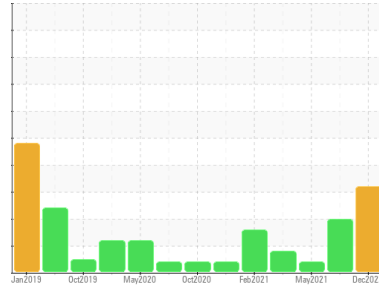
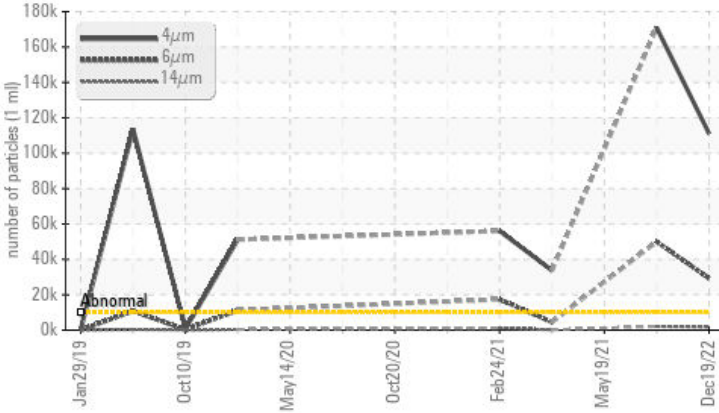


Machine Id
BOSS XTO-PLU ROSS RANCH 33-25-30 (S/N 116821)
 Component
Compressor
 Fluid
TULCO LUBSOIL LPG WS 150 (7 GAL)



COMPONENT CONDITION SUMMARY

▲ Particle Trend



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.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>10000	▲ 111080	▲ 170976	---
Particles >6µm	ASTM D7647	>1300	▲ 29272	▲ 50008	---
Particles >14µm	ASTM D7647	>320	▲ 1606	▲ 2030	---
Particles >21µm	ASTM D7647	>80	▲ 439	▲ 207	---
Particles >38µm	ASTM D7647	>20	▲ 36	5	---
Particles >71µm	ASTM D7647	>4	▲ 7	1	---
Oil Cleanliness	ISO 4406 (c)	>20/17/15	▲ 24/22/18	▲ 25/23/18	---
Debris	scalar *Visual	NONE	▲ MODER	NONE	▲ MODER

Customer Id: RICHOB
 Sample No.: TO90002924
 Lab Number: 05747970
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

01 Aug 2022 Diag: Doug Bogart

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

view report



19 May 2021 Diag: Doug Bogart

VIS DEBRIS



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. 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



09 Mar 2021 Diag: Don Baldrige

ISO



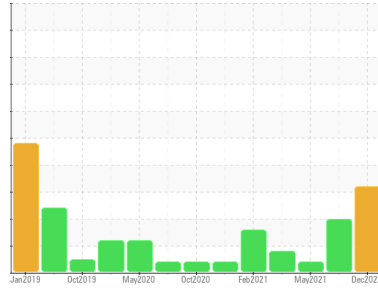
No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
BOSS XTO-PLU ROSS RANCH 33-25-30 (S/N 116821)
 Component
Compressor
 Fluid
TULCO LUBSOIL LPG WS 150 (7 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 particulates present in the oil. Moderate concentration of visible dirt/debris 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	TO90002924	TO90002493	TO9013032
Sample Date	Client Info	19 Dec 2022	01 Aug 2022	19 May 2021
Machine Age	hrs	12363	12123	7780
Oil Age	hrs	12363	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	4	2	<1
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m	4	<1	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	<1	<1	<1
Aluminum	ppm	ASTM D5185m >25	<1	<1	0
Lead	ppm	ASTM D5185m >25	0	<1	0
Copper	ppm	ASTM D5185m >50	3	3	1
Tin	ppm	ASTM D5185m >15	<1	1	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	<1

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	5	4
Barium	ppm	ASTM D5185m 0	<1	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m 0	0	<1	0
Calcium	ppm	ASTM D5185m 0	<1	0	0
Phosphorus	ppm	ASTM D5185m 0	88	418	12
Zinc	ppm	ASTM D5185m 0	33	9	0
Sulfur	ppm	ASTM D5185m 0	494	107	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	1	17	<1
Sodium	ppm	ASTM D5185m	11	2	6
Potassium	ppm	ASTM D5185m >20	<1	1	0
Water	%	ASTM D6304 >2.26	0.609	0.739	1.07
ppm Water	ppm	ASTM D6304 >22600	6090	7390	10700

FLUID CLEANLINESS

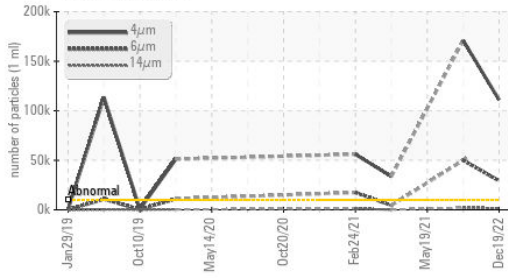
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 111080	▲ 170976	---
Particles >6µm	ASTM D7647 >1300	▲ 29272	▲ 50008	---
Particles >14µm	ASTM D7647 >320	▲ 1606	▲ 2030	---
Particles >21µm	ASTM D7647 >80	▲ 439	▲ 207	---
Particles >38µm	ASTM D7647 >20	▲ 36	5	---
Particles >71µm	ASTM D7647 >4	▲ 7	1	---
Oil Cleanliness	ISO 4406 (c) >20/17/15	▲ 24/22/18	▲ 25/23/18	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	0.38	0.084

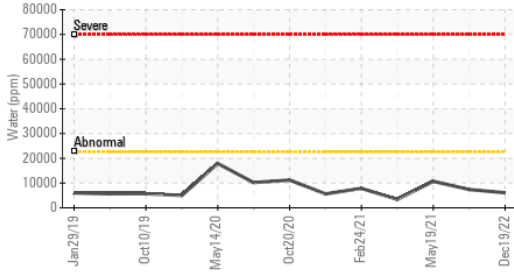
OIL ANALYSIS REPORT

▲ Particle Trend



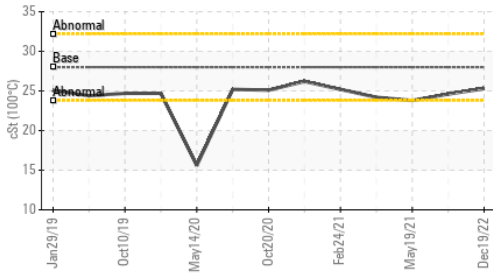
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

Water (KF)

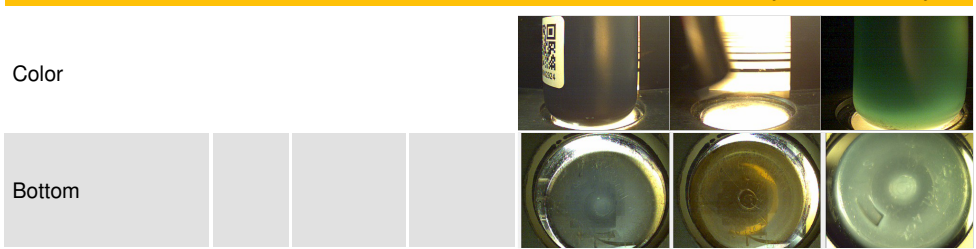


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	151	140	129
Visc @ 100°C	cSt	ASTM D445	28	24.6	23.8
Viscosity Index (VI)	Scale	ASTM D2270	224	209	217

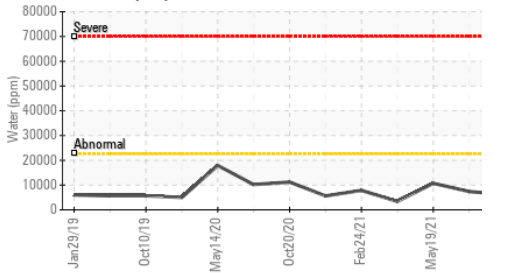
Viscosity @ 100°C



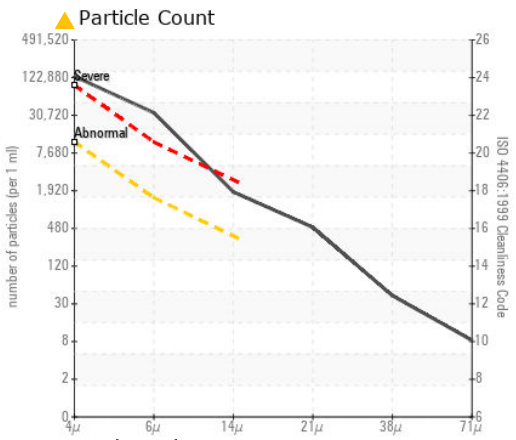
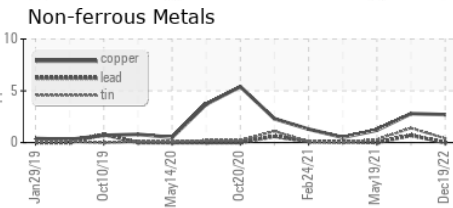
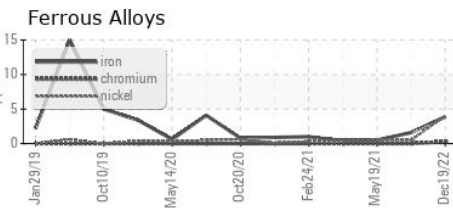
SAMPLE IMAGES



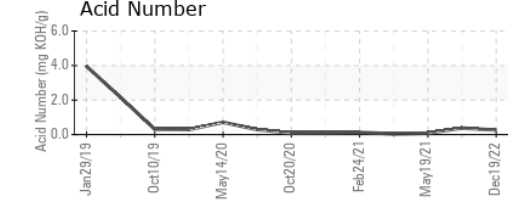
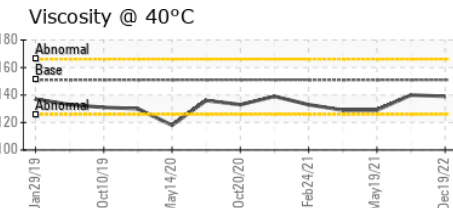
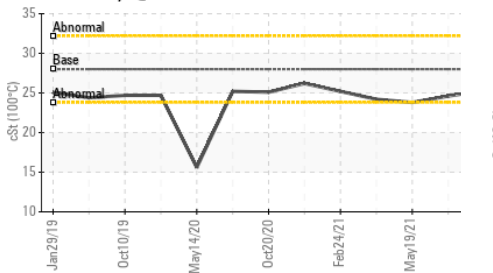
Water (KF)



GRAPHS



Viscosity @ 100°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90002924 **Received** : 24 Jan 2023
Lab Number : 05747970 **Diagnosed** : 25 Jan 2023
Unique Number : 10307574 **Diagnostician** : Don Baldrige
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: