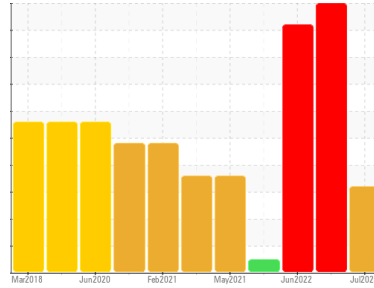


# PROBLEM SUMMARY

Sample Rating Trend



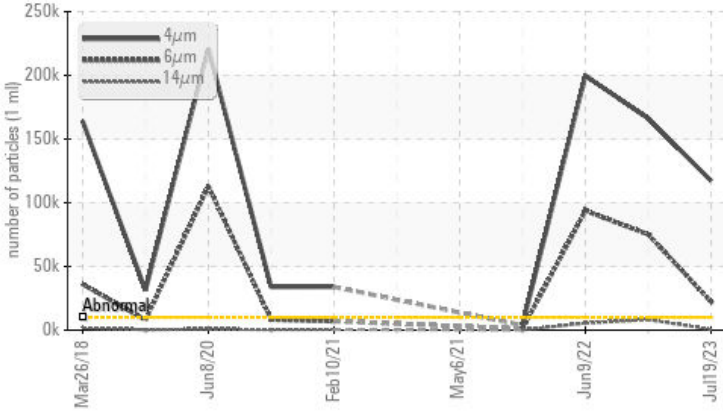
Machine Id  
**MYCOM B**

Component  
**Compressor**

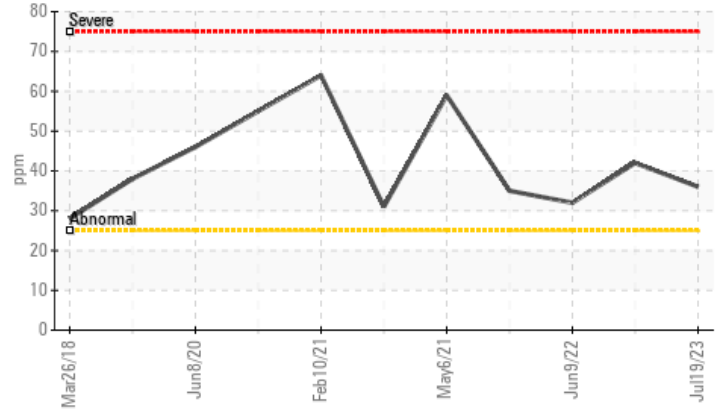
Fluid  
**TULCO LUBSOIL LPG WI 100 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Silicon (ppm)



## 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>	SEVERE	SEVERE
Silicon	ppm	ASTM D5185m	>25	▲ <b>36</b>	▲ 42	▲ 32
Particles >4µm		ASTM D7647	>10000	▲ <b>117248</b>	● 166203	● 199741
Particles >6µm		ASTM D7647	>1300	▲ <b>22381</b>	● 75162	● 93775
Particles >14µm		ASTM D7647	>320	▲ <b>523</b>	● 8202	● 5545
Oil Cleanliness		ISO 4406 (c)	>20/17/15	▲ <b>24/22/16</b>	● 25/23/20	● 25/24/20

Customer Id: MELMELTX  
Sample No.: TO60000404  
Lab Number: 05905470  
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

### 01 Dec 2022 Diag: Angela Borella

ISO



The filter change at the time of sampling has been noted. 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. The condition of the oil is acceptable for the time in service.

view report



### 09 Jun 2022 Diag: Angela Borella

ISO



The filter change at the time of sampling has been noted. 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. The condition of the oil is acceptable for the time in service.

view report



### 31 Jan 2022 Diag: Doug Bogart

NORMAL



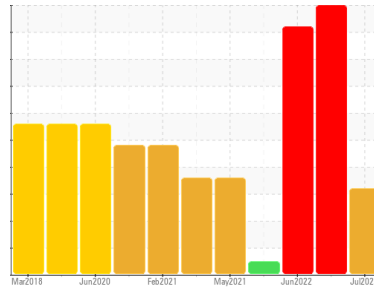
Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for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

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**MYCOM B**

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 high amount of particulates present in the oil. Elemental level of silicon (Si) above normal.

### 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>TO60000404</b>	TO50000122	TO50000130
Sample Date	Client Info	<b>19 Jul 2023</b>	01 Dec 2022	09 Jun 2022
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>N/A</b>	Filtered	Filtered
Sample Status		<b>ABNORMAL</b>	SEVERE	SEVERE

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	<1	<1	0
Chromium	ppm ASTM D5185m >10	<1	0	0
Nickel	ppm ASTM D5185m	<1	0	<1
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	<1	0	0
Aluminum	ppm ASTM D5185m >25	0	0	<1
Lead	ppm ASTM D5185m >25	0	0	<1
Copper	ppm ASTM D5185m >50	0	0	<1
Tin	ppm ASTM D5185m >15	<1	<1	1
Antimony	ppm ASTM D5185m	---	---	---
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	0	3
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m 0	0	0	<1
Manganese	ppm ASTM D5185m	0	0	0
Magnesium	ppm ASTM D5185m 0	0	2	2
Calcium	ppm ASTM D5185m	0	0	3
Phosphorus	ppm ASTM D5185m 0	0	37	27
Zinc	ppm ASTM D5185m 0	0	5	0
Sulfur	ppm ASTM D5185m 0	<b>1990</b>	987	2528

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>▲ 36</b>	▲ 42	▲ 32
Sodium	ppm ASTM D5185m	0	0	0
Potassium	ppm ASTM D5185m >20	<1	0	<1
Water	% ASTM D6304 >2.26	<b>0.343</b>	0.208	0.297
ppm Water	ppm ASTM D6304 >22600	<b>3435.2</b>	2086.3	2971.3

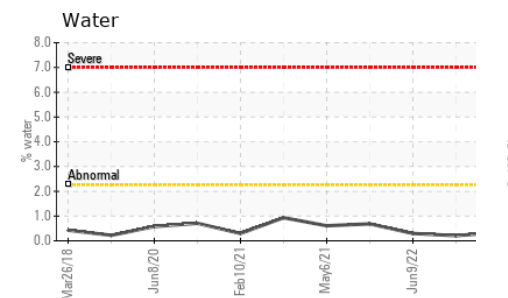
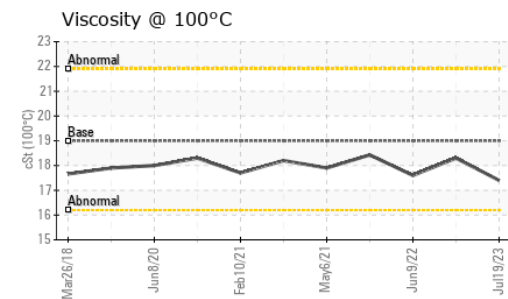
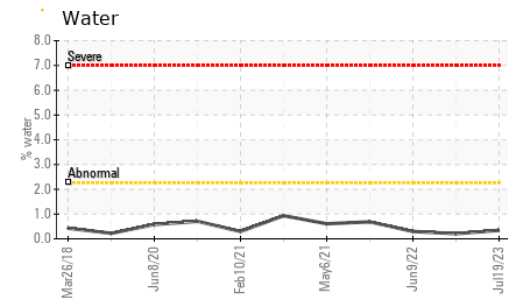
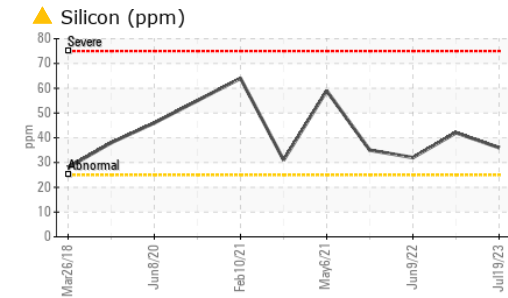
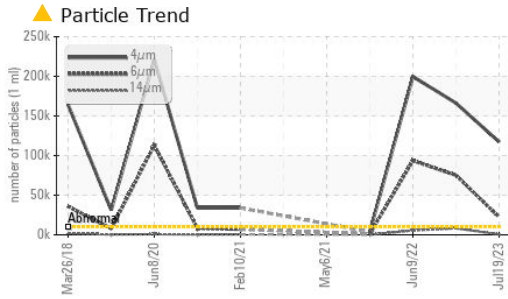
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>▲ 117248</b>	166203	199741
Particles >6µm	ASTM D7647 >1300	<b>▲ 22381</b>	75162	93775
Particles >14µm	ASTM D7647 >320	<b>▲ 523</b>	8202	5545
Particles >21µm	ASTM D7647 >80	<b>79</b>	2669	820
Particles >38µm	ASTM D7647 >20	<b>1</b>	162	2
Particles >71µm	ASTM D7647 >4	<b>0</b>	7	0
Oil Cleanliness	ISO 4406 (c) >20/17/15	<b>▲ 24/22/16</b>	25/23/20	25/24/20

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.401</b>	0.68	0.259

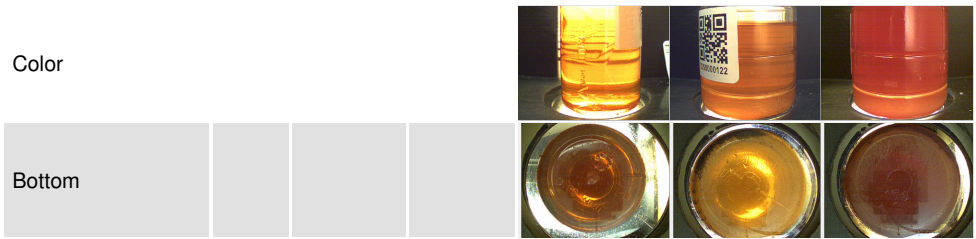
# OIL ANALYSIS REPORT



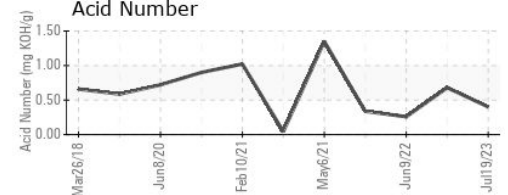
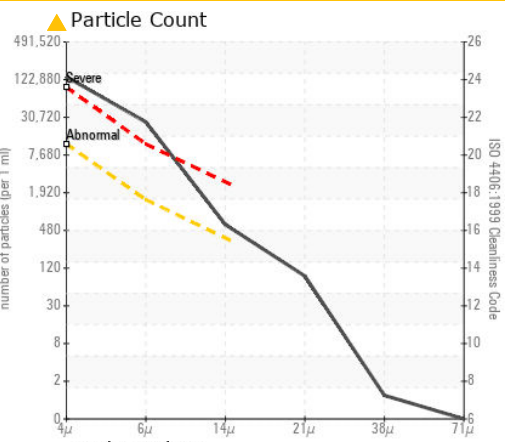
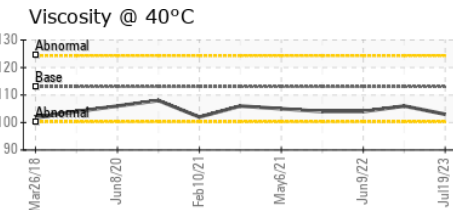
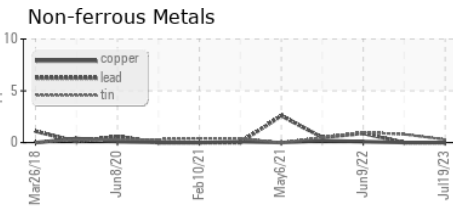
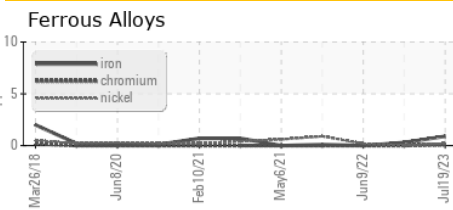
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	106	104
Visc @ 100°C	cSt	ASTM D445	19	18.3	17.6
Viscosity Index (VI)	Scale	ASTM D2270	189	192	186

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO60000404 **Received** : 24 Jul 2023  
**Lab Number** : 05905470 **Diagnosed** : 26 Jul 2023  
**Unique Number** : 10566826 **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:

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)