

Machine Id
VILTER MAIN VILTER A
 Component
Compressor
 Fluid
VILTER METHANE PAO 100 (--- GAL)

DIAGNOSIS

Recommendation
 No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is a high amount of silt (particulates < 14 microns in size) 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	TO60002351	TO60001065	TO60001086
Sample Date	Client Info	03 Apr 2024	02 Oct 2023	07 Sep 2023
Machine Age	hrs	41886	37801	37348
Oil Age	hrs	30981	27349	28205
Oil Changed	Client Info	Oil Added	N/A	N/A
Sample Status		ABNORMAL	ATTENTION	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	<1	<1
Chromium	ppm	ASTM D5185m >5	0	0	0
Nickel	ppm	ASTM D5185m	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >15	<1	0	0
Lead	ppm	ASTM D5185m >65	0	0	0
Copper	ppm	ASTM D5185m >65	2	0	0
Tin	ppm	ASTM D5185m >10	<1	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
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	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	1	0	0
Magnesium	ppm	ASTM D5185m	<1	0	<1
Calcium	ppm	ASTM D5185m	0	0	<1
Phosphorus	ppm	ASTM D5185m	0	0	1
Zinc	ppm	ASTM D5185m	0	0	4
Sulfur	ppm	ASTM D5185m	340	297	251

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >35	32	29	19
Sodium	ppm	ASTM D5185m	2	0	0
Potassium	ppm	ASTM D5185m >20	2	0	1
Water	%	ASTM D6304 >0.1	0.013	0.038	0.079
ppm Water	ppm	ASTM D6304 >1000	137	382.2	790

FLUID CLEANLINESS

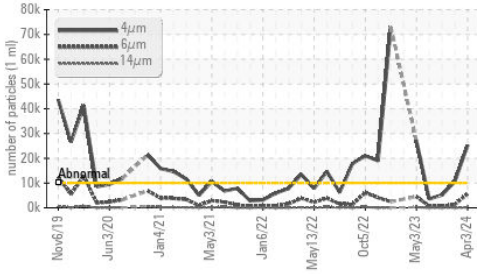
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 25233	● 10574	5182
Particles >6µm	ASTM D7647 >2500	▲ 5644	● 1329	721
Particles >14µm	ASTM D7647 >320	136	● 26	20
Particles >21µm	ASTM D7647 >80	21	● 8	7
Particles >38µm	ASTM D7647 >20	1	● 2	0
Particles >71µm	ASTM D7647 >4	0	● 2	0
Oil Cleanliness	ISO 4406 (c) >20/18/15	▲ 22/20/14	● 21/18/12	20/17/11

FLUID DEGRADATION

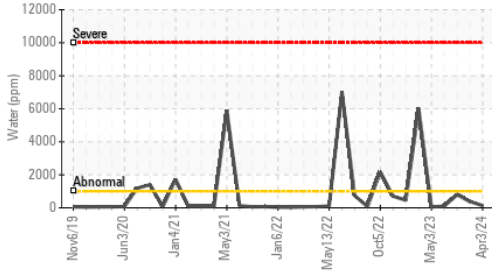
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.80	0.224	0.88

OIL ANALYSIS REPORT

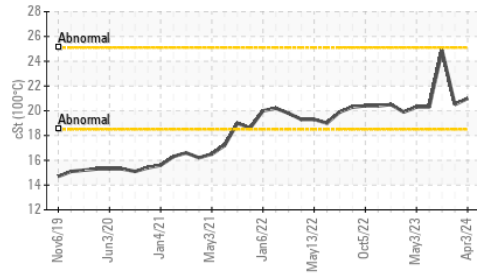
▲ Particle Trend



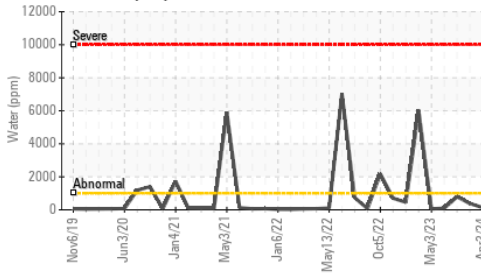
Water (KF)



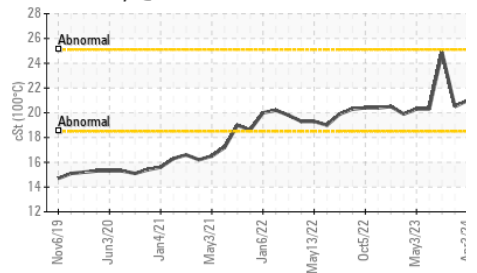
Viscosity @ 100°C



Water (KF)



Viscosity @ 100°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	141	137	138
Visc @ 100°C	cSt	ASTM D445	21.0	20.5	24.88
Viscosity Index (VI)	Scale	ASTM D2270	173	173	214

SAMPLE IMAGES	method	limit/base	current	history1	history2
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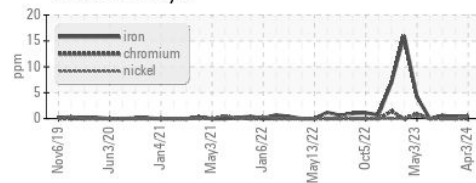
Color



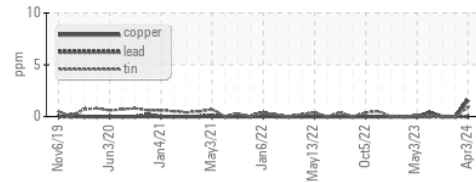
Bottom

GRAPHS

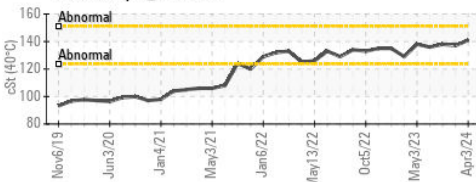
Ferrous Alloys



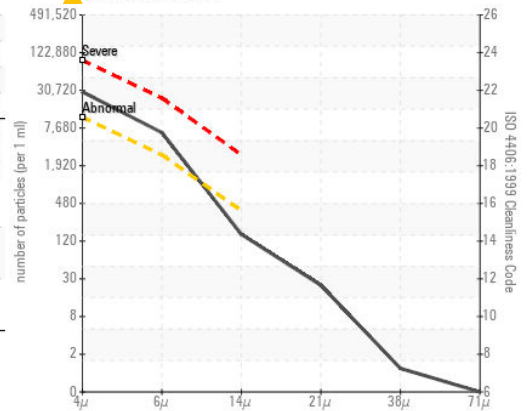
Non-ferrous Metals



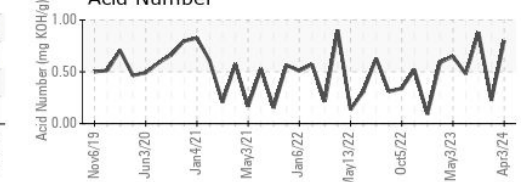
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : TO60002351

Lab Number : 06151234

Unique Number : 10981312

Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

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)

Received : 16 Apr 2024

Tested : 19 Apr 2024

Diagnosed : 19 Apr 2024 - Don Baldrige

BLUE RIDGE RENEWABLES

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