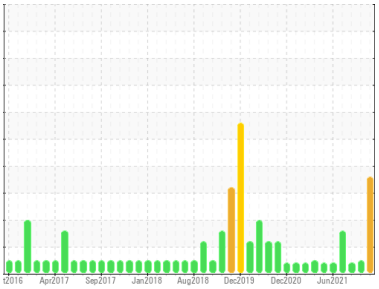
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
COMP 4 (S/N 1001)
Component
Air Compressor
Fluid
TULCO LUBSOIL SYN FG COMPRESSOR 46 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor.

Wear

An increase in the iron level is noted. An increase in the copper level is noted. Bearing wear is indicated.

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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**TO40000352**	TO50000254	TO50000304
Sample Date		Client Info		**21 Mar 2024**	22 Sep 2021	23 Aug 2021
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	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	**30**	2	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**	0	0
Aluminum	ppm	ASTM D5185m	>10	**<1**	0	<1
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>40	**26**	9	5
Tin	ppm	ASTM D5185m	>5	**<1**	<1	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		**<1**	0	0
Calcium	ppm	ASTM D5185m		**0**	0	0
Phosphorus	ppm	ASTM D5185m	325	**52**	113	153
Zinc	ppm	ASTM D5185m		**173**	142	55
Sulfur	ppm	ASTM D5185m		**0**	86	1

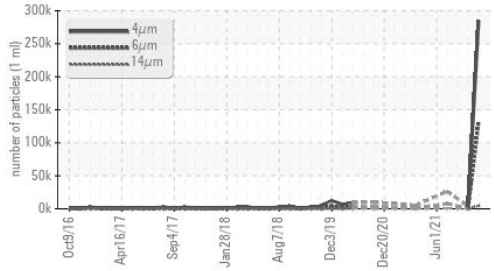
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	0	<1
Sodium	ppm	ASTM D5185m		**2**	0	0
Potassium	ppm	ASTM D5185m	>20	**<1**	0	0
Water	%	ASTM D6304	>0.6	**0.002**	0.003	0.003
ppm Water	ppm	ASTM D6304	>6000	**22**	34.5	26.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**284519**	3811	---
Particles >6µm		ASTM D7647	>1300	**132484**	514	---
Particles >14µm		ASTM D7647	>80	**4414**	25	---
Particles >21µm		ASTM D7647	>20	**673**	8	---
Particles >38µm		ASTM D7647	>4	**12**	1	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	**25/24/19**	19/16/12	---

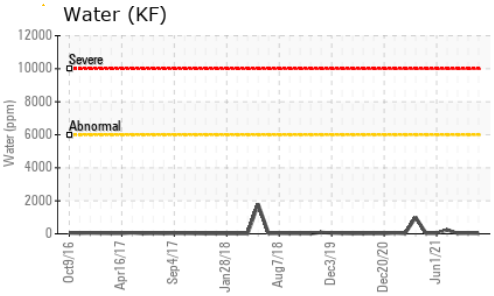
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.8	**0.37**	0.370	0.461

OIL ANALYSIS REPORT

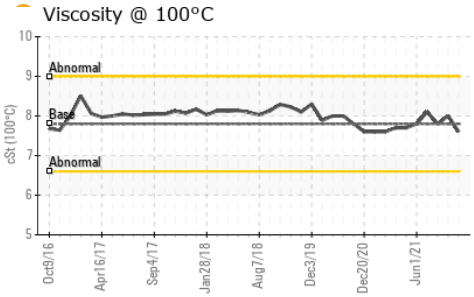
Particle Trend



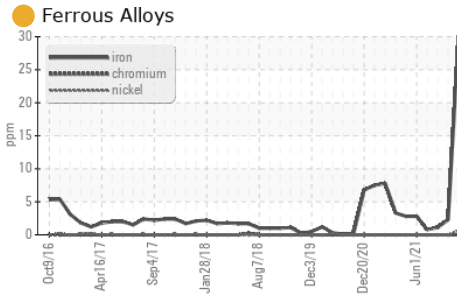
Water (KF)



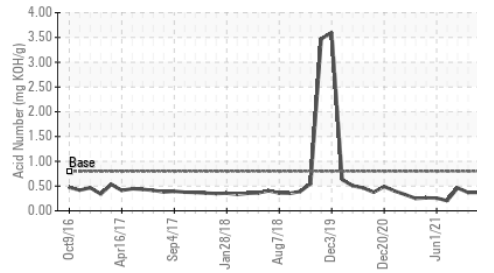
Viscosity @ 100°C



Ferrous Alloys

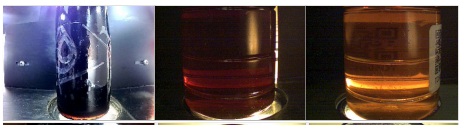


Acid Number



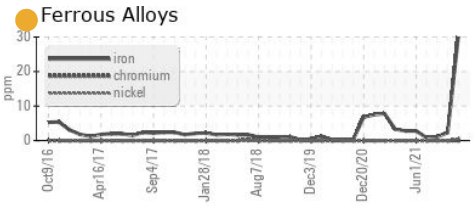
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**LIGHT**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.6	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	44.8	**44.8**	46.6	46.0
Visc @ 100°C	cSt	ASTM D445	7.8	**7.6**	8	7.8
Viscosity Index (VI)	Scale	ASTM D2270	146	**137**	143	139

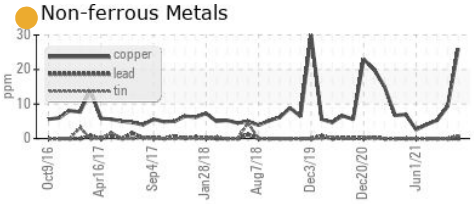
SAMPLE IMAGES						
Color						
Bottom						

GRAPHS

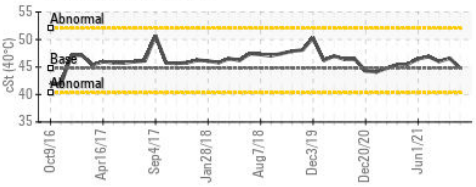
Ferrous Alloys



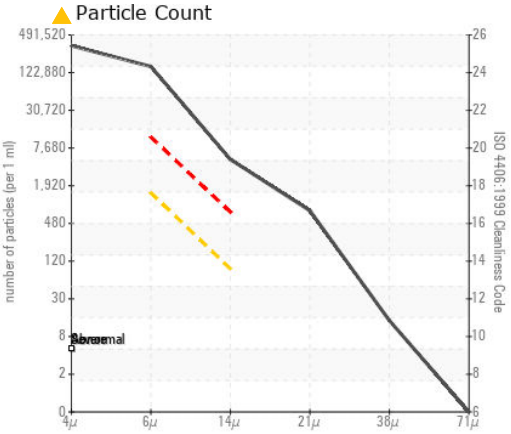
Non-ferrous Metals



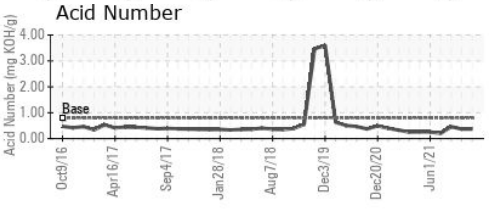
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO40000352
Lab Number : 06132042
Unique Number : 10951507
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

Received : 28 Mar 2024
Tested : 29 Mar 2024
Diagnosed : 02 Apr 2024 - Angela Borella

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)

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