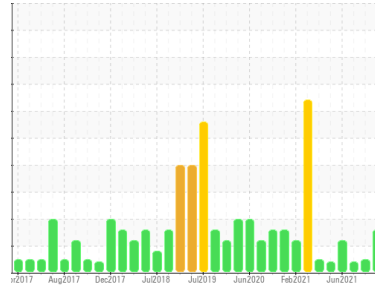


Machine Id
COMP 5 (S/N 1029)

Component
Air Compressor

Fluid
TULCO LUBSOIL SYN FG COMPRESSOR 46 (48 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	TO40000353	TO50000255	TO50000305
Sample Date	Client Info	21 Mar 2024	22 Sep 2021	23 Aug 2021
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	1	<1
Chromium	ppm	ASTM D5185m >4	0	0	0
Nickel	ppm	ASTM D5185m >4	<1	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	<1	0
Aluminum	ppm	ASTM D5185m >10	<1	0	<1
Lead	ppm	ASTM D5185m >20	0	0	0
Copper	ppm	ASTM D5185m >40	3	5	5
Tin	ppm	ASTM D5185m >5	<1	0	0
Antimony	ppm	ASTM D5185m	---	<1	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	<1	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	0	0	0
Calcium	ppm	ASTM D5185m	0	0	0
Phosphorus	ppm	ASTM D5185m 325	803	79	70
Zinc	ppm	ASTM D5185m	22	114	89
Sulfur	ppm	ASTM D5185m	532	84	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	0	0	0
Sodium	ppm	ASTM D5185m	2	0	0
Potassium	ppm	ASTM D5185m >20	<1	0	0
Water	%	ASTM D6304 >0.6	0.001	0.003	0.003
ppm Water	ppm	ASTM D6304 >6000	15	27.1	29.7

FLUID CLEANLINESS

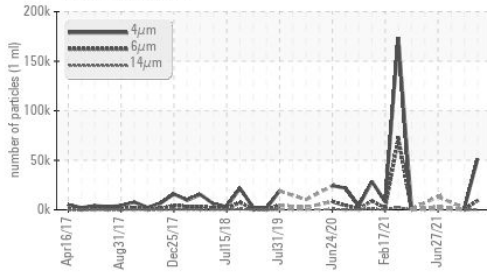
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	51422	1874	---
Particles >6µm	ASTM D7647 >1300	9428	225	---
Particles >14µm	ASTM D7647 >80	298	12	---
Particles >21µm	ASTM D7647 >20	60	3	---
Particles >38µm	ASTM D7647 >4	2	0	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	23/20/15	18/15/11	---

FLUID DEGRADATION

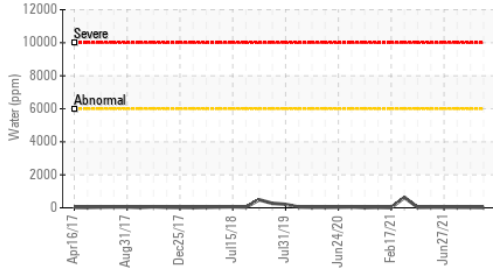
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.8	0.27	0.324	0.301

OIL ANALYSIS REPORT

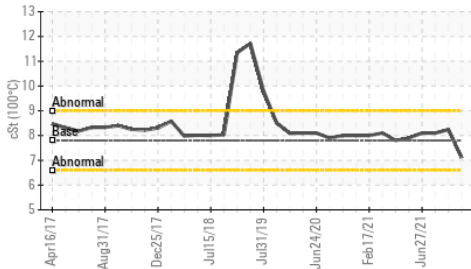
▲ Particle Trend



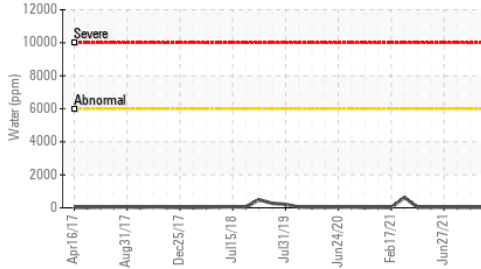
Water (KF)



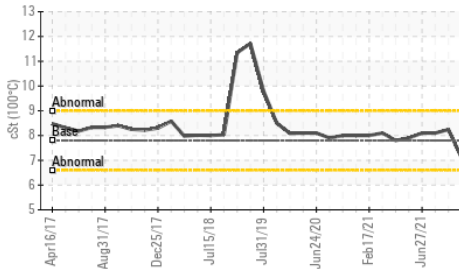
Viscosity @ 100°C



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	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.6	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

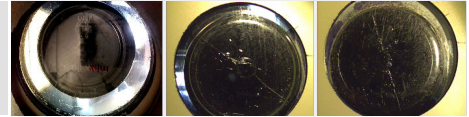
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	44.8	43.8	47.9
Visc @ 100°C	cSt	ASTM D445	7.8	7.1	8.24
Viscosity Index (VI)	Scale	ASTM D2270	146	122	146

SAMPLE IMAGES

Color

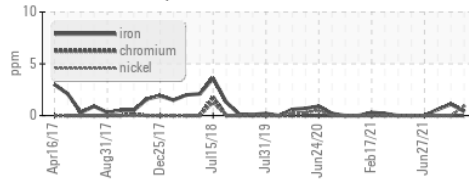


Bottom

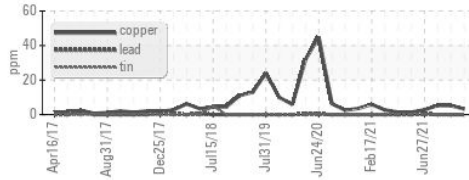


GRAPHS

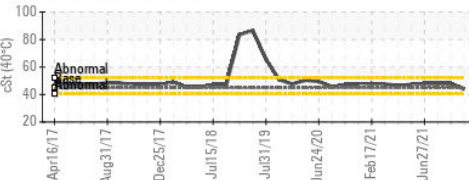
Ferrous Alloys



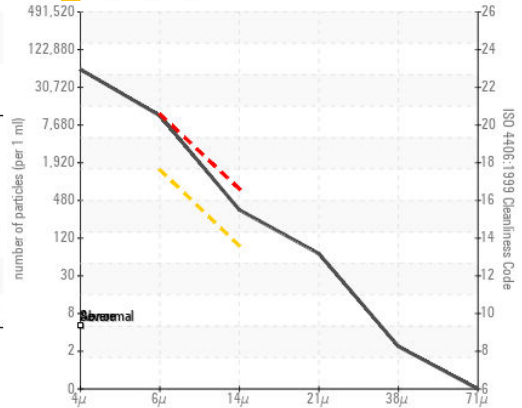
Non-ferrous Metals



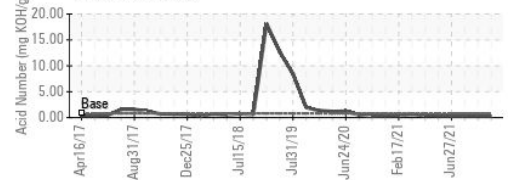
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

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

Sample No. : TO40000353

Lab Number : 06132041

Unique Number : 10951506

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

Received : 28 Mar 2024

Tested : 29 Mar 2024

Diagnosed : 02 Apr 2024 - Jonathan Hester

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)

FRESH EXPRESS - MORROW

1361 SOUTHERN ROAD

MORROW, GA

US 30260

Contact: FERNANDO VILLASENOR

fvillasenor@freshexpress.com

T: (678)422-4080

F: x: