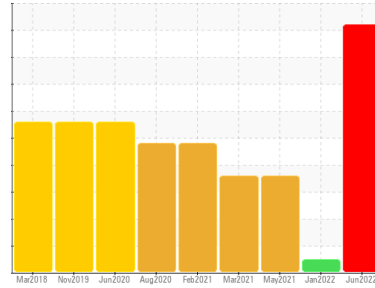




Machine Id  
**MYCOM B**

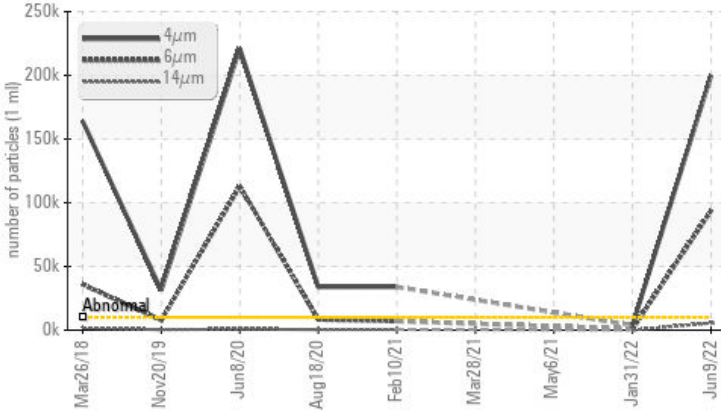
Component  
**Compressor**

Fluid  
**TULCO LUBSOIL LPG WI 100 (--- GAL)**

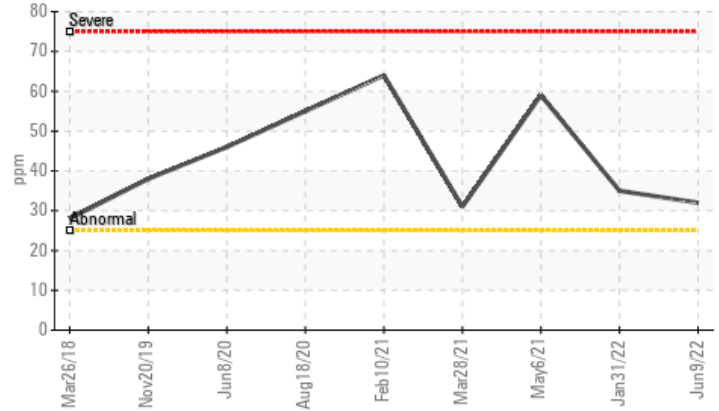


## COMPONENT CONDITION SUMMARY

### Particle Trend



### Silicon (ppm)



## 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			SEVERE	NORMAL	ABNORMAL
Silicon	ppm	ASTM D5185m >25	▲ 32	35	▲ 59
Particles >4µm		ASTM D7647 >10000	● 199741	3738	---
Particles >6µm		ASTM D7647 >1300	● 93775	1019	---
Particles >14µm		ASTM D7647 >320	● 5545	86	---
Particles >21µm		ASTM D7647 >80	● 820	17	---
Oil Cleanliness		ISO 4406 (c) >20/17/15	● 25/24/20	19/17/14	---

Customer Id: MELMELTX  
Sample No.: TO50000130  
Lab Number: 05569213  
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](mailto:angela.borella@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

There are no recommended actions for this sample.

## HISTORICAL DIAGNOSIS

### 31 Jan 2022 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 06 May 2021 Diag: Jonathan Hester

WATER



We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. 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. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid.

view report



### 28 Mar 2021 Diag: Jonathan Hester

WATER



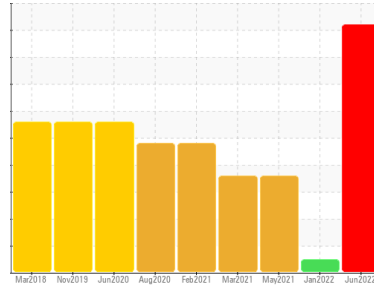
We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. There is a high concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. 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



Machine Id  
**MYCOM 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

There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

### 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		<b>TO50000130</b>	TO50000085	TO50000087
Sample Date	Client Info		<b>09 Jun 2022</b>	31 Jan 2022	06 May 2021
Machine Age	wks	Client Info	<b>0</b>	0	0
Oil Age	wks	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Filtered</b>	N/A	N/A
Sample Status			<b>SEVERE</b>	NORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	<1	0
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	3
Copper	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m >15	<b>1</b>	<1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	<1	6
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>3</b>	3	4
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 0	<b>2</b>	<1	0
Calcium	ppm	ASTM D5185m	<b>3</b>	<1	0
Phosphorus	ppm	ASTM D5185m 0	<b>27</b>	17	0
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 0	<b>2528</b>	946	1317

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>▲ 32</b>	35	<b>▲ 59</b>
Sodium	ppm	ASTM D5185m	<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	0
Water	%	ASTM D6304 >2.26	<b>0.297</b>	0.685	<b>▲ 0.608</b>
ppm Water	ppm	ASTM D6304 >22600	<b>2971.3</b>	6851.6	<b>▲ 6080</b>

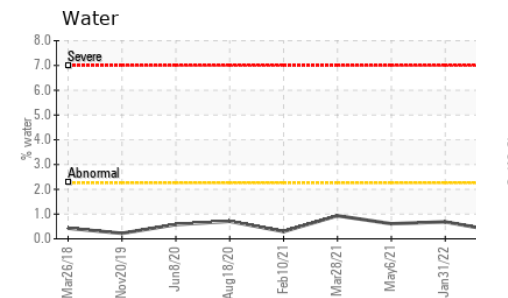
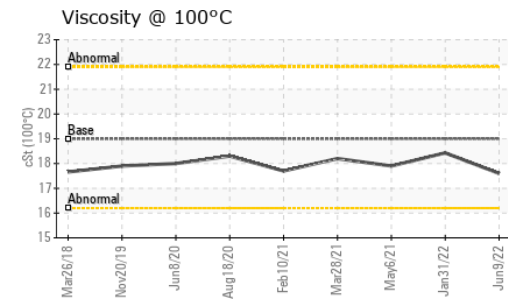
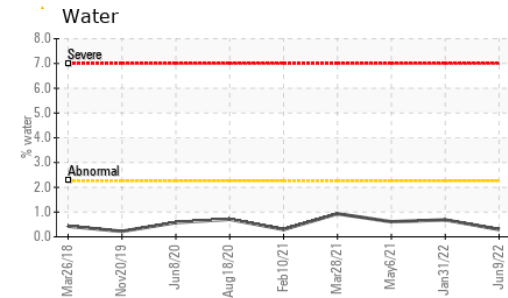
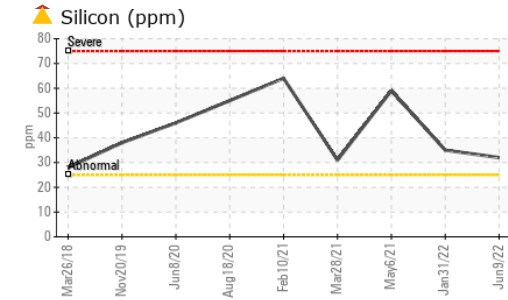
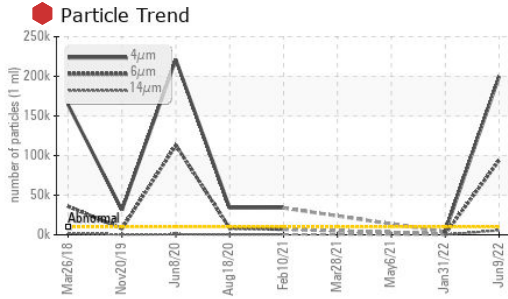
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>● 199741</b>	3738	---
Particles >6µm	ASTM D7647	>1300	<b>● 93775</b>	1019	---
Particles >14µm	ASTM D7647	>320	<b>● 5545</b>	86	---
Particles >21µm	ASTM D7647	>80	<b>● 820</b>	17	---
Particles >38µm	ASTM D7647	>20	<b>2</b>	0	---
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>20/17/15	<b>● 25/24/20</b>	19/17/14	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.259</b>	0.338	1.349

# OIL ANALYSIS REPORT



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	NONE	▲ 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	113	104	105
Visc @ 100°C	cSt	ASTM D445	19	17.6	18.43
Viscosity Index (VI)	Scale	ASTM D2270	189	186	197

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50000130 **Received** : 15 Jun 2022  
**Lab Number** : 05569213 **Diagnosed** : 16 Jun 2022  
**Unique Number** : 10013613 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**MELISSA RENEWABLES**  
 3820 SAM RAYBURN HWY  
 MELISSA, TX  
 US 75454  
 Contact: BILL PALMER  
 bpalmer@morrowenergy.com  
 T: (972)529-8442  
 F:

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)