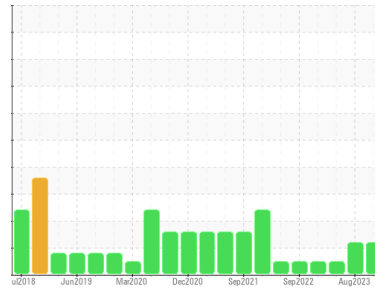


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

EDWARD PLANT

Machine Id

C-2161 (S/N XC0342)

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 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	TO90003246	TO90002230	TO90002330
Sample Date	Client Info	14 Mar 2024	14 Aug 2023	15 Mar 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >8	8	8	7
Chromium	ppm	ASTM D5185m >2	0	0	0
Nickel	ppm	ASTM D5185m	<1	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >3	<1	0	1
Lead	ppm	ASTM D5185m >2	0	0	0
Copper	ppm	ASTM D5185m >8	2	1	0
Tin	ppm	ASTM D5185m >4	3	3	1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	1	<1	<1
Magnesium	ppm	ASTM D5185m	2	2	5
Calcium	ppm	ASTM D5185m	44	41	45
Phosphorus	ppm	ASTM D5185m 1500	805	766	667
Zinc	ppm	ASTM D5185m	2	0	10
Sulfur	ppm	ASTM D5185m	57	99	63

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	3	3	2
Sodium	ppm	ASTM D5185m	2	1	0
Potassium	ppm	ASTM D5185m >20	3	1	1
Water	%	ASTM D6304 >2.26	0.027	0.039	0.056
ppm Water	ppm	ASTM D6304 >22600	278	395.6	564.4

FLUID CLEANLINESS

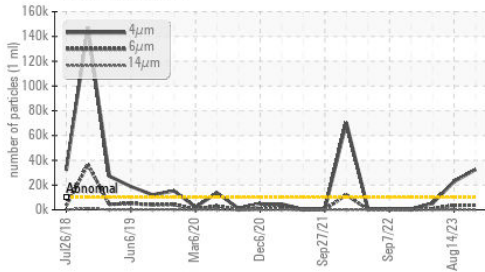
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 32589	▲ 22788	5224
Particles >6µm	ASTM D7647 >2500	● 3751	▲ 3522	933
Particles >14µm	ASTM D7647 >320	101	85	27
Particles >21µm	ASTM D7647 >80	18	12	7
Particles >38µm	ASTM D7647 >20	0	0	0
Particles >71µm	ASTM D7647 >4	0	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/15	▲ 22/19/14	▲ 22/19/14	20/17/12

FLUID DEGRADATION

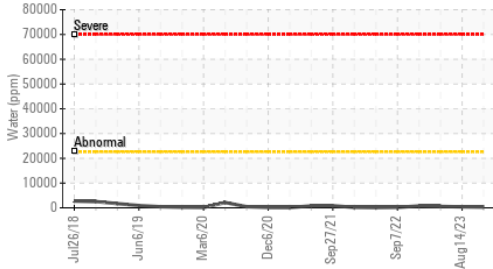
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974 0.04	0.087	0.031	---

OIL ANALYSIS REPORT

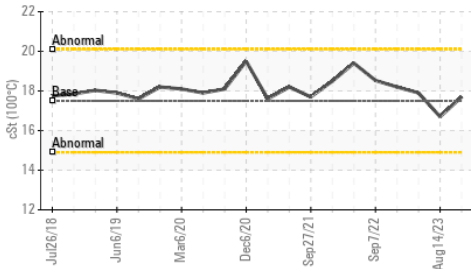
▲ Particle Trend



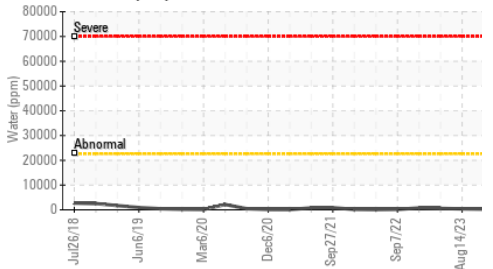
Water (KF)



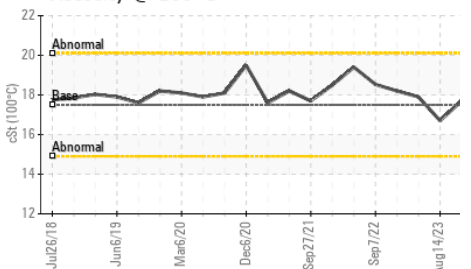
Viscosity @ 100°C



Water (KF)



Viscosity @ 100°C



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	105	100
Visc @ 100°C	cSt	ASTM D445	17.5	17.7	16.7
Viscosity Index (VI)	Scale	ASTM D2270	198	186	181

SAMPLE IMAGES	method	limit/base	current	history1	history2
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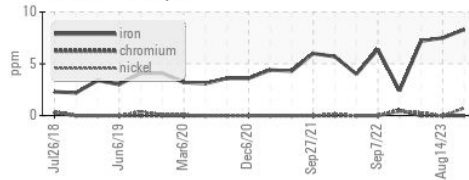
Color

Bottom

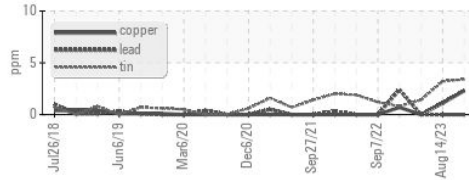


GRAPHS

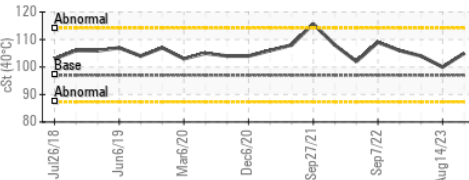
Ferrous Alloys



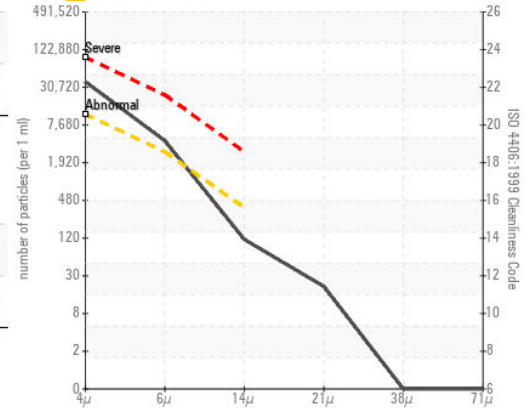
Non-ferrous Metals



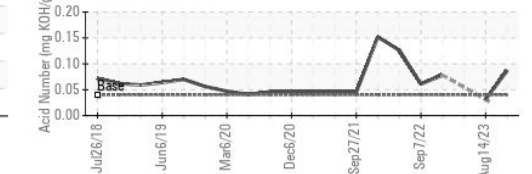
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90003246 **Received** : 16 Apr 2024
Lab Number : 06150501 **Tested** : 17 Apr 2024
Unique Number : 10980579 **Diagnosed** : 18 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KV100, PrtCount, VI)

TARGA RESOURCES - EDWARD
 1757 COUNTY ROAD 250
 MIDKIFF, TX
 US 79755

Contact: BRANDON CERVANTES
 bcervantes@targaresources.com

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)

T:
F: