

Machine Id
MARLEY COOLING TOWER 3

Component
Gearbox

Fluid
GEAR OIL ISO 150 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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		PC0077141	---	---
Sample Date	Client Info		20 Aug 2023	---	---
Machine Age	yrs	Client Info	0	---	---
Oil Age	yrs	Client Info	1	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m) >200	<1	---	---
Chromium	ppm	ASTM D5185(m) >10	0	---	---
Nickel	ppm	ASTM D5185(m) >10	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >25	0	---	---
Lead	ppm	ASTM D5185(m) >50	4	---	---
Copper	ppm	ASTM D5185(m) >200	19	---	---
Tin	ppm	ASTM D5185(m) >10	0	---	---
Antimony	ppm	ASTM D5185(m) >5	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 50	0	---	---
Barium	ppm	ASTM D5185(m) 15	0	---	---
Molybdenum	ppm	ASTM D5185(m) 15	0	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m) 50	<1	---	---
Calcium	ppm	ASTM D5185(m) 50	8	---	---
Phosphorus	ppm	ASTM D5185(m) 350	689	---	---
Zinc	ppm	ASTM D5185(m) 100	55	---	---
Sulfur	ppm	ASTM D5185(m) 12500	1118	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

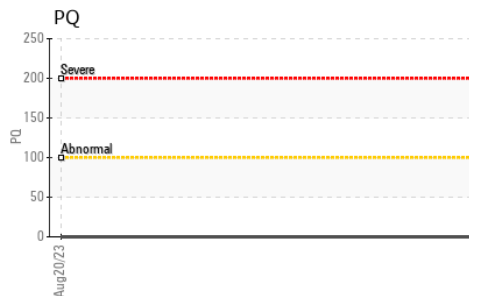
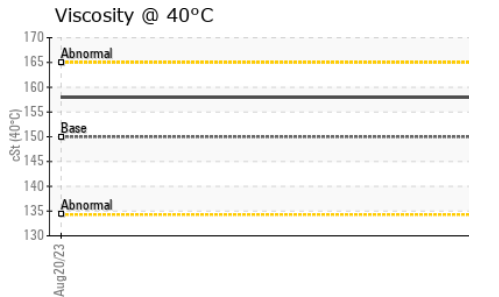
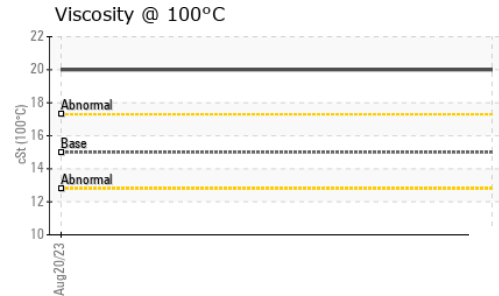
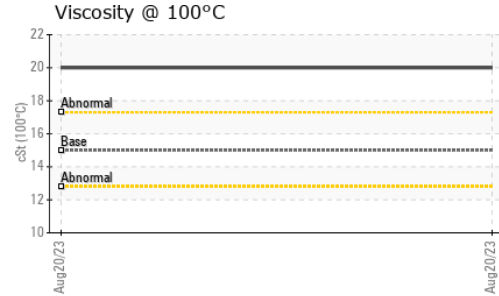
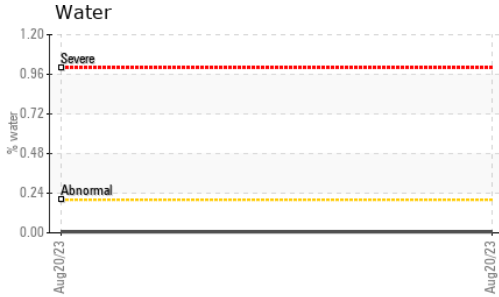
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	3	---	---
Sodium	ppm	ASTM D5185(m)	<1	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---
Water	%	ASTM D6304* >0.2	0.006	---	---
ppm Water	ppm	ASTM D6304* >2000	69.6	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.85	0.19	---	---

OIL ANALYSIS REPORT

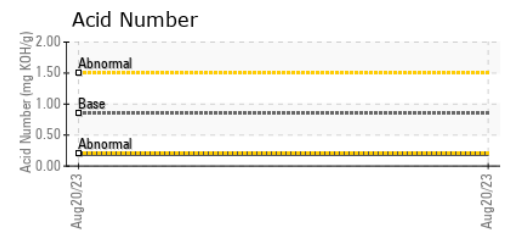
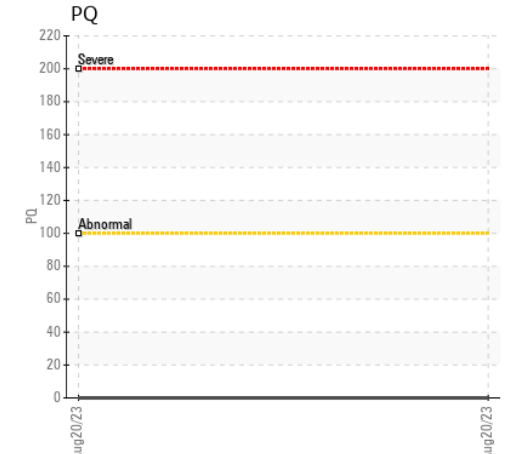
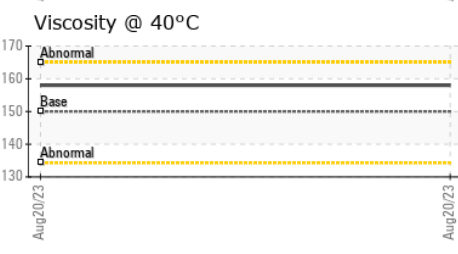
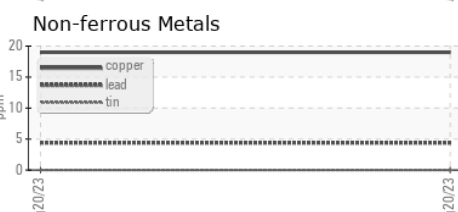
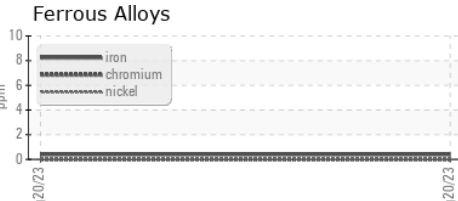


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	.2%	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	150	158	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.0	20.0	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	99	146	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 ARCHER DANIELS MIDLAND COMPANY (ADM)
Sample No. : PC0077141 **Received** : 15 Sep 2023
Lab Number : 02582956 **Diagnosed** : 18 Sep 2023
Unique Number : 5644021 **Diagnostician** : Bill Quesnel
Test Package : IND 2 (Additional Tests: KF, KV100, TAN Man, VI)
 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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