



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

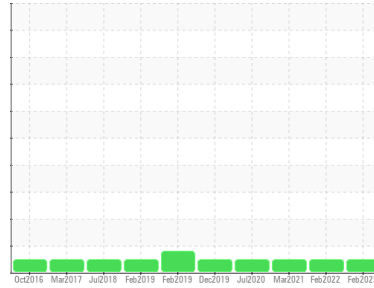


Area

1
Machine Id
WINERGY GEARBOX WTG-103 (S/N 4839491-0020-6)

Component
Hydraulic System

Fluid
SHELL TELLUS 32 (300 LTR)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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		WC0804530	WC05504442	WC0547138
Sample Date	Client Info		27 Feb 2023	26 Feb 2022	01 Mar 2021
Machine Age	mths	Client Info	0	74	120
Oil Age	mths	Client Info	0	5	0
Oil Changed	Client Info		Not Changed	Not Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		12	16	---
Iron	ppm	ASTM D5185m >20	2	<1	2
Chromium	ppm	ASTM D5185m >20	8	4	4
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >20	<1	0	0
Lead	ppm	ASTM D5185m >20	0	0	<1
Copper	ppm	ASTM D5185m >20	3	4	4
Tin	ppm	ASTM D5185m >20	0	0	0
Antimony	ppm	ASTM D5185m	---	---	0
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
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 11	9	8	5
Calcium	ppm	ASTM D5185m 35	22	25	22
Phosphorus	ppm	ASTM D5185m 259	282	300	284
Zinc	ppm	ASTM D5185m 277	284	291	271
Sulfur	ppm	ASTM D5185m 1865	3889	3256	4296

CONTAMINANTS

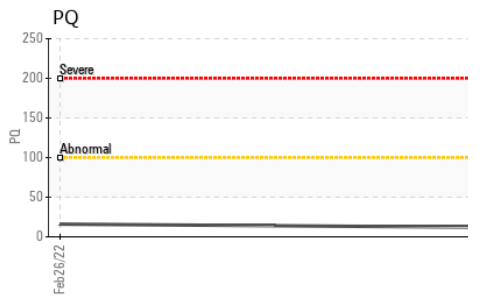
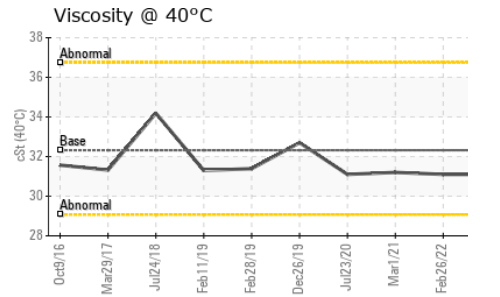
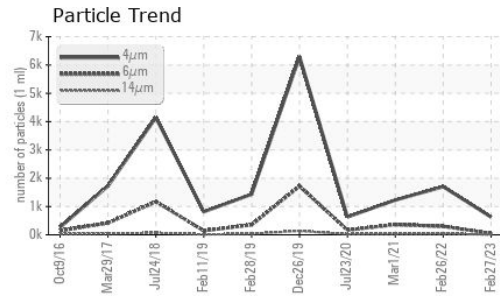
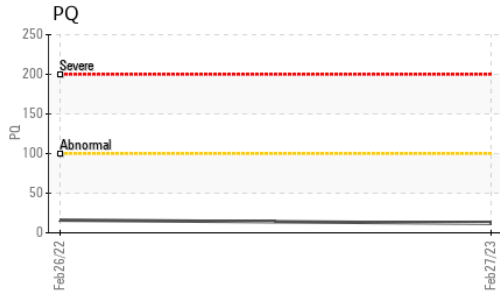
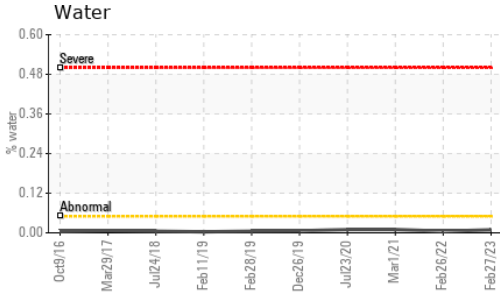
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	0	0
Sodium	ppm	ASTM D5185m	<1	0	0
Potassium	ppm	ASTM D5185m >20	0	0	0
Water	%	ASTM D6304 >0.05	0.009	0.005	0.010
ppm Water	ppm	ASTM D6304 >500	97.2	56.5	108.4

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		626	1701	1229
Particles >6µm	ASTM D7647 >5000		47	298	361
Particles >14µm	ASTM D7647 >640		6	37	31
Particles >21µm	ASTM D7647 >160		1	9	10
Particles >38µm	ASTM D7647 >40		0	1	0
Particles >71µm	ASTM D7647 >10		0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/19/16	16/13/10	18/15/12	17/16/12



OIL ANALYSIS REPORT

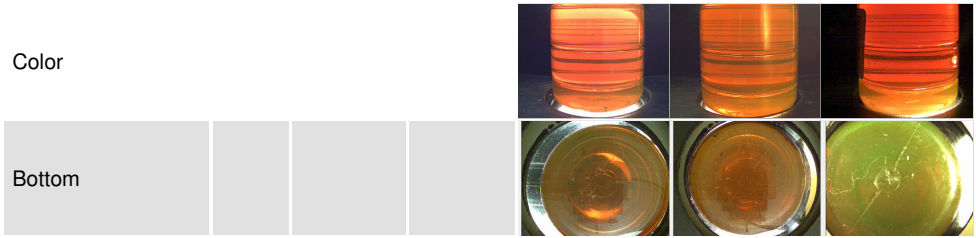


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.32	0.25	0.28	0.284

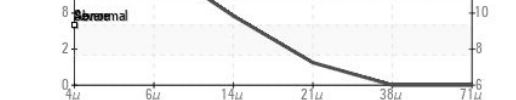
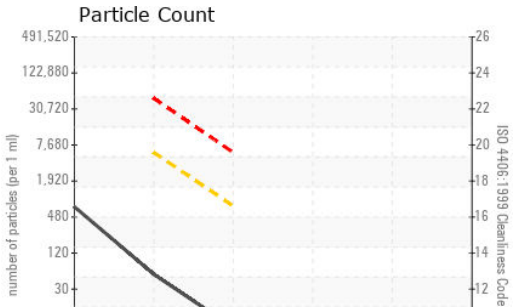
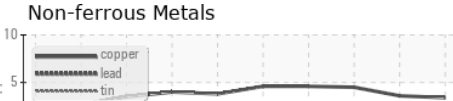
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.32	31.1	31.1	31.2

SAMPLE IMAGES		method	limit/base	current	history1	history2
---------------	--	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0804530 **Received** : 26 May 2023
Lab Number : 05857898 **Diagnosed** : 30 May 2023
Unique Number : 10492363 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PQ)

ENERGIA EOLICA
 STA ANA KM25 CARRETERA AL SUR, A 1KM DEL CRUCE
 FRANCISCO MORAZAN, ZZ
 HN
 Contact: SANTOS DEL CID
 sdelcid@dennci.com

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)

T: x:
 F: x: