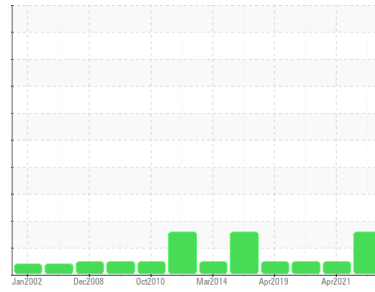# OIL ANALYSIS REPORT

WATER ⚠️

Sample Rating Trend

Machine Id
MCQUAY CHAMPLAIN BLDG CH-1 (S/N 5TA81055-00)
Component
Refrigeration Compressor
Fluid
EMKARATE RL 32H (8 GAL)

DIAGNOSIS

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

Wear
All component wear rates are normal.

⚠️ Contamination
There is a trace of moisture present 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	**WC0660704**	WC0384488	WCI2310421
Sample Date		Client Info	**18 Mar 2024**	06 Apr 2021	23 Mar 2020
Machine Age	hrs	Client Info	**56806**	47360	44610
Oil Age	hrs	Client Info	**56806**	0	44610
Oil Changed		Client Info	**Not Changd**	Not Changd	Not Changd
Sample Status			**MARGINAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185	>100	**26**	17	13
Chromium	ppm	ASTM D5185m	>2	**0**	<1	<1
Nickel	ppm	ASTM D5185m		**<1**	<1	<1
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m	>2	**0**	<1	0
Aluminum	ppm	ASTM D5185m	>50	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>2	**<1**	2	1
Copper	ppm	ASTM D5185m	>100	**<1**	<1	2
Tin	ppm	ASTM D5185m	>4	**2**	2	1
Antimony	ppm	ASTM D5185m		**---**	<1	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	2	<1
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	<1	<1
Manganese	ppm	ASTM D5185m		**<1**	<1	0
Magnesium	ppm	ASTM D5185m	0	**<1**	<1	0
Calcium	ppm	ASTM D5185m	0	**0**	<1	0
Phosphorus	ppm	ASTM D5185m	5	**9**	11	5
Zinc	ppm	ASTM D5185m	10	**61**	58	47
Sulfur	ppm	ASTM D5185m	50	**90**	32	35

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**6**	17	18
Sodium	ppm	ASTM D5185m		**<1**	1	<1
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	0
Water	%	ASTM D6304	>0.02	⚠️ **0.022**	0.012	0.007
ppm Water	ppm	ASTM D6304	>250	⚠️ **229**	124.6	78.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	.05	**0.179**	0.046	0.12

OIL ANALYSIS REPORT

Water (KF)

Acid Number

Viscosity @ 40°C
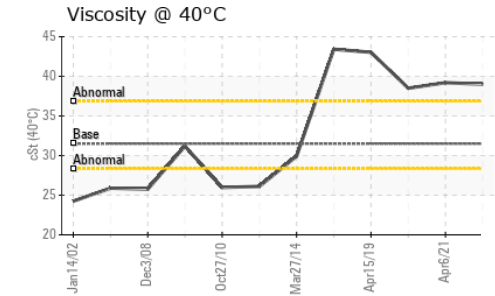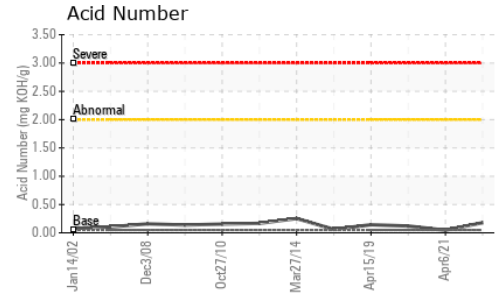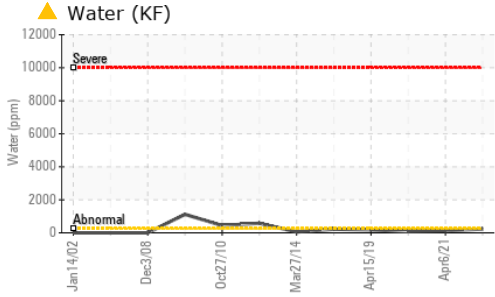
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.02	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	31.5	**39.0**	39.2	38.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
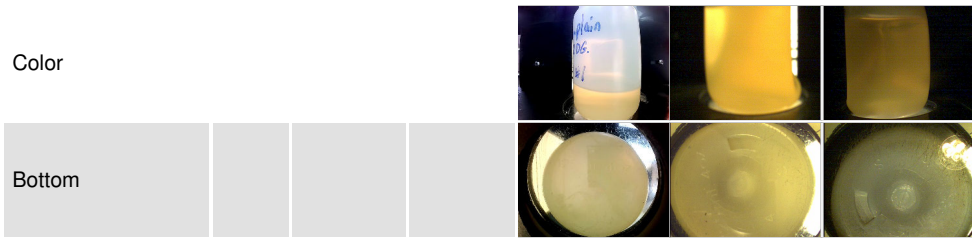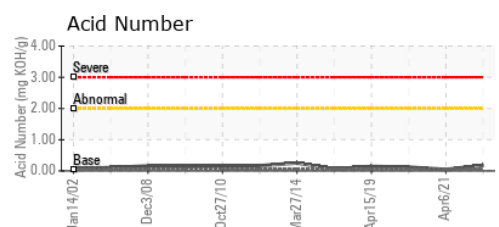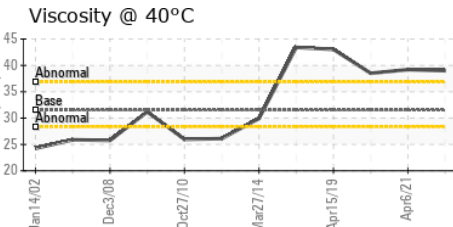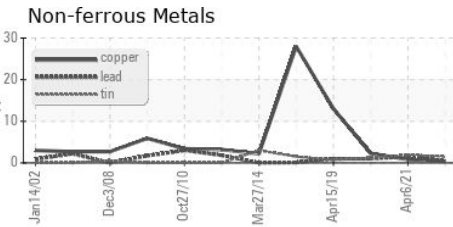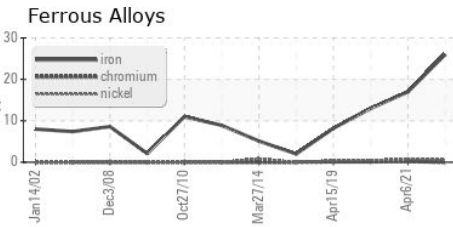
GRAPHS

Ferrous Alloys

Non-ferrous Metals

Viscosity @ 40°C

Acid Number

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)