



OIL ANALYSIS REPORT

Area

RRJ
Machine Id

B-01-402 Biogas Blower Drive End

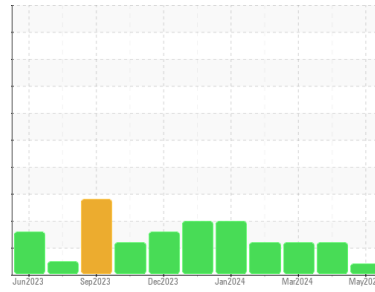
Component

Drive End Compressor

Fluid

GARDNER DENVER AEON PD (--- GAL)

Sample Rating Trend



VIS DEBRIS



DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		TWC0000003	WC0886361	WC0886373
Sample Date	Client Info		31 May 2024	02 May 2024	26 Mar 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	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	<1	4	<1
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	2	3
Lead	ppm	ASTM D5185m	>25	0	<1	<1
Copper	ppm	ASTM D5185m	>50	11	2	5
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		<1	0	<1
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		0	<1	<1
Calcium	ppm	ASTM D5185m		2	3	3
Phosphorus	ppm	ASTM D5185m		701	715	721
Zinc	ppm	ASTM D5185m		3	3	3
Sulfur	ppm	ASTM D5185m		706	731	590

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	8	8	6
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	<1	<1	1

FLUID CLEANLINESS

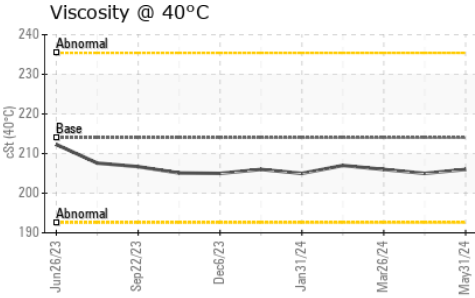
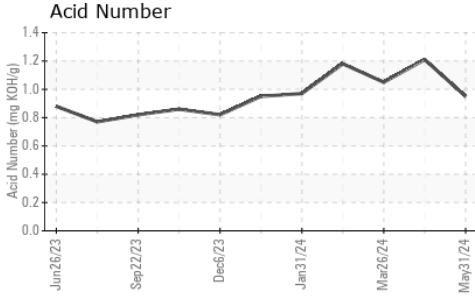
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	---	▲ 24728	▲ 32181
Particles >6µm	ASTM D7647	>2500	---	● 3397	● 4726
Particles >14µm	ASTM D7647	>320	---	185	297
Particles >21µm	ASTM D7647	>80	---	36	87
Particles >38µm	ASTM D7647	>20	---	1	4
Particles >71µm	ASTM D7647	>4	---	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	---	▲ 22/19/15	▲ 22/19/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.95	1.21	1.05



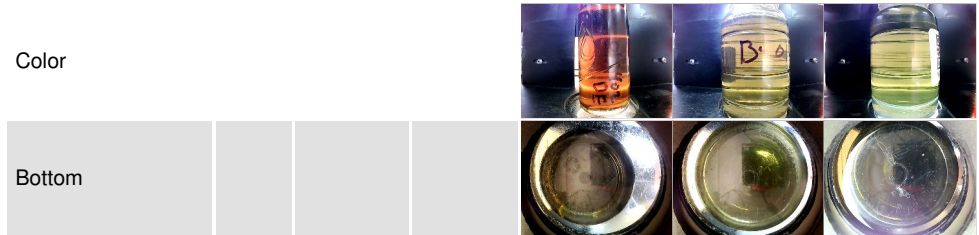
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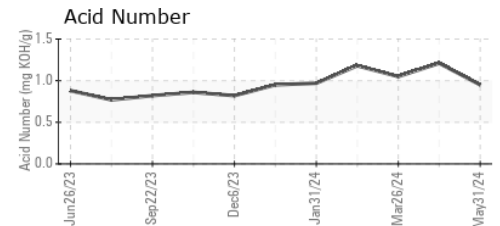
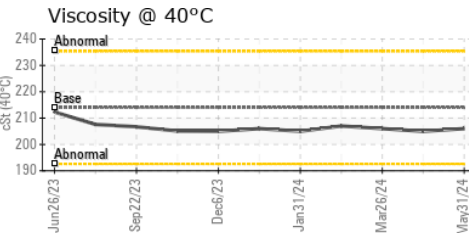
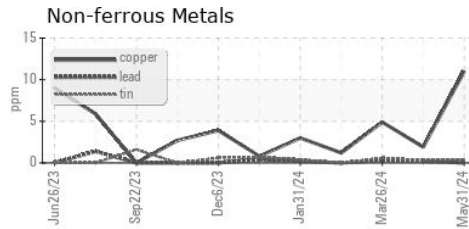
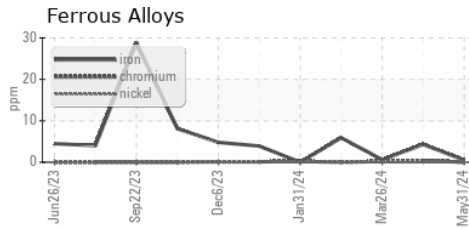
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 214	206	205	206

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. : TWC0000003
Lab Number : 06200125
Unique Number : 11062248
Test Package : PLANT

Received : 05 Jun 2024
Tested : 07 Jun 2024
Diagnosed : 07 Jun 2024 - Don Baldrige

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

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)

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F: