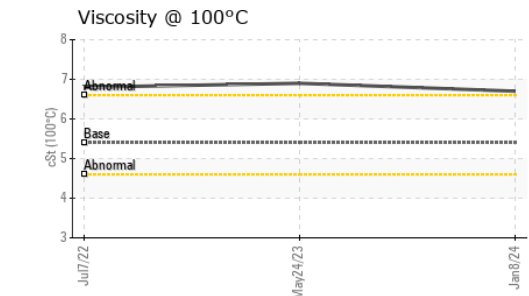
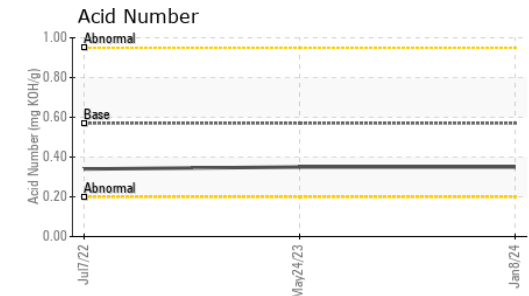
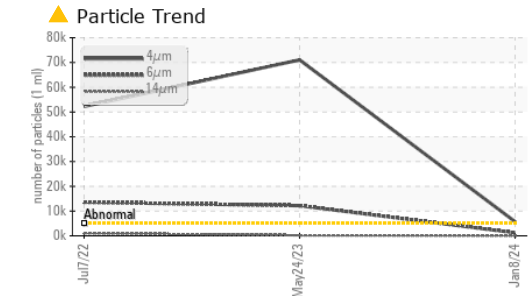
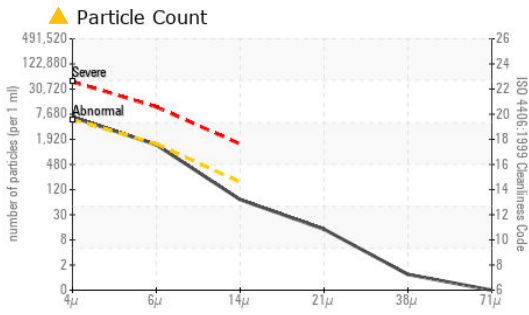
There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 5710</b>	▲ 71041	▲ 52256
Particles >6µm		ASTM D7647	>1300	<b>1249</b>	▲ 12184	▲ 13576
Particles >14µm		ASTM D7647	>160	<b>61</b>	▲ 186	▲ 1046
Particles >21µm		ASTM D7647	>40	<b>12</b>	▲ 44	▲ 217
Particles >38µm		ASTM D7647	>10	<b>1</b>	1	▲ 17
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 20/17/13</b>	▲ 23/21/15	▲ 23/21/17
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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		<b>0</b>	<1	<1
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	3
Barium	ppm	ASTM D5185m	5	<b>0</b>	4	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	25	<b>3</b>	2	<1
Calcium	ppm	ASTM D5185m	200	<b>73</b>	46	46
Phosphorus	ppm	ASTM D5185m	300	<b>355</b>	300	337
Zinc	ppm	ASTM D5185m	370	<b>414</b>	380	417
Sulfur	ppm	ASTM D5185m	2500	<b>4926</b>	4938	5745
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.35</b>	0.35	0.34
Visc @ 40°C	cSt	ASTM D445	32	<b>36.0</b>	36.3	36.6
Visc @ 100°C	cSt	ASTM D445	5.4	<b>6.7</b>	6.9	6.8
Viscosity Index (VI)	Scale	ASTM D2270	102	<b>145</b>	152	146



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0812273 **Received** : 17 Jan 2024  
**Lab Number** : 06062653 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834035 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

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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)