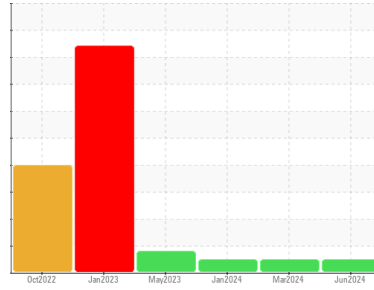




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
 (W40-1450) Co-Gen - Utilities
 Machine Id
Silo Sweep Drive 2
 Component
Reduction Gear
 Fluid
SHELL MORLINA S4 B 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PE0001499	PE0001592	PE0001479
Sample Date	Client Info		04 Jun 2024	06 Mar 2024	30 Jan 2024
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		17	15	14
Iron	ppm	ASTM D5185m >150	<1	0	0
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >10	0	0	<1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >25	0	0	<1
Lead	ppm	ASTM D5185m >100	7	2	1
Copper	ppm	ASTM D5185m >50	<1	2	<1
Tin	ppm	ASTM D5185m >10	0	0	<1
Vanadium	ppm	ASTM D5185m	<1	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m	1	0	3
Calcium	ppm	ASTM D5185m	2	0	6
Phosphorus	ppm	ASTM D5185m	420	334	374
Zinc	ppm	ASTM D5185m	36	27	33
Sulfur	ppm	ASTM D5185m	1060	732	733

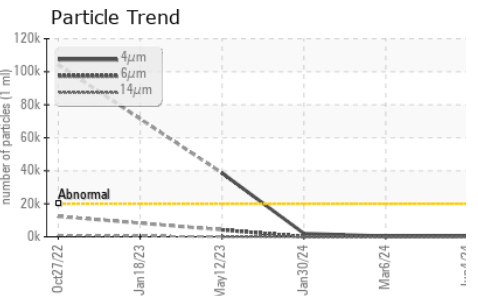
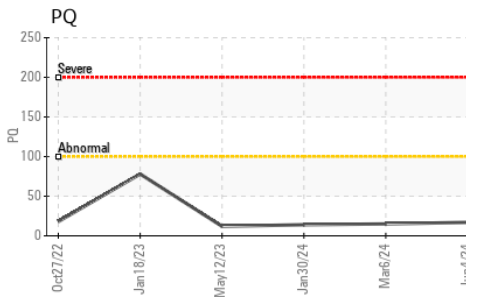
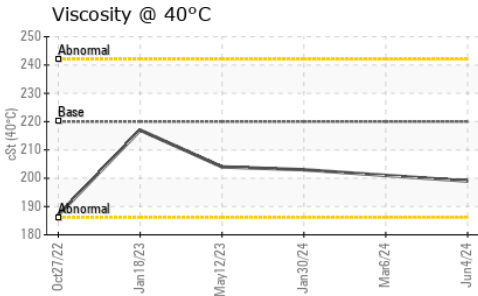
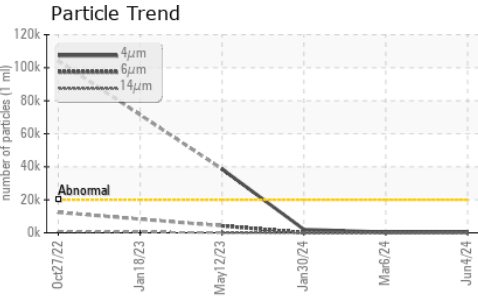
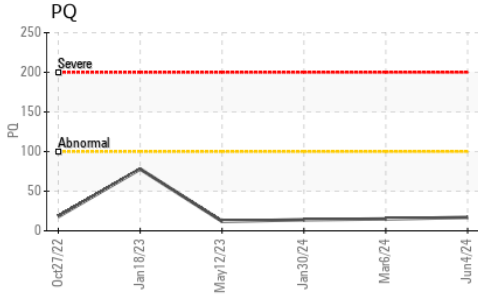
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	11	8	9
Sodium	ppm	ASTM D5185m	1	<1	1
Potassium	ppm	ASTM D5185m >20	3	0	2

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	585	395	2022
Particles >6µm	ASTM D7647	>5000	238	142	100
Particles >14µm	ASTM D7647	>640	35	18	10
Particles >21µm	ASTM D7647	>160	8	7	3
Particles >38µm	ASTM D7647	>40	2	2	0
Particles >71µm	ASTM D7647	>10	1	1	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	16/15/12	16/14/11	18/14/10

OIL ANALYSIS REPORT

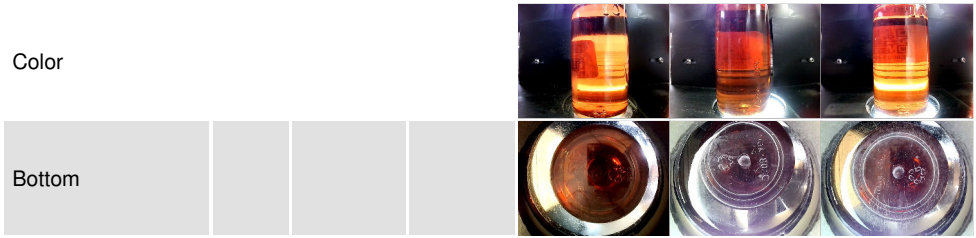


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.59	0.64	0.66

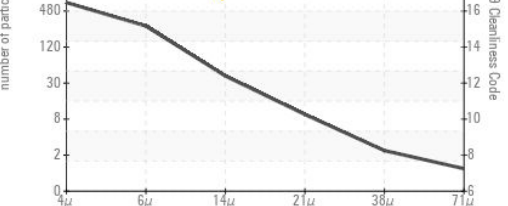
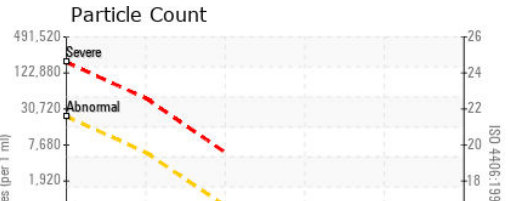
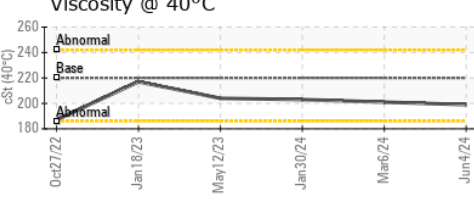
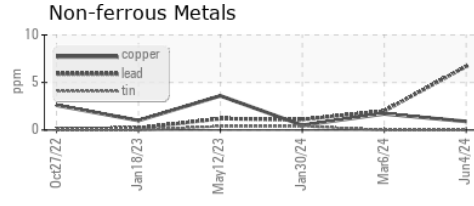
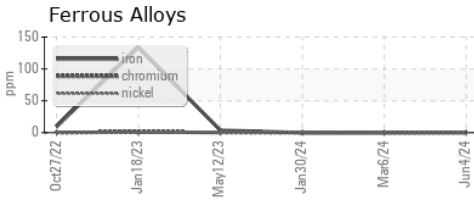
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	199	201	203

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0001499 **Received** : 10 Jun 2024
Lab Number : **06205316** **Tested** : 13 Jun 2024
Unique Number : 11072777 **Diagnosed** : 13 Jun 2024 - Angela Borella
Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrcCount, SCREEN)

MCKINLEY PAPER COMPANY
 1902 MARINE DR
 PORT ANGELES, WA
 US 98363
 Contact: JOSHUA HALL
 joshua.hall@biopappel.com
 T: (360)457-4474
 F:

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)