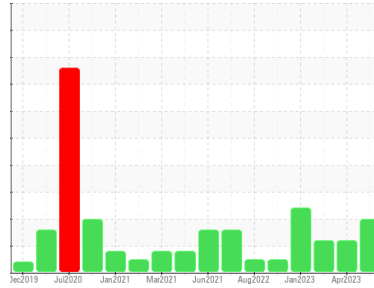
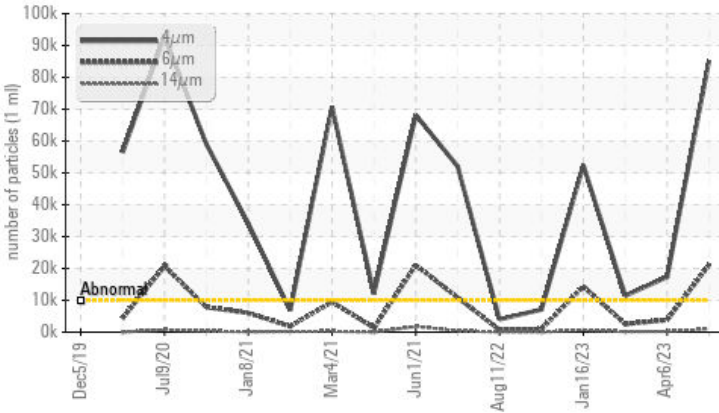


Machine Id
BOSS LONE WATIE CTB-HEATER TREATER-XTO (S/N 123442)
 Component
Compressor
 Fluid
TULCO LUBSOIL LPG WS 150 (10 GAL)



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>10000	▲ 85214	▲ 17360	▲ 11439
Particles >6µm	ASTM D7647	>1300	▲ 21103	▲ 3829	▲ 2560
Particles >14µm	ASTM D7647	>320	▲ 980	210	141
Particles >21µm	ASTM D7647	>80	▲ 159	43	29
Oil Cleanliness	ISO 4406 (c)	>20/17/15	▲ 24/22/17	▲ 21/19/15	▲ 21/19/14

Customer Id: RICHOB
 Sample No.: TO90003412
 Lab Number: 05867355
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	MISSED	Nov 30 2023	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

06 Apr 2023 Diag: Don Baldrige

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



08 Mar 2023 Diag: Don Baldrige

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



16 Jan 2023 Diag: Don Baldrige

ISO

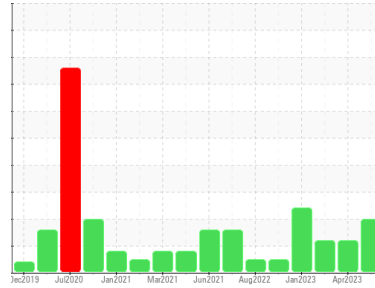


We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id
BOSS LONE WATIE CTB-HEATER TREATER-XTO (S/N 123442)
 Component
Compressor
 Fluid
TULCO LUBSOIL LPG WS 150 (10 GAL)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates 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	TO90003412	TO90002799	TO90002881	
Sample Date	Client Info	12 May 2023	06 Apr 2023	08 Mar 2023	
Machine Age	hrs	Client Info	17314	17265	17102
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A	
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL	

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	2	2	2
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	<1	0	0
Aluminum	ppm	ASTM D5185m >25	0	0	0
Lead	ppm	ASTM D5185m >25	0	0	0
Copper	ppm	ASTM D5185m >50	<1	<1	<1
Tin	ppm	ASTM D5185m >15	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	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 0	2	<1	0
Calcium	ppm	ASTM D5185m 0	0	1	2
Phosphorus	ppm	ASTM D5185m 0	188	160	176
Zinc	ppm	ASTM D5185m 0	0	<1	1
Sulfur	ppm	ASTM D5185m 0	74	23	16

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	2	1	1
Sodium	ppm	ASTM D5185m	9	10	14
Potassium	ppm	ASTM D5185m >20	3	1	1
Water	%	ASTM D6304 >2.26	1.36	0.555	0.626
ppm Water	ppm	ASTM D6304 >22600	13600	5550	6260

FLUID CLEANLINESS

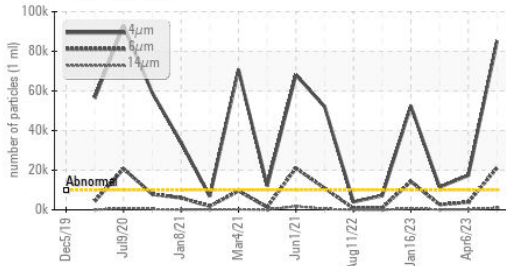
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 85214	▲ 17360	▲ 11439
Particles >6µm	ASTM D7647 >1300	▲ 21103	▲ 3829	▲ 2560
Particles >14µm	ASTM D7647 >320	▲ 980	210	141
Particles >21µm	ASTM D7647 >80	▲ 159	43	29
Particles >38µm	ASTM D7647 >20	3	1	1
Particles >71µm	ASTM D7647 >4	0	0	0
Oil Cleanliness	ISO 4406 (c) >20/17/15	▲ 24/22/17	▲ 21/19/15	▲ 21/19/14

FLUID DEGRADATION

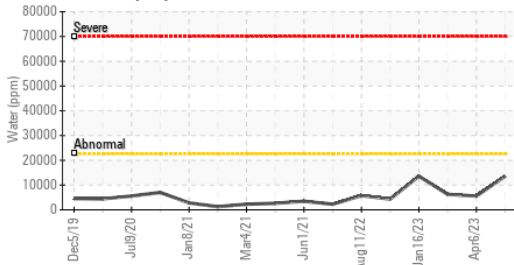
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.11	0.42	0.13

OIL ANALYSIS REPORT

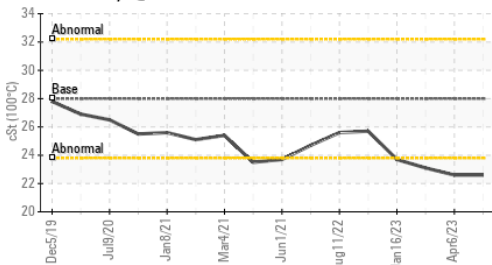
▲ Particle Trend



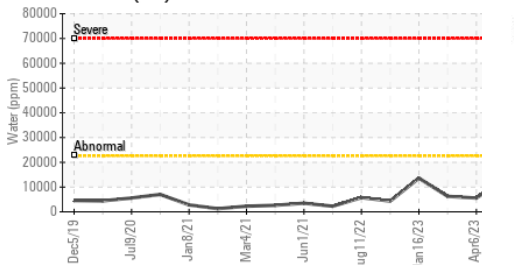
Water (KF)



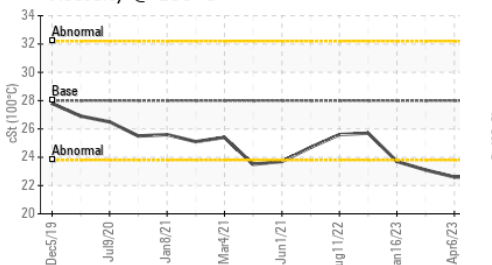
Viscosity @ 100°C



Water (KF)



Viscosity @ 100°C



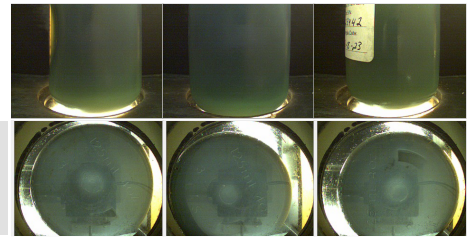
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2.26	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	151	119	124
Visc @ 100°C	cSt	ASTM D445	28	22.6	23.1
Viscosity Index (VI)	Scale	ASTM D2270	224	217	217

SAMPLE IMAGES	method	limit/base	current	history1	history2
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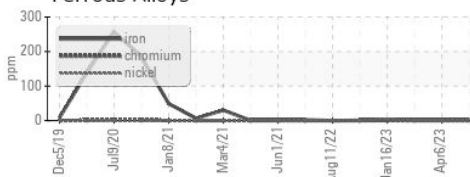
Color

Bottom

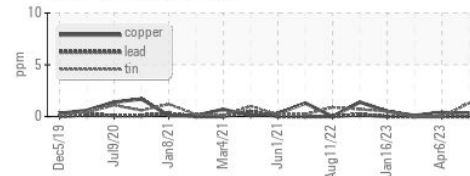


GRAPHS

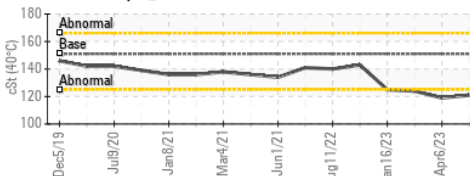
Ferrous Alloys



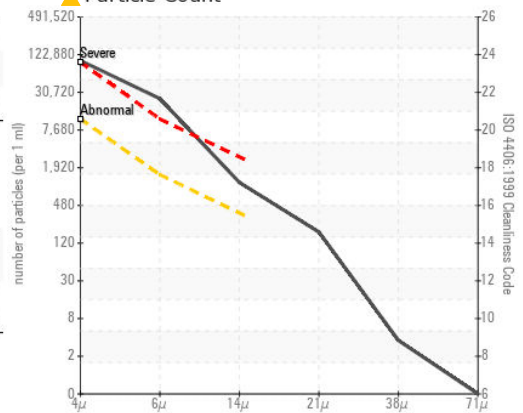
Non-ferrous Metals



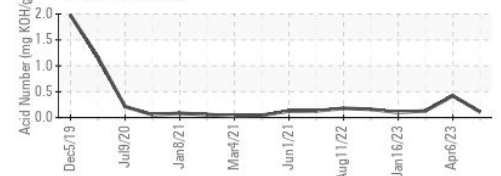
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90003412 **Received** : 07 Jun 2023
Lab Number : 05867355 **Diagnosed** : 11 Jun 2023
Unique Number : 10507139 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

RICHARDS ENERGY COMPRESSION
 1629 WEST BENDER
 HOBBS, NM
 US 88240
 Contact: BILL RICHARDSON
 richardsenergy@windstream.net

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)

T:
F: