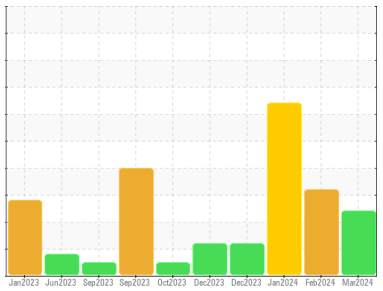
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
RRJ
Machine Id
B-01-402 Biogas Blower Non-Drive End
Component
Non-Drive End Compressor
Fluid
GARDNER DENVER AEON PD (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor.

Wear
The iron level is abnormal. All other component wear rates are normal.

Contamination
There is a moderate concentration of water present 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		**WC0886374**	WC0886377	WC0886388
Sample Date		Client Info		**26 Mar 2024**	27 Feb 2024	31 Jan 2024
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	▲ **51**	▲ 59	▲ 87
Chromium	ppm	ASTM D5185m	>10	**4**	2	4
Nickel	ppm	ASTM D5185m		**<1**	0	<1
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**3**	<1	2
Lead	ppm	ASTM D5185m	>25	**<1**	0	<1
Copper	ppm	ASTM D5185m	>50	**1**	0	<1
Tin	ppm	ASTM D5185m	>15	**1**	1	2
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**<1**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**<1**	0	<1
Calcium	ppm	ASTM D5185m		**5**	<1	0
Phosphorus	ppm	ASTM D5185m		**631**	591	605
Zinc	ppm	ASTM D5185m		**4**	0	0
Sulfur	ppm	ASTM D5185m		**662**	811	718

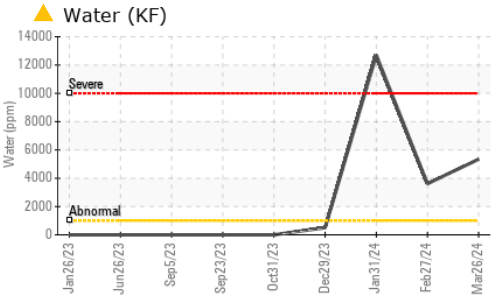
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**4**	4	5
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**<1**	0	0
Water	%	ASTM D6304	>0.1	▲ **0.534**	▲ 0.361	▲ 1.27
ppm Water	ppm	ASTM D6304	>1000	▲ **5340**	▲ 3610	▲ 12700

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**1740**	---	9944
Particles >6µm		ASTM D7647	>2500	**948**	---	▲ 5417
Particles >14µm		ASTM D7647	>320	**161**	---	▲ 922
Particles >21µm		ASTM D7647	>80	**54**	---	▲ 311
Particles >38µm		ASTM D7647	>20	**8**	---	▲ 48
Particles >71µm		ASTM D7647	>4	**1**	---	▲ 5
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**18/17/15**	---	▲ 20/20/17

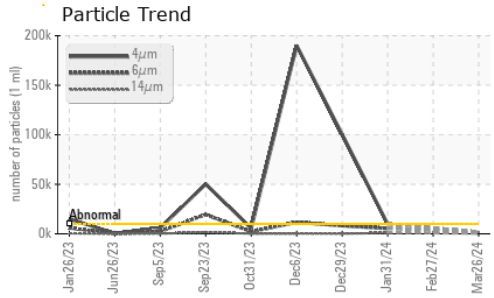
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.63**	0.55	0.79

OIL ANALYSIS REPORT

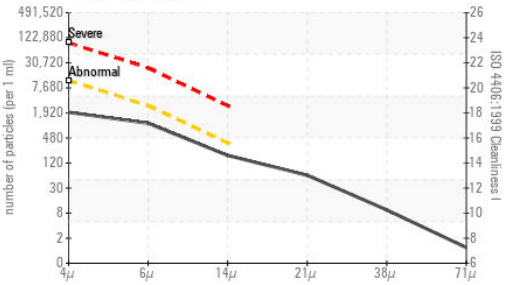
Water (KF)



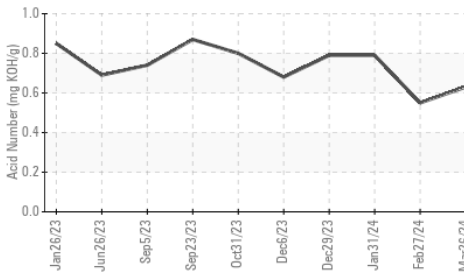
Particle Trend



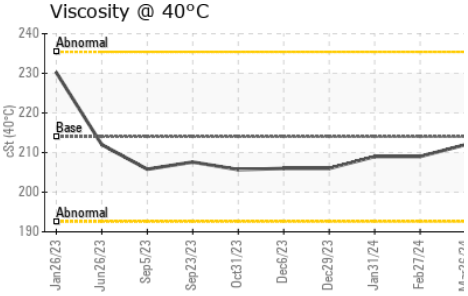
Particle Count



Acid Number



Viscosity @ 40°C



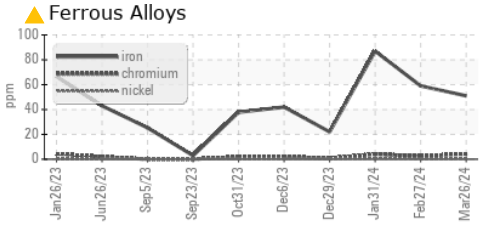
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**0.2%**	0.2%	▲ 0.2%
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	214	**212**	209	209

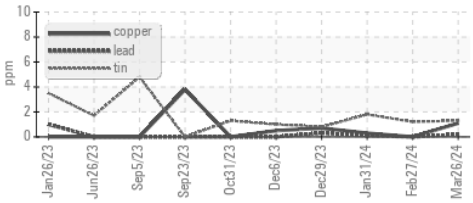
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

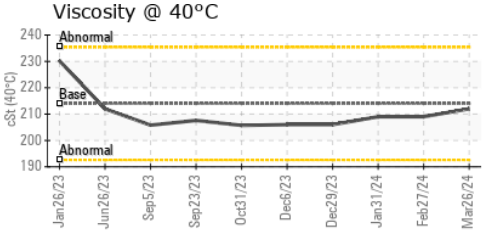
Ferrous Alloys



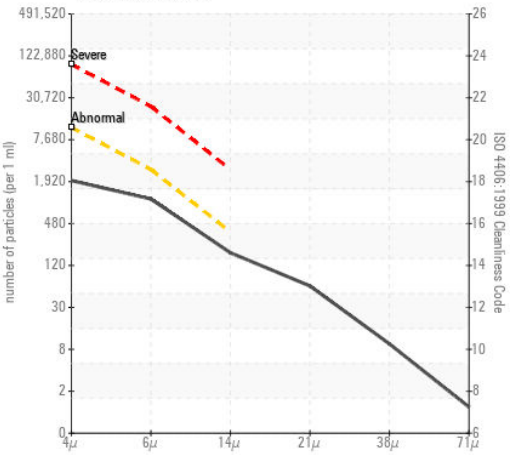
Non-ferrous Metals



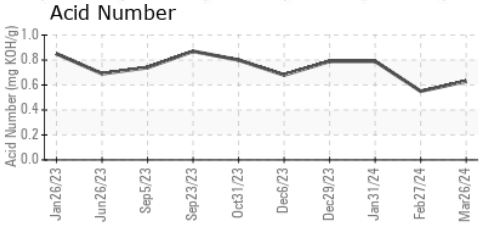
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0886374
Lab Number : 06133285
Unique Number : 10952750
Test Package : PLANT

Received : 29 Mar 2024
Tested : 05 Apr 2024
Diagnosed : 05 Apr 2024 - Jonathan Hester

GEVO Inc.
2498 250th Street
Doon, IA
US 51235
Contact: Service Manager
T:
F:

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)

Report Id: GEVDOO [WUSCAR] 06133285 (Generated: 04/05/2024 14:08:38) Rev: 1

Submitted By: KYLE HUTCHINSON