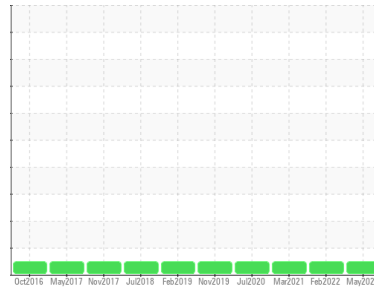




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
9
 Machine Id
WTG-905
 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 is acceptable. There is no indication of any contamination in the component.

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		WC0804549	WC05504472	WC0547238
Sample Date	Client Info		25 May 2023	03 Feb 2022	10 Mar 2021
Machine Age	mths	Client Info	0	67	120
Oil Age	mths	Client Info	0	0	0
Oil Changed	Client Info		Not Changed	Not Changd	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		12	18	---
Iron	ppm	ASTM D5185m >20	8	5	6
Chromium	ppm	ASTM D5185m >20	15	13	14
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	<1	<1
Aluminum	ppm	ASTM D5185m >20	<1	0	0
Lead	ppm	ASTM D5185m >20	0	0	<1
Copper	ppm	ASTM D5185m >20	4	5	5
Tin	ppm	ASTM D5185m >20	<1	0	<1
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	<1	<1	<1
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m 11	13	8	6
Calcium	ppm	ASTM D5185m 35	24	25	23
Phosphorus	ppm	ASTM D5185m 259	267	278	257
Zinc	ppm	ASTM D5185m 277	246	243	231
Sulfur	ppm	ASTM D5185m 1865	4246	3499	3642

CONTAMINANTS

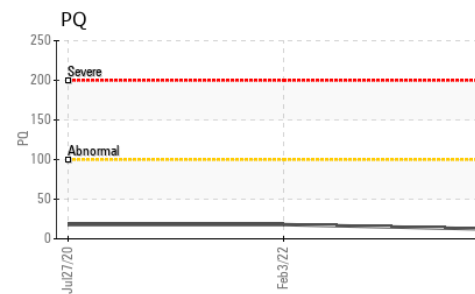
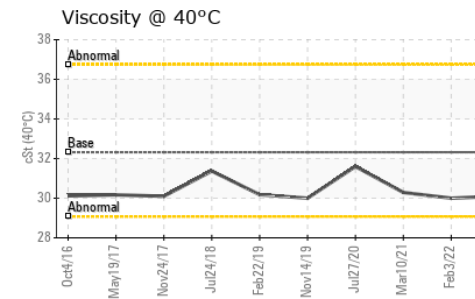
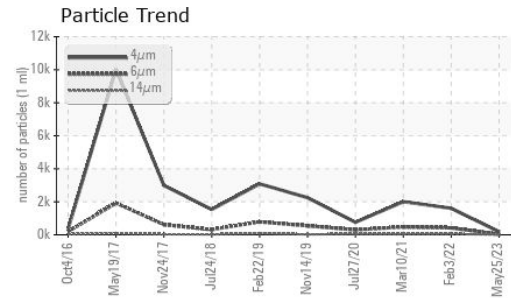
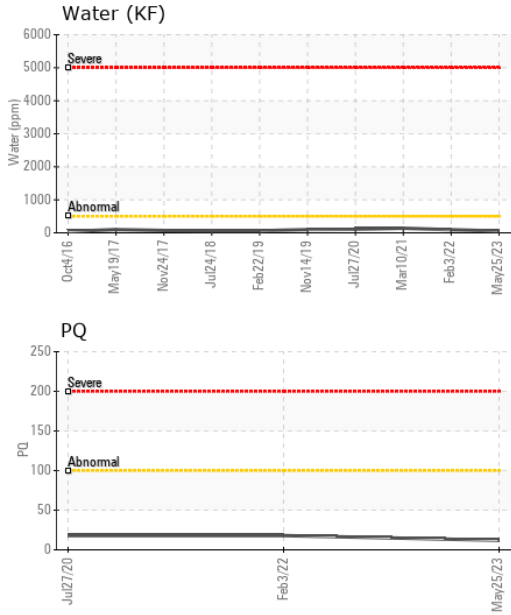
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	<1	0
Sodium	ppm	ASTM D5185m	3	1	1
Potassium	ppm	ASTM D5185m >20	1	0	<1
Water	%	ASTM D6304 >0.05	0.005	0.009	0.013
ppm Water	ppm	ASTM D6304 >500	55.7	93.1	138.8

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		186	1607	2005
Particles >6µm	ASTM D7647	>5000	31	421	472
Particles >14µm	ASTM D7647	>640	3	51	38
Particles >21µm	ASTM D7647	>160	1	15	13
Particles >38µm	ASTM D7647	>40	0	2	1
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/19/16	15/12/9	18/16/13	18/16/12



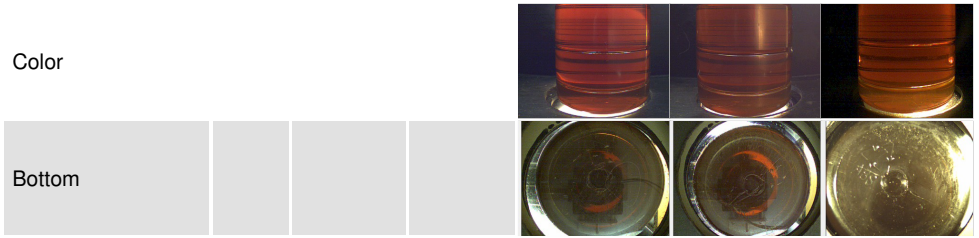
OIL ANALYSIS REPORT



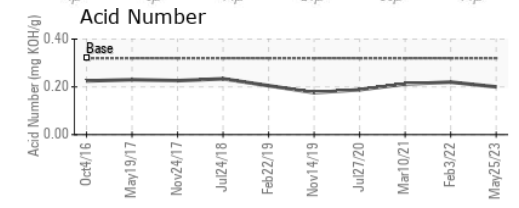
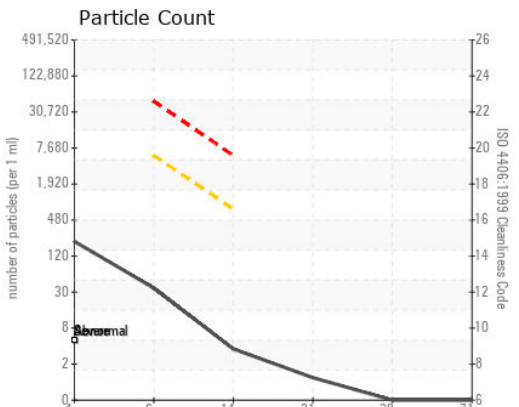
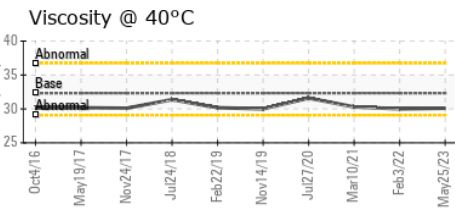
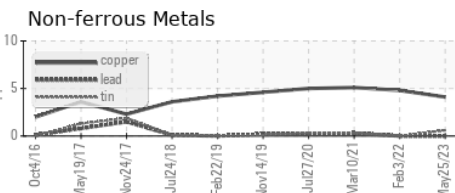
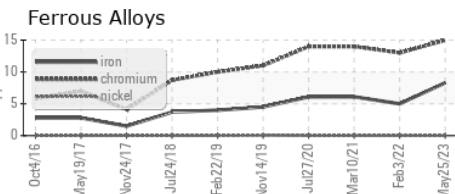
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.32	0.20	0.22	0.212
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	30.1	30.0	30.29

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0804549 **Received** : 26 May 2023
Lab Number : 05857879 **Diagnosed** : 30 May 2023
Unique Number : 10492344 **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@dencmi.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: x:
F: x: