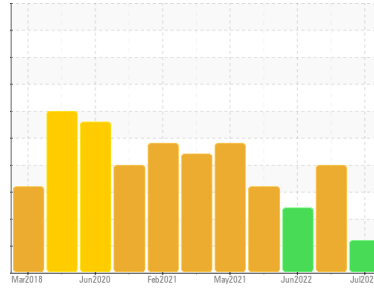


Machine Id
MYCOM A

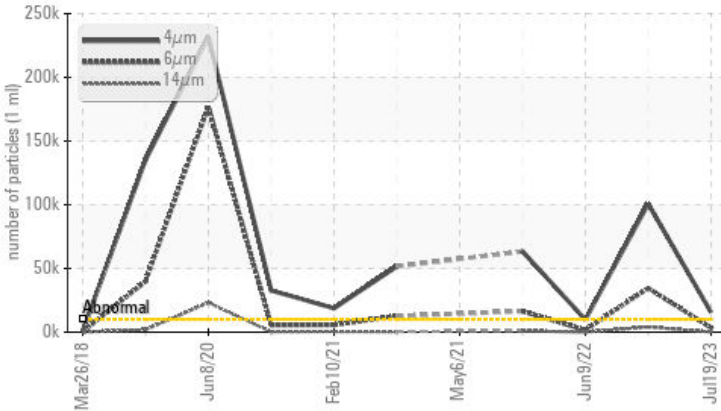
Component
Compressor

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



COMPONENT CONDITION SUMMARY

▲ 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			ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>10000	▲ 15691	▲ 100713	9886
Particles >6µm	ASTM D7647	>1300	▲ 3471	▲ 34517	▲ 1661
Oil Cleanliness	ISO 4406 (c)	>20/17/15	▲ 21/19/14	▲ 24/22/19	▲ 20/18/12

Customer Id: MELMELTX
Sample No.: TO60000405
Lab Number: 05905466
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

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

01 Dec 2022 Diag: Angela Borella

DIRT



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

view report



09 Jun 2022 Diag: Don Baldrige

DIRT



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. All component wear rates are normal. 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. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



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.

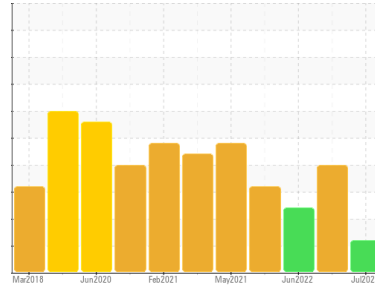
view report



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 high amount of silt (particulates < 14 microns in size) present in the oil.

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	TO60000405	TO50000123	TO50000121
Sample Date	Client Info	19 Jul 2023	01 Dec 2022	09 Jun 2022
Machine Age	wks Client Info	0	0	0
Oil Age	wks Client Info	0	0	0
Oil Changed	Client Info	Filtered	Filtered	Filtered
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	0	<1	0
Chromium	ppm ASTM D5185m >10	0	0	0
Nickel	ppm ASTM D5185m	0	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	0
Tin	ppm ASTM D5185m >15	<1	<1	1
Antimony	ppm ASTM D5185m	---	---	---
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	0	0	<1
Barium	ppm ASTM D5185m	<1	0	0
Molybdenum	ppm ASTM D5185m 0	0	0	<1
Manganese	ppm ASTM D5185m	0	0	0
Magnesium	ppm ASTM D5185m 0	0	2	<1
Calcium	ppm ASTM D5185m	0	0	0
Phosphorus	ppm ASTM D5185m 0	0	38	17
Zinc	ppm ASTM D5185m 0	0	5	0
Sulfur	ppm ASTM D5185m 0	1420	1607	2656

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	23	▲ 35	▲ 37
Sodium	ppm ASTM D5185m	0	1	0
Potassium	ppm ASTM D5185m >20	1	0	<1
Water	% ASTM D6304 >2.26	0.344	0.172	0.963
ppm Water	ppm ASTM D6304 >22600	3446.2	1725.0	9630

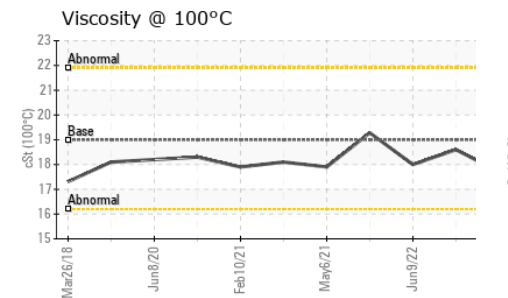
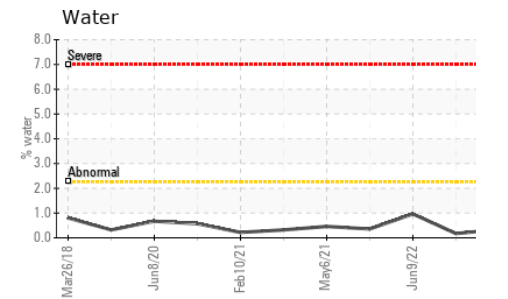
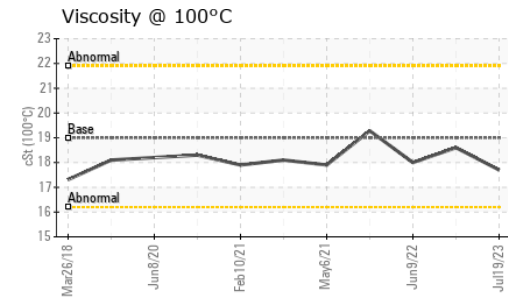
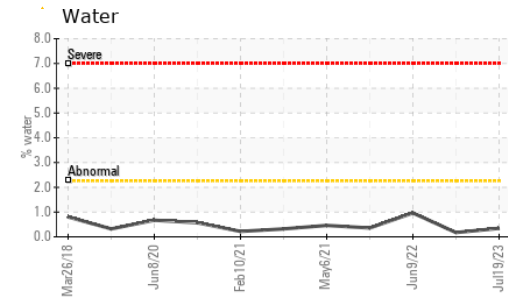
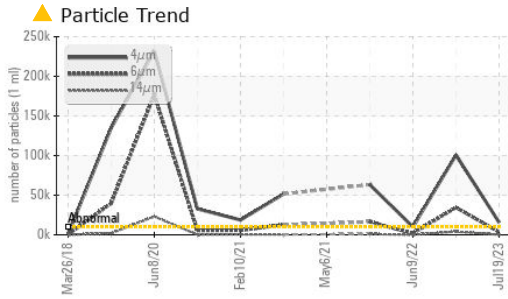
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 15691	▲ 100713	9886
Particles >6µm	ASTM D7647 >1300	▲ 3471	▲ 34517	▲ 1661
Particles >14µm	ASTM D7647 >320	111	▲ 4038	34
Particles >21µm	ASTM D7647 >80	23	▲ 1370	9
Particles >38µm	ASTM D7647 >20	0	▲ 76	0
Particles >71µm	ASTM D7647 >4	0	4	0
Oil Cleanliness	ISO 4406 (c) >20/17/15	▲ 21/19/14	▲ 24/22/19	▲ 20/18/12

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	0.156	0.79	0.401

OIL ANALYSIS REPORT



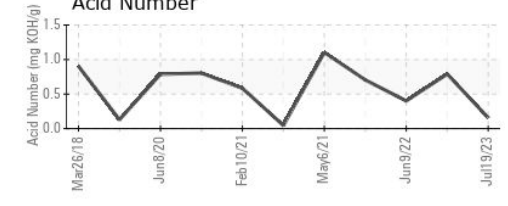
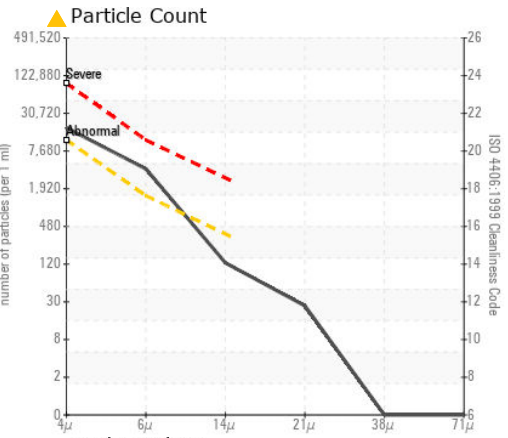
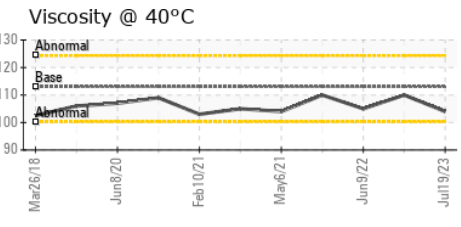
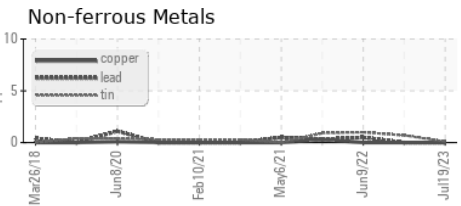
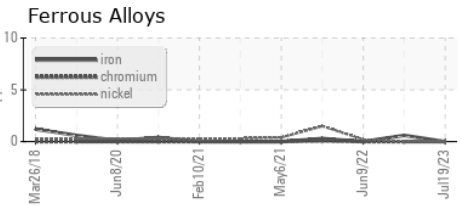
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	110
Visc @ 100°C	cSt	ASTM D445	19	17.7	18.6
Viscosity Index (VI)	Scale	ASTM D2270	189	188	189

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60000405 **Received** : 24 Jul 2023
Lab Number : 05905466 **Diagnosed** : 26 Jul 2023
Unique Number : 10566822 **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)