



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
BROWN BOVERI 5MW COMPRESSOR LUBE OIL
 Component
Centrifugal Compressor
 Fluid
SHELL TELLUS 32 (2900 LTR)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample
 Comment: Yearly oil sample test 5MW)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0943224	WC0701213	WC0701225
Sample Date		Client Info		28 May 2024	23 Aug 2023	11 May 2022
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		0	0	0
Filter Age	yrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
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 D5185(m)	>50	0	<1	0
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)		0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	0	0	0
Lead	ppm	ASTM D5185(m)	>25	<1	2	2
Copper	ppm	ASTM D5185(m)	>50	3	3	2
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

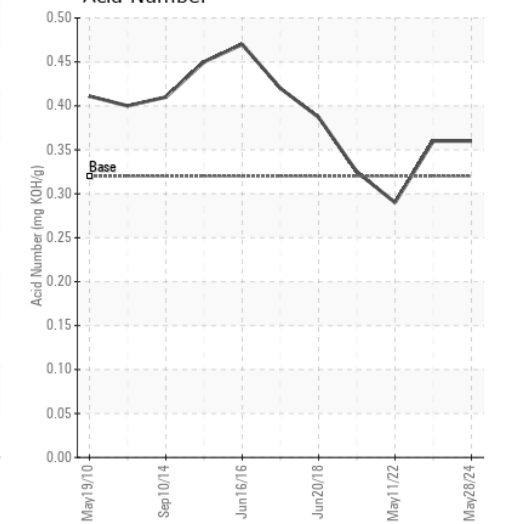
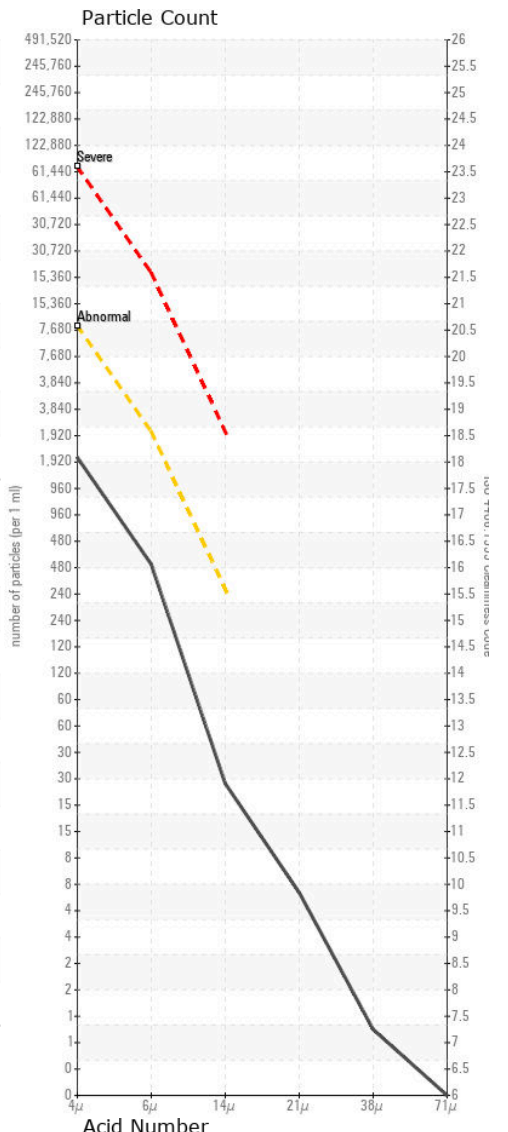
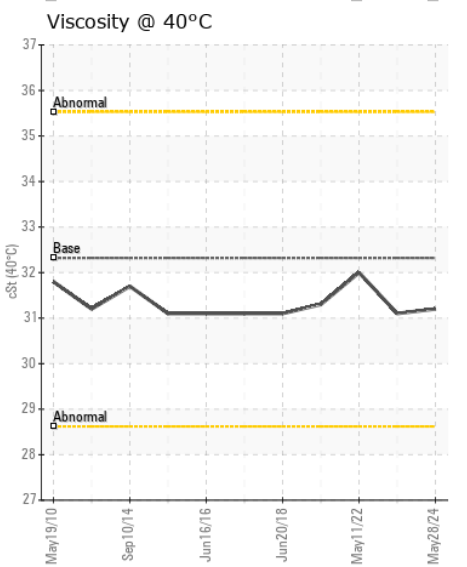
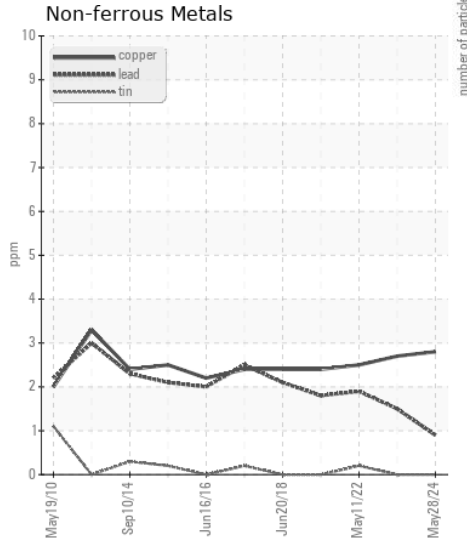
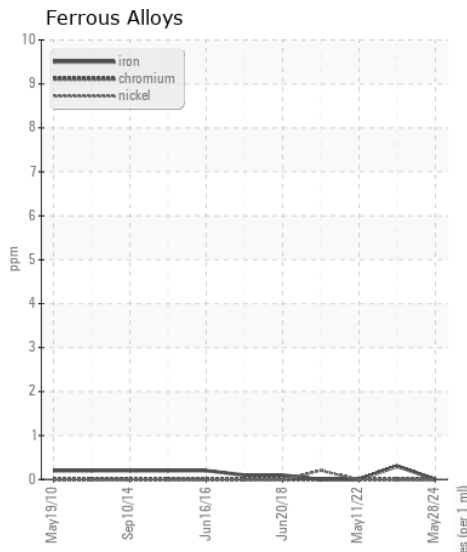
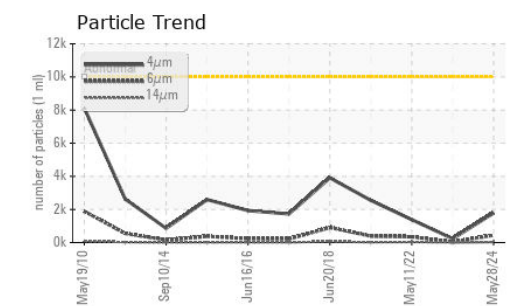
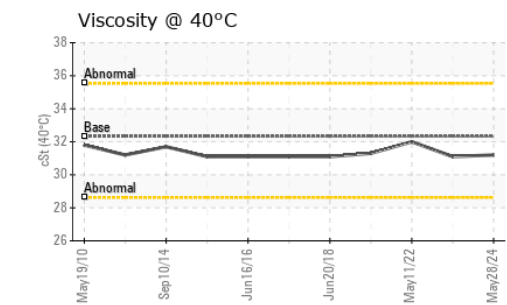
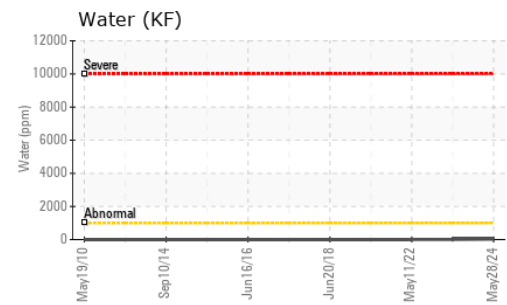
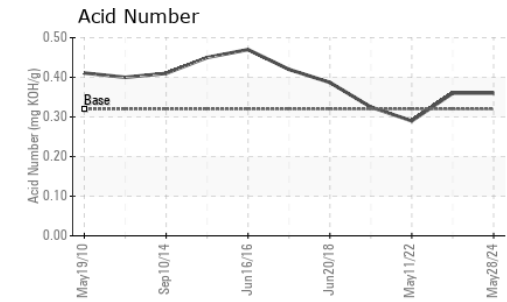
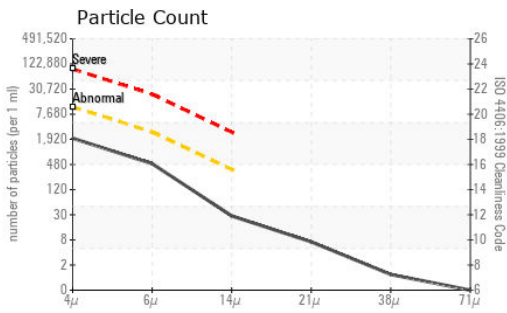
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>25	0	1	1
Potassium	ppm	ASTM D5185(m)	>20	1	<1	1
Water	%	ASTM D6304*	>0.1	0.003	0.001	0.00
ppm Water	ppm	ASTM D6304*	>1000	31	1.3	0.00
Particles >4µm		ASTM D7647	>10000	1785	230	1385
Particles >6µm		ASTM D7647	>2500	440	42	348
Particles >14µm		ASTM D7647	>320	25	3	30
Particles >21µm		ASTM D7647	>80	6	2	9
Particles >38µm		ASTM D7647	>20	1	1	0
Particles >71µm		ASTM D7647	>4	0	1	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	18/16/12	15/13/9	18/16/12
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	VLITE	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

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<1	<1	0
Boron	ppm	ASTM D5185(m)		0	<1	0
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	11	2	1	1
Calcium	ppm	ASTM D5185(m)	35	24	25	25
Phosphorus	ppm	ASTM D5185(m)	259	344	365	361
Zinc	ppm	ASTM D5185(m)	277	279	285	296
Sulfur	ppm	ASTM D5185(m)	1865	2542	2594	2636
Acid Number (AN)	mg KOH/g	ASTM D974*	0.32	0.36	0.36	0.29
Visc @ 40°C	cSt	ASTM D7279(m)	32.32	31.2	31.1	32.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0943224 **Received** : 30 May 2024
Lab Number : 02638884 **Tested** : 03 Jun 2024
Unique Number : 5788046 **Diagnosed** : 03 Jun 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: KF)

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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.