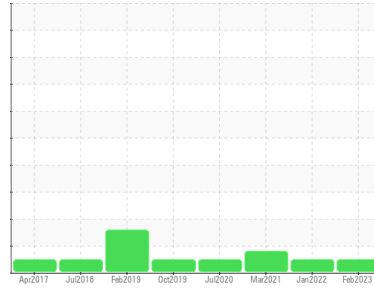




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

4

Machine Id

WINERGY GEARBOX WTG-402 (S/N 4834518-0020-2)

Component

Hydraulic System

Fluid

PETRO CANADA HYDREX AW 46 (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		WC0804547	WC05504429	WC0547152
Sample Date	Client Info		28 Feb 2023	26 Jan 2022	02 Mar 2021
Machine Age	mths	Client Info	0	73	0
Oil Age	mths	Client Info	0	5	0
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		13	16	---
Iron	ppm	ASTM D5185m >20	3	<1	1
Chromium	ppm	ASTM D5185m >20	5	3	2
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	0
Copper	ppm	ASTM D5185m >20	2	3	3
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

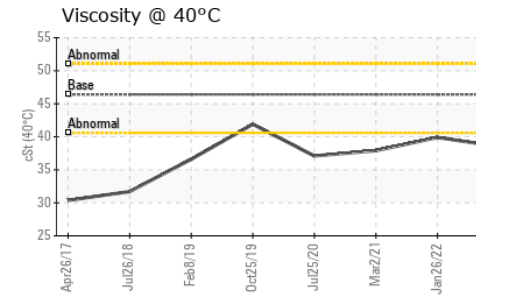
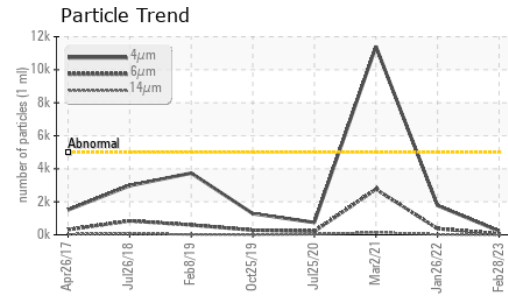
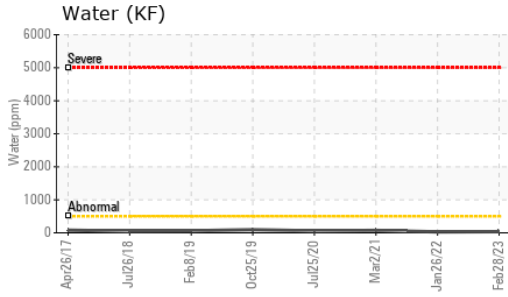
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	<1	0	0
Manganese	ppm	ASTM D5185m 0	<1	0	0
Magnesium	ppm	ASTM D5185m 0	3	0	1
Calcium	ppm	ASTM D5185m 50	27	28	26
Phosphorus	ppm	ASTM D5185m 330	311	321	303
Zinc	ppm	ASTM D5185m 430	339	336	340
Sulfur	ppm	ASTM D5185m 760	2297	1942	2038

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	0	0	0
Sodium	ppm	ASTM D5185m	<1	0	0
Potassium	ppm	ASTM D5185m >20	<1	0	<1
Water	%	ASTM D6304 >0.05	0.003	0.003	0.007
ppm Water	ppm	ASTM D6304 >500	35.7	28.2	73.7

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	226	1774	▲ 11407
Particles >6µm	ASTM D7647	>1300	51	377	▲ 2763
Particles >14µm	ASTM D7647	>160	7	24	146
Particles >21µm	ASTM D7647	>40	2	6	24
Particles >38µm	ASTM D7647	>10	0	2	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	15/13/10	18/16/12	▲ 21/19/14

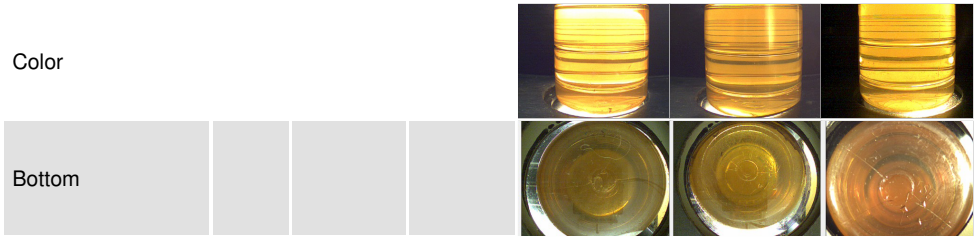


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	0.24	0.26	0.275

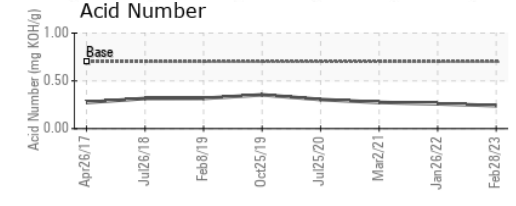
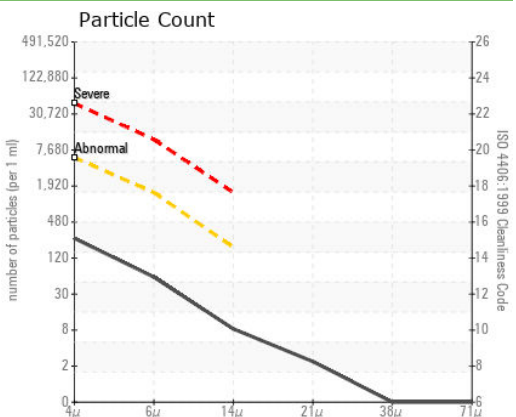
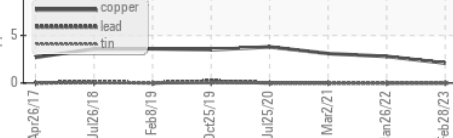
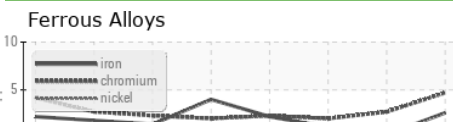
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	46.4	38.5	39.9	37.9

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0804547 **Received** : 26 May 2023
Lab Number : 05857881 **Diagnosed** : 30 May 2023
Unique Number : 10492346 **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
 T: x:
 F: x:

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)