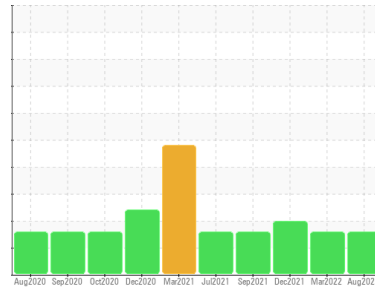


PROBLEM SUMMARY

Sample Rating Trend

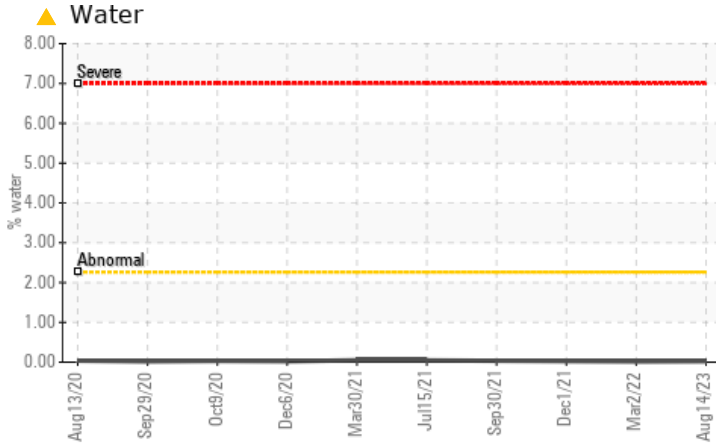


WATER



Area
REBEL 2
Machine Id
FRICK C-163 - REBEL 2
Component
Refrigeration Compressor
Fluid
TULCO LUBSOIL SYN RL WI 100 (250 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				MARGINAL	MARGINAL	ATTENTION
Water	%	ASTM D6304	>2.26	▲ 0.022	▲ 0.016	▲ 0.025
ppm Water	ppm	ASTM D6304	>22600	▲ 228.4	▲ 160.7	▲ 252.0

Customer Id: ENEGAR
Sample No.: TO90002196
Lab Number: 05931584
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

02 Mar 2022 Diag: Don Baldrige

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present 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



01 Dec 2021 Diag: Doug Bogart

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



30 Sep 2021 Diag: Doug Bogart

WATER



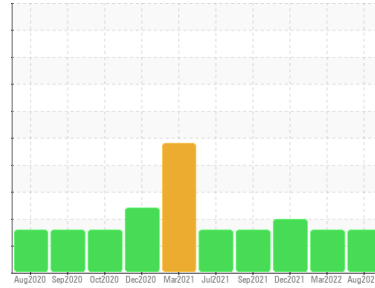
No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
REBEL 2
Machine Id
FRICK C-163 - REBEL 2
Component
Refrigeration Compressor
Fluid
TULCO LUBSOIL SYN RL WI 100 (250 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a trace of moisture present in the oil. 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 suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	TO90002196	TO90000114	TO90001854
Sample Date	Client Info	14 Aug 2023	02 Mar 2022	01 Dec 2021
Machine Age	hrs	Client Info	1113	1113
Oil Age	hrs	Client Info	1113	1113
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		MARGINAL	MARGINAL	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >8	12	8	6
Chromium	ppm	ASTM D5185m >2	0	0	0
Nickel	ppm	ASTM D5185m	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >2	0	<1	0
Aluminum	ppm	ASTM D5185m >3	0	<1	0
Lead	ppm	ASTM D5185m >2	0	0	<1
Copper	ppm	ASTM D5185m >8	<1	0	0
Tin	ppm	ASTM D5185m >4	1	1	1
Antimony	ppm	ASTM D5185m	---	0	3
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	3	<1
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	1	0	0
Calcium	ppm	ASTM D5185m	2	3	0
Phosphorus	ppm	ASTM D5185m 1500	604	1220	920
Zinc	ppm	ASTM D5185m	3	8	0
Sulfur	ppm	ASTM D5185m	16	8	15

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	2	6	1
Sodium	ppm	ASTM D5185m	11	6	11
Potassium	ppm	ASTM D5185m >20	1	0	<1
Water	%	ASTM D6304 >2.26	▲ 0.022	▲ 0.016	▲ 0.025
ppm Water	ppm	ASTM D6304 >22600	▲ 228.4	▲ 160.7	▲ 252.0

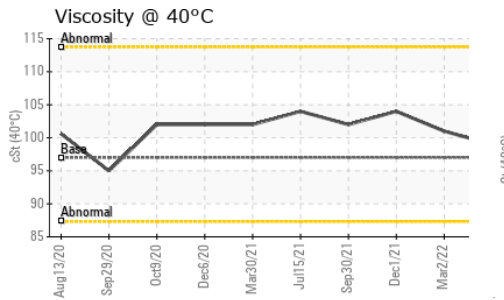
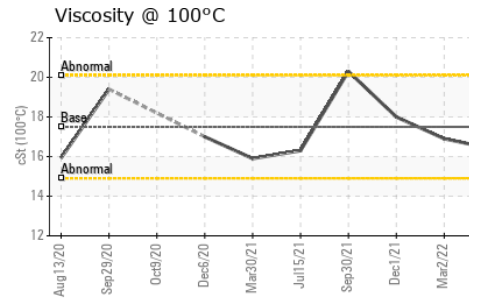
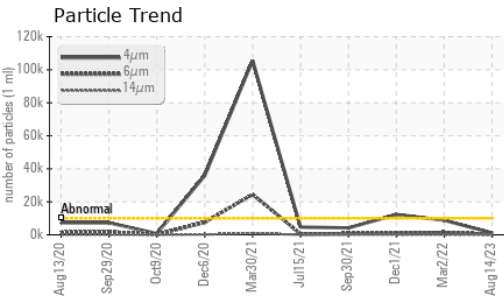
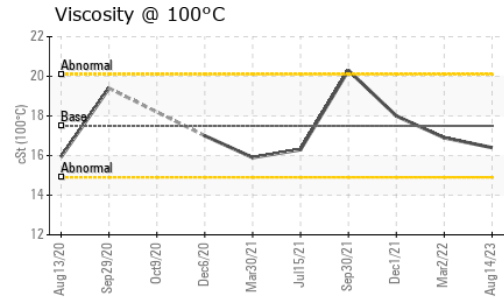
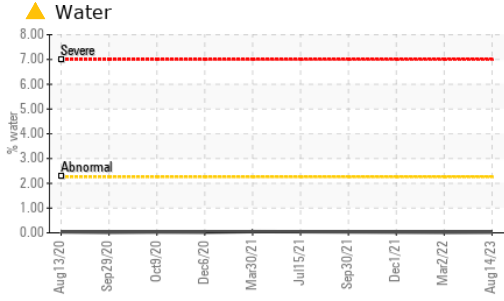
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	1167	8808	▲ 12327
Particles >6µm	ASTM D7647 >2500	322	1440	978
Particles >14µm	ASTM D7647 >320	20	34	23
Particles >21µm	ASTM D7647 >80	4	7	5
Particles >38µm	ASTM D7647 >20	0	0	1
Particles >71µm	ASTM D7647 >4	0	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/15	17/16/11	20/18/12	▲ 21/17/12

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974 0.04	0.027	0.042	0.014

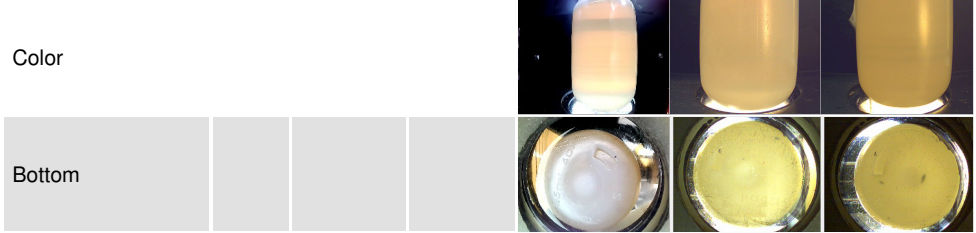
OIL ANALYSIS REPORT



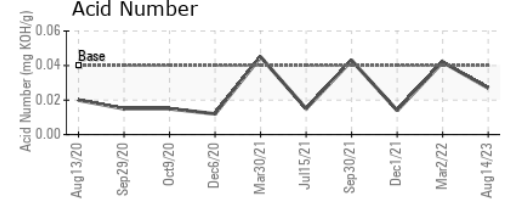
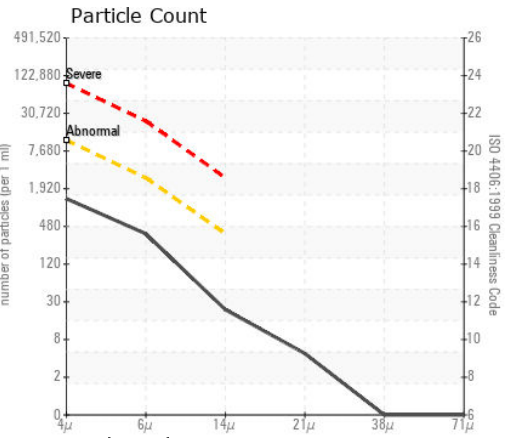
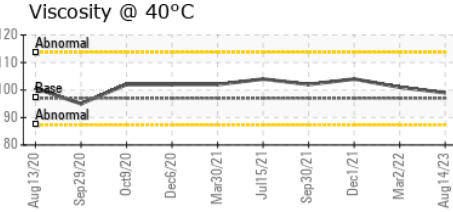
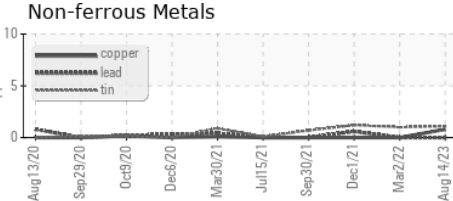
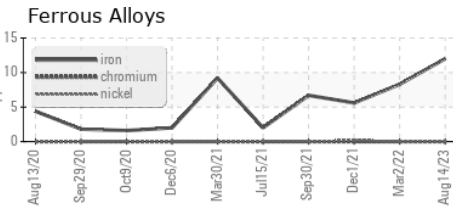
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	97	101	104
Visc @ 100°C	cSt	ASTM D445	17.5	16.9	18.0
Viscosity Index (VI)	Scale	ASTM D2270	198	182	191

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90002196 **Received** : 22 Aug 2023
Lab Number : 05931584 **Diagnosed** : 24 Aug 2023
Unique Number : 10616855 **Diagnostician** : Angela Borella
Test Package : IND 2 (Additional Tests: KV100, PrtCount, VI)

ENERGY TRANSFER - REBEL
 13788 TX-158
 GARDEN CITY, TX
 US 79739
 Contact: BOBBY POSEY
 bobby.posey@energytransfer.com
 T: (432)270-4842
 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)