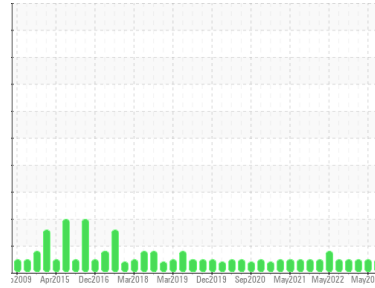




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Kerr

Machine Id

KER01 Generator Thrust / Guide Bearings (S/N IS5P266)

Component

Case Drain Thrust Bearing

Fluid

CONOCO TURBINE OIL 68 (77 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination 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		WC0483410	WC0483316	WC0483305
Sample Date	Client Info		22 Aug 2023	10 May 2023	06 Feb 2023
Machine Age	yrs	Client Info	0	0	0
Oil Age	yrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >85	2	2	2
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >40	0	<1	0
Lead	ppm	ASTM D5185m >60	<1	0	0
Copper	ppm	ASTM D5185m >7	<1	0	0
Tin	ppm	ASTM D5185m >40	0	0	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	1	0	0
Molybdenum	ppm	ASTM D5185m	<1	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	0	0	0
Calcium	ppm	ASTM D5185m	0	0	<1
Phosphorus	ppm	ASTM D5185m	23	20	20
Zinc	ppm	ASTM D5185m	<1	0	0
Sulfur	ppm	ASTM D5185m	947	673	837

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<1	0	<1
Sodium	ppm	ASTM D5185m	0	<1	0
Potassium	ppm	ASTM D5185m >20	1	0	<1

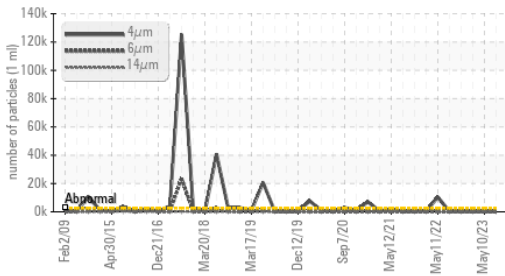
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	237	241	145
Particles >6µm	ASTM D7647	>640	37	32	34
Particles >14µm	ASTM D7647	>80	4	2	1
Particles >21µm	ASTM D7647	>20	2	0	0
Particles >38µm	ASTM D7647	>4	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	15/12/9	15/12/9	14/12/7

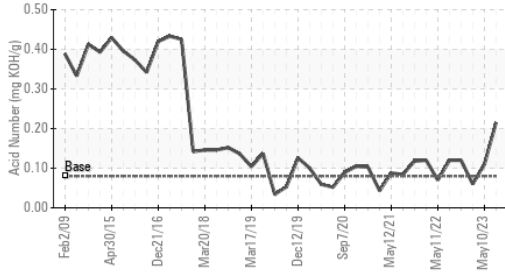
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.08	0.215	0.11	0.06

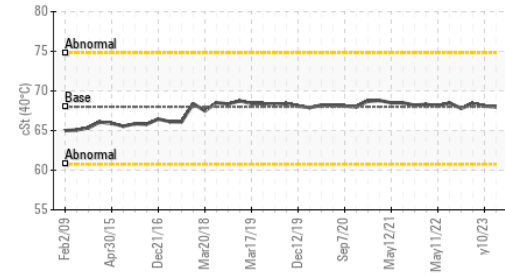
Particle Trend



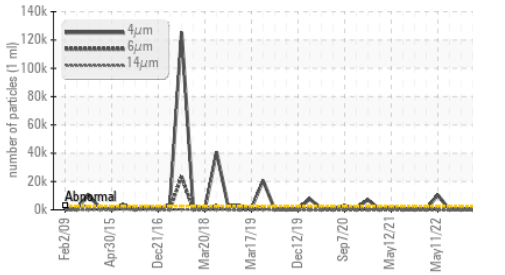
Acid Number



Viscosity @ 40°C



Particle Trend

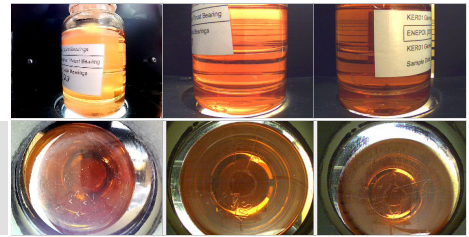


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	68.0	68.1	68.4

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				
Bottom				
PrtFilter				



GRAPHS

<h4>Ferrous Alloys</h4>	<h4>Particle Count</h4>
<h4>Non-ferrous Metals</h4>	<h4>Acid Number</h4>
<h4>Viscosity @ 40°C</h4>	



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0483410 **Received** : 25 Aug 2023
Lab Number : 05935586 **Diagnosed** : 01 Sep 2023
Unique Number : 10620857 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: FilterPatch, PrtCount)

ENERGY KEEPERS INC
 110 MAIN ST, SUITE 304
 POLSON, MT
 US 59860
 Contact: GARY PETERSON
 gary.peterson@energykeepersinc.com
 T: (406)872-0229
 F: (406)883-1183

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)