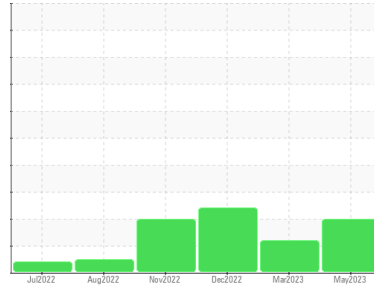


PROBLEM SUMMARY

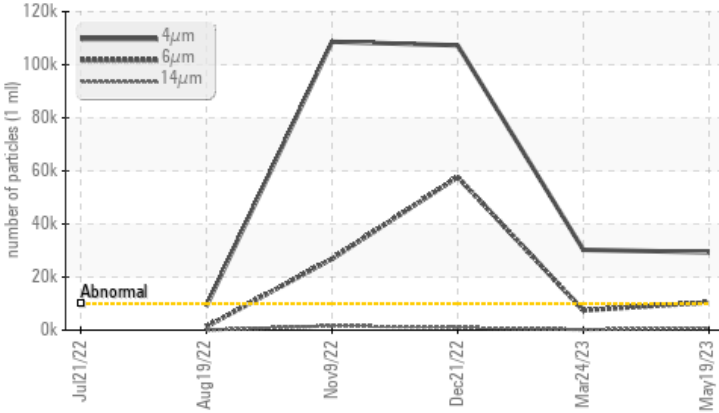
Sample Rating Trend



Machine Id
BOSS PIERCE CANYON 28 (S/N 116789)
 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	ASTM D7647	ASTM D7647	ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm	>10000	>10000	▲ 29343	▲ 30260	▲ 107299
Particles >6µm	>1300	>1300	▲ 10418	▲ 7436	▲ 57658
Particles >14µm	>320	>320	▲ 733	183	▲ 1017
Particles >21µm	>80	>80	▲ 95	30	▲ 195
Oil Cleanliness	ISO 4406 (c)	>20/17/15	▲ 22/21/17	▲ 22/20/15	▲ 24/23/17

Customer Id: RICHOB
 Sample No.: TO90003416
 Lab Number: 05867323
 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

24 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 acceptable for the time in service.

view report



21 Dec 2022 Diag: Don Baldrige

ISO



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. 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



09 Nov 2022 Diag: Angela Borella

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 acceptable for the time in service.

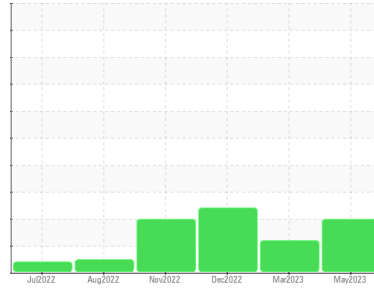
view report



Machine Id
BOSS PIERCE CANYON 28 (S/N 116789)

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			TO90003416	TO90002855	TO90002867
Sample Date	Client Info			19 May 2023	24 Mar 2023	21 Dec 2022
Machine Age	hrs	Client Info		11229	10891	0
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	10	<1	2
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m		<1	0	5
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	0	0	<1
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	<1
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	0	2	0	<1
Calcium	ppm	ASTM D5185m	0	13	0	1
Phosphorus	ppm	ASTM D5185m	0	9	63	399
Zinc	ppm	ASTM D5185m	0	2	0	4
Sulfur	ppm	ASTM D5185m	0	146	65	229

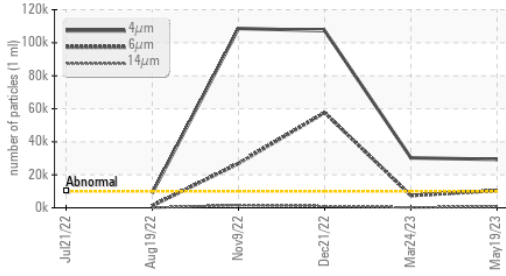
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	2	<1
Sodium	ppm	ASTM D5185m		4	3	32
Potassium	ppm	ASTM D5185m	>20	2	<1	<1
Water	%	ASTM D6304	>2.26	0.405	0.768	1.73
ppm Water	ppm	ASTM D6304	>22600	4050	7680	17300

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ 29343	▲ 30260	▲ 107299
Particles >6µm		ASTM D7647	>1300	▲ 10418	▲ 7436	▲ 57658
Particles >14µm		ASTM D7647	>320	▲ 733	183	▲ 1017
Particles >21µm		ASTM D7647	>80	▲ 95	30	▲ 195
Particles >38µm		ASTM D7647	>20	3	0	11
Particles >71µm		ASTM D7647	>4	0	0	1
Oil Cleanliness		ISO 4406 (c)	>20/17/15	▲ 22/21/17	▲ 22/20/15	▲ 24/23/17

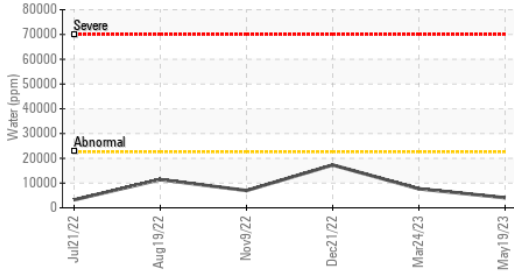
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.24	0.31	0.51

OIL ANALYSIS REPORT

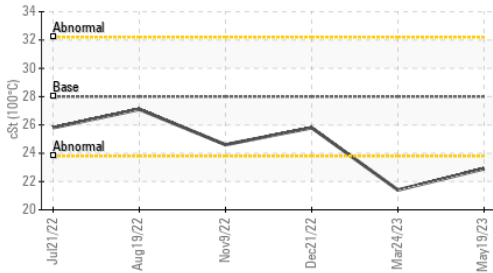
▲ Particle Trend



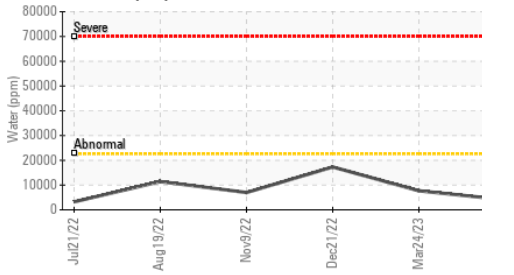
Water (KF)



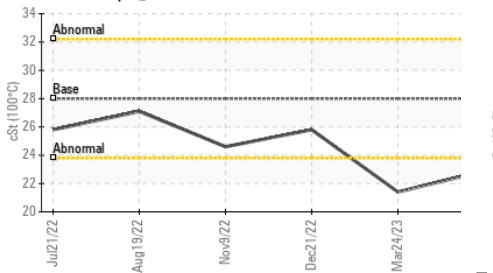
Viscosity @ 100°C



Water (KF)



Viscosity @ 100°C

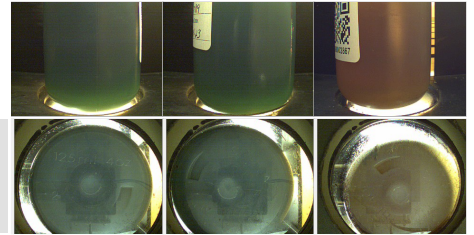


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT ▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	151	124	105
Visc @ 100°C	cSt	ASTM D445	28	22.9	21.4
Viscosity Index (VI)	Scale	ASTM D2270	224	215	231

SAMPLE IMAGES

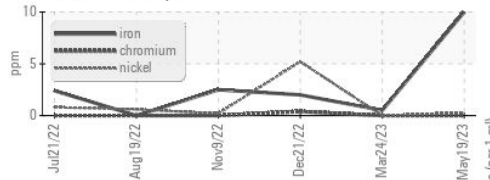
Color



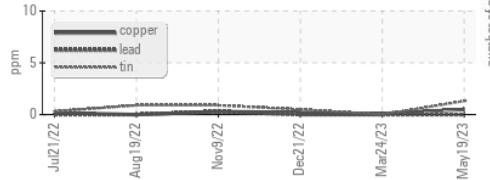
Bottom

GRAPHS

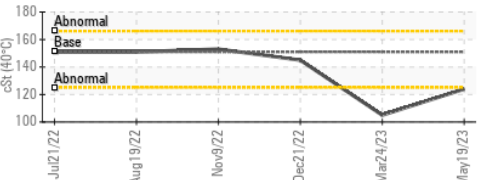
Ferrous Alloys



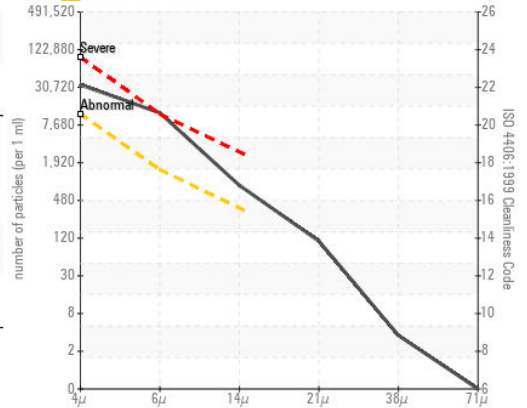
Non-ferrous Metals



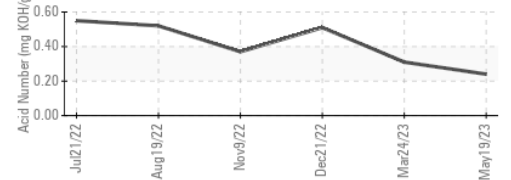
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90003416 **Received** : 07 Jun 2023
Lab Number : 05867323 **Diagnosed** : 10 Jun 2023
Unique Number : 10507107 **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: