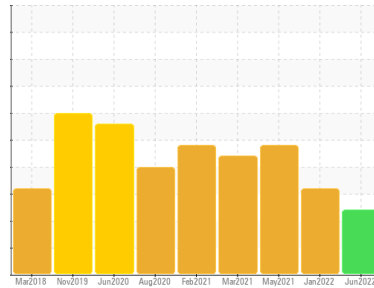


# PROBLEM SUMMARY

Sample Rating Trend



**DIRT**



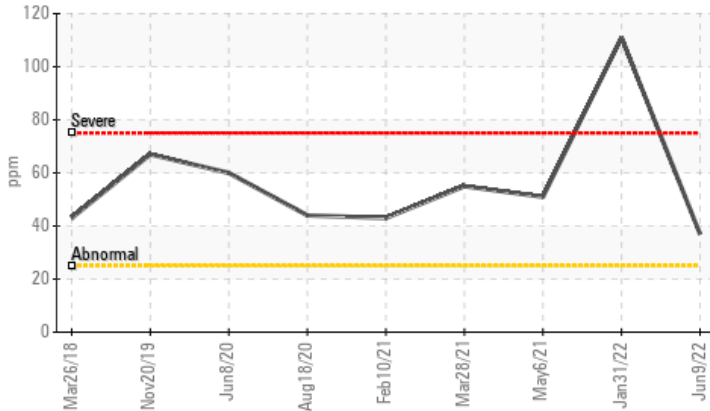
Machine Id  
**MYCOM A**

Component  
**Compressor**

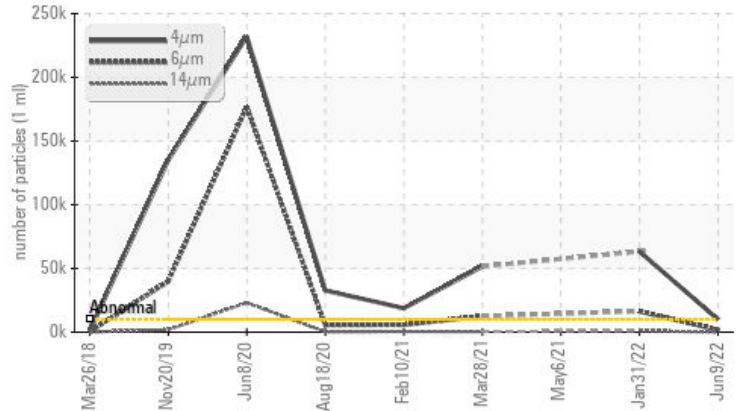
Fluid  
**TULCO LUBSOIL LPG WI 100 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Particle Trend



## RECOMMENDATION

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.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Silicon	ppm	ASTM D5185m >25	▲ <b>37</b>	▲ 111	▲ 51
Particles >6µm		ASTM D7647 >1300	▲ <b>1661</b>	▲ 16426	---
Oil Cleanliness		ISO 4406 (c) >20/17/15	▲ <b>20/18/12</b>	▲ 23/21/17	---

Customer Id: MELMELTX  
Sample No.: TO50000121  
Lab Number: 05569217  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

#### 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 particulates 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



### 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. Moderate concentration of visible metal present. All component wear rates are normal. There is a moderate concentration of water 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



### 28 Mar 2021 Diag: Don Baldrige

#### WATER



We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid.

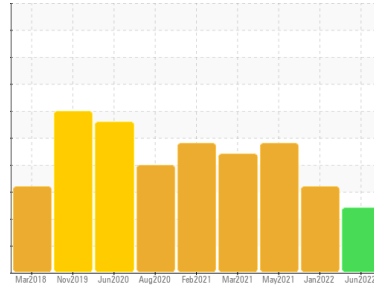
view report



Machine Id  
**MYCOM A**

Component  
**Compressor**

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



## DIAGNOSIS

### Recommendation

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.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) 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 suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>TO50000121</b>	TO50000086	TO50000088
Sample Date	Client Info	<b>09 Jun 2022</b>	31 Jan 2022	06 May 2021
Machine Age	mths	Client Info	<b>0</b>	0
Oil Age	mths	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>Filtered</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	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>	<1	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	2	<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>	<1	0
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >50	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m >15	<b>1</b>	<1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	<1	2
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	<b>&lt;1</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>&lt;1</b>	<1	0
Calcium	ppm	ASTM D5185m	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185m 0	<b>17</b>	14	<1
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	1
Sulfur	ppm	ASTM D5185m 0	<b>2656</b>	2309	1469

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>▲ 37</b>	▲ 111	▲ 51
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	0
Water	%	ASTM D6304 >2.26	<b>0.963</b>	0.357	▲ 0.460
ppm Water	ppm	ASTM D6304 >22600	<b>9630</b>	3578.2	▲ 4600

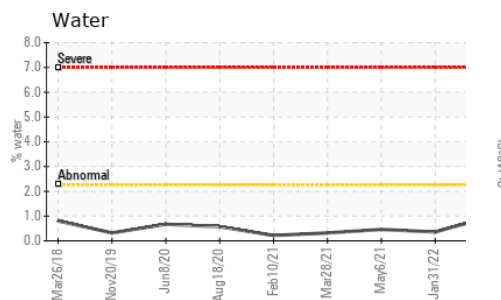
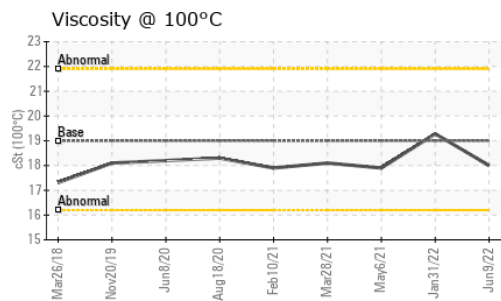
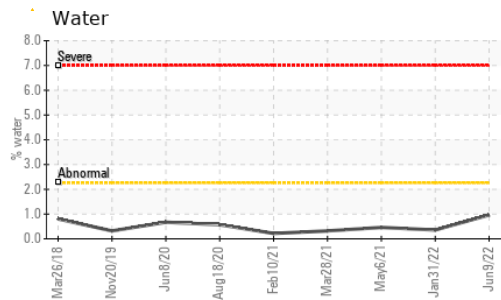
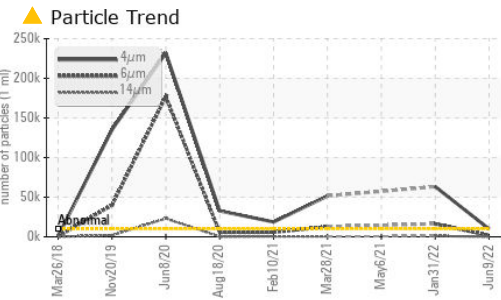
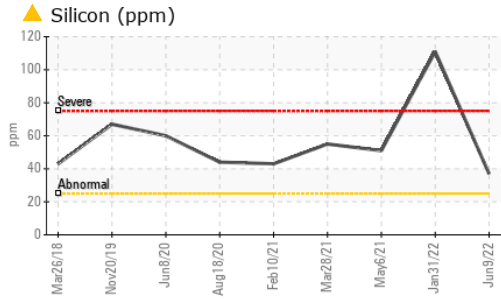
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>9886</b>	▲ 63348	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 1661</b>	▲ 16426	---
Particles >14µm	ASTM D7647 >320	<b>34</b>	▲ 994	---
Particles >21µm	ASTM D7647 >80	<b>9</b>	▲ 229	---
Particles >38µm	ASTM D7647 >20	<b>0</b>	4	---
Particles >71µm	ASTM D7647 >4	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >20/17/15	<b>▲ 20/18/12</b>	▲ 23/21/17	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.401</b>	0.705	1.103

# OIL ANALYSIS REPORT

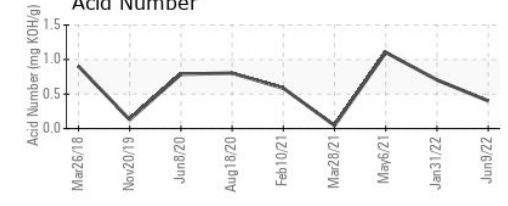
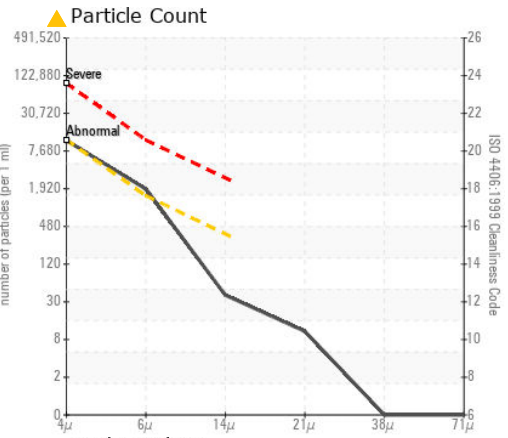
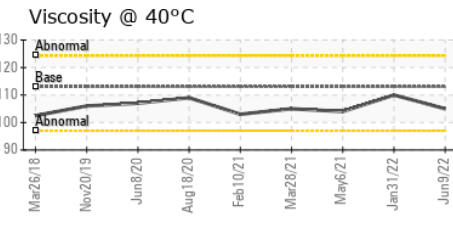
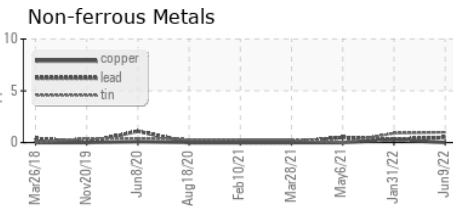
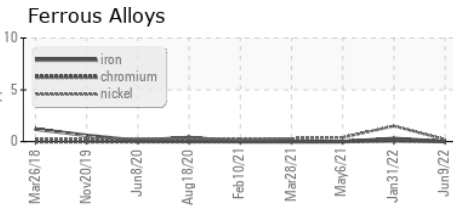


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE ▲ MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>VLITE</b>	VLITE ▲ MODER
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML
Emulsified Water	scalar	*Visual	>2.26	<b>NEG</b>	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	113	<b>105</b>	110
Visc @ 100°C	cSt	ASTM D445	19	<b>18.0</b>	19.28
Viscosity Index (VI)	Scale	ASTM D2270	189	<b>190</b>	197

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50000121 **Received** : 15 Jun 2022  
**Lab Number** : 05569217 **Diagnosed** : 20 Jun 2022  
**Unique Number** : 10013617 **Diagnostician** : Don Baldrige  
**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:

Certificate L2367  
 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)