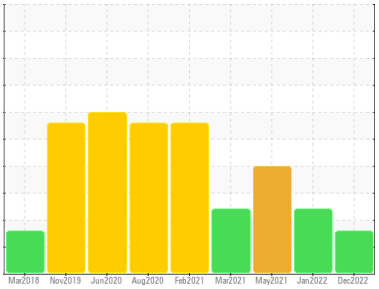
PROBLEM SUMMARY

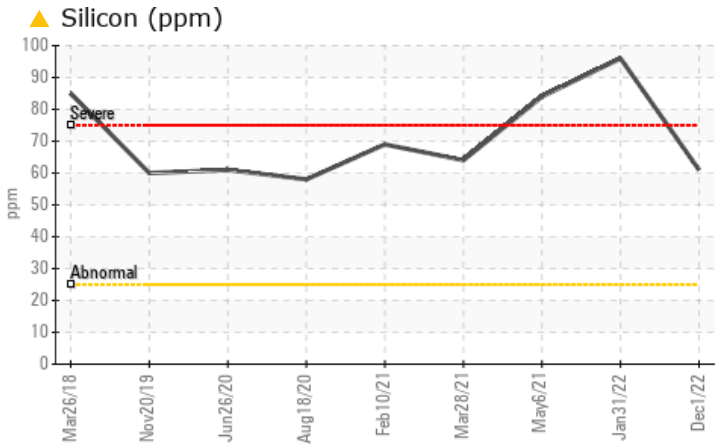
Sample Rating Trend



DIRT

Machine Id
VILTER B
Component
Compressor
Fluid
TULCO LUBSOIL LPG WI 100 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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
Silicon	ppm	ASTM D5185m	>25	▲ **61**	▲ 96	▲ 84

Customer Id: MELMELTX
Sample No.: TO50000125
Lab Number: 05708434
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

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

31 Jan 2022 Diag: Doug Bogart

DIRT

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. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid.

view report

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06 May 2021 Diag: Jonathan Hester

WATER

The filter change at the time of sampling has been noted. 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. There is a moderate concentration of water present in the oil. There is a moderate amount of visible silt present in the sample. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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28 Mar 2021 Diag: Jonathan Hester

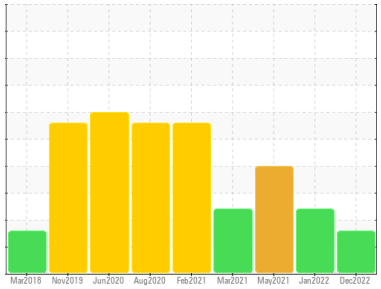
DIRT

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. There is a moderate amount of visible silt present in the sample. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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



DIRT

Machine Id
VILTER B
Component
Compressor
Fluid
TULCO LUBSOIL LPG WI 100 (--- GAL)

DIAGNOSIS

Recommendation
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
Elemental level of silicon (Si) above normal indicating ingress of seal material. The amount and size of particulates present in the system are acceptable.

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		**TO50000125**	TO50000083	TO50000090
Sample Date		Client Info		**01 Dec 2022**	31 Jan 2022	06 May 2021
Machine Age	mths	Client Info		**0**	0	0
Oil Age	mths	Client Info		**0**	0	0
Oil Changed		Client Info		**Filtered**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	3	29
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m		**0**	<1	1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	<1	<1
Aluminum	ppm	ASTM D5185m	>25	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>25	**0**	<1	0
Copper	ppm	ASTM D5185m	>50	**0**	<1	0
Tin	ppm	ASTM D5185m	>15	**<1**	1	0
Antimony	ppm	ASTM D5185m		**---**	1	2
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**	2	<1
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m	0	**2**	<1	0
Calcium	ppm	ASTM D5185m		**0**	0	<1
Phosphorus	ppm	ASTM D5185m	0	**36**	10	5
Zinc	ppm	ASTM D5185m	0	**4**	0	0
Sulfur	ppm	ASTM D5185m	0	**6098**	6239	2086

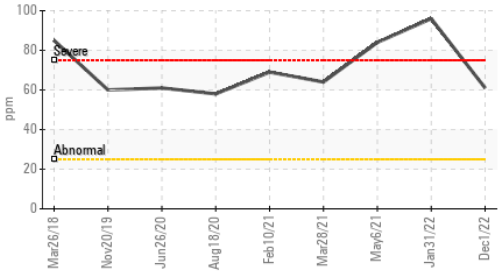
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	▲ **61**	▲ 96	▲ 84
Sodium	ppm	ASTM D5185m		**0**	2	2
Potassium	ppm	ASTM D5185m	>20	**0**	2	0
Water	%	ASTM D6304	>2.26	**0.301**	0.003	▲ 0.627
ppm Water	ppm	ASTM D6304	>22600	**3017.4**	32.7	▲ 6270

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**3365**	▲ 196636	---
Particles >6µm		ASTM D7647	>1300	**594**	▲ 47745	---
Particles >14µm		ASTM D7647	>320	**31**	140	---
Particles >21µm		ASTM D7647	>80	**9**	31	---
Particles >38µm		ASTM D7647	>20	**1**	1	---
Particles >71µm		ASTM D7647	>4	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>20/17/15	**19/16/12**	▲ 25/23/14	---

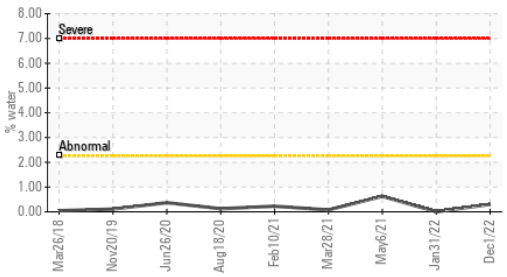
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.02**	0.641	0.857

OIL ANALYSIS REPORT

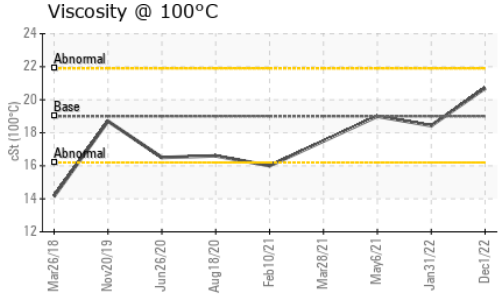
Silicon (ppm)



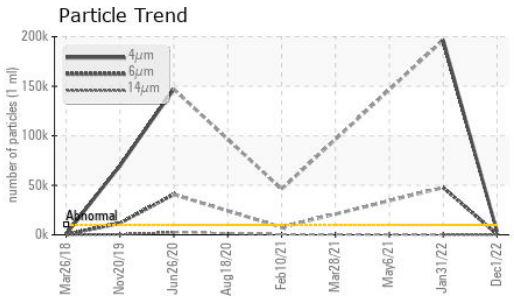
Water



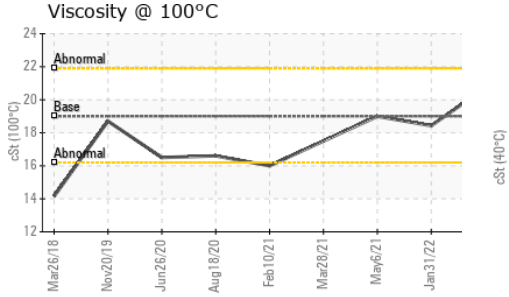
Viscosity @ 100°C



Particle Trend



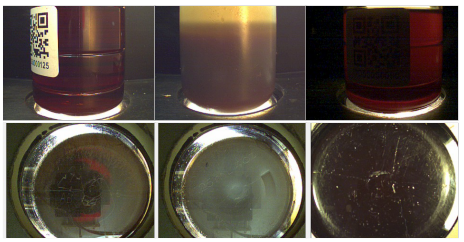
Viscosity @ 100°C



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	**NONE**	NONE	▲ MODER
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
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	>2.26	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

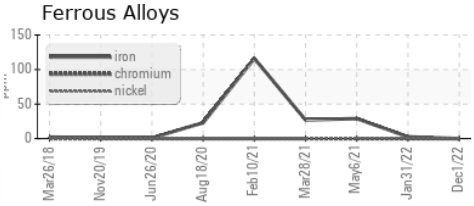
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	113	**124**	109	129
Visc @ 100°C	cSt	ASTM D445	19	**20.7**	18.43	19.0
Viscosity Index (VI)	Scale	ASTM D2270	189	**192**	188	166

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

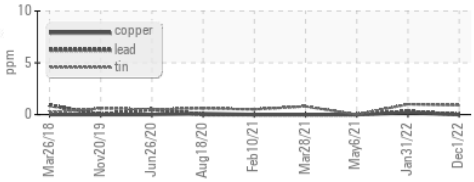


GRAPHS

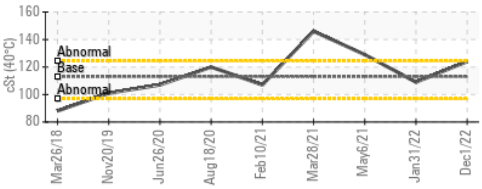
Ferrous Alloys



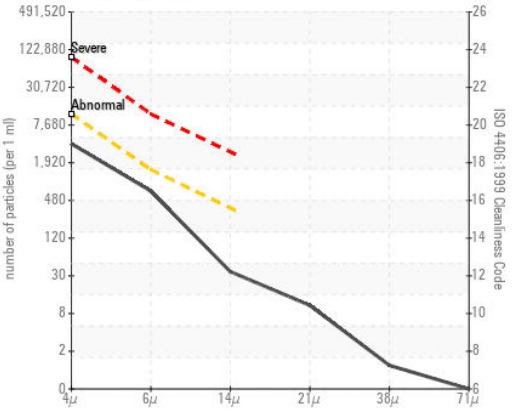
Non-ferrous Metals



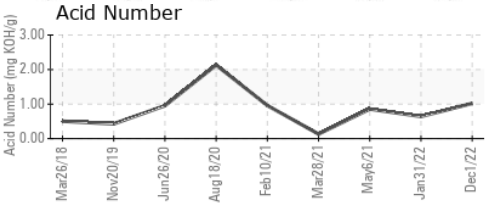
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50000125 **Received** : 05 Dec 2022
Lab Number : 05708434 **Diagnosed** : 06 Dec 2022
Unique Number : 10243009 **Diagnostician** : Angela Borella
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

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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