



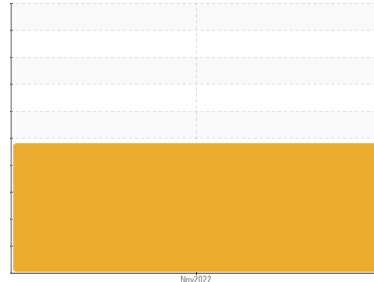
PROBLEM SUMMARY

Sample Rating Trend

WATER

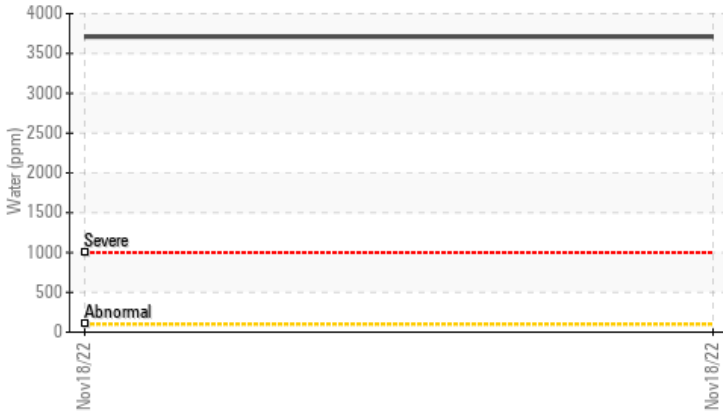


Machine Id
US MOTOR BOG A
Component
Circulating System
Fluid
NOT GIVEN (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Water (KF)



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, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Water	%	ASTM D6304		▲ 0.371	---	---
ppm Water	ppm	ASTM D6304		▲ 3710	---	---
Silt	scalar	*Visual	NONE	▲ MODER	---	---
Appearance	scalar	*Visual	NORML	▲ HAZY	---	---
Emulsified Water	scalar	*Visual		▲ 0.2%	---	---
Free Water	scalar	*Visual		▲ 1.0	---	---

Customer Id: PIEMAX
Sample No.: WC0753572
Lab Number: 05720742
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

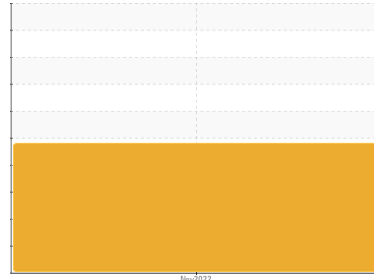
Action	Status	Date	Done By	Description
Water Drain-off	---	---	?	We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
US MOTOR BOG A
 Component
Circulating System
 Fluid
NOT GIVEN (--- 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, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

▲ Contamination

Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil. Free water present.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0753572	---	---
Sample Date	Client Info		18 Nov 2022	---	---
Machine Age	days	Client Info	110	---	---
Oil Age	days	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	5	---	---
Chromium	ppm	ASTM D5185m	0	---	---
Nickel	ppm	ASTM D5185m	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m	0	---	---
Lead	ppm	ASTM D5185m	9	---	---
Copper	ppm	ASTM D5185m	<1	---	---
Tin	ppm	ASTM D5185m	<1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	2	---	---
Calcium	ppm	ASTM D5185m	53	---	---
Phosphorus	ppm	ASTM D5185m	321	---	---
Zinc	ppm	ASTM D5185m	6	---	---
Sulfur	ppm	ASTM D5185m	4979	---	---

CONTAMINANTS

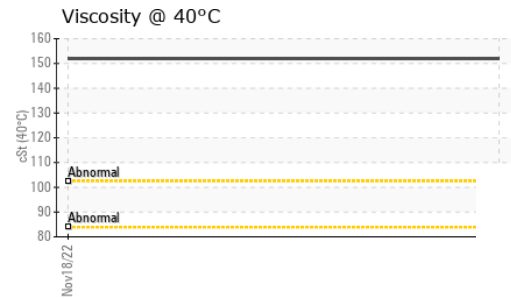
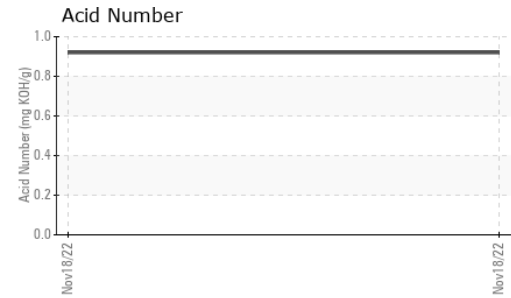
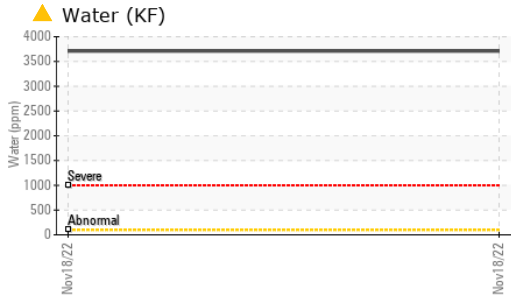
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	2	---	---
Sodium	ppm	ASTM D5185m	<1	---	---
Potassium	ppm	ASTM D5185m >20	0	---	---
Water	%	ASTM D6304	▲ 0.371	---	---
ppm Water	ppm	ASTM D6304	▲ 3710	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.92	---	---



OIL ANALYSIS REPORT



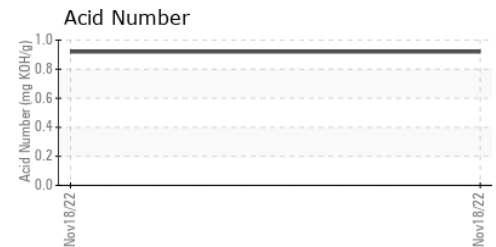
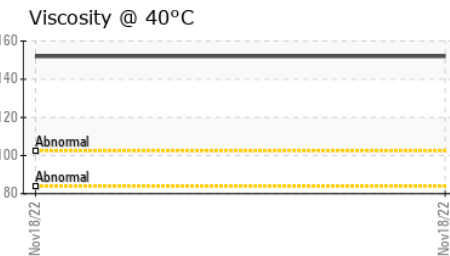
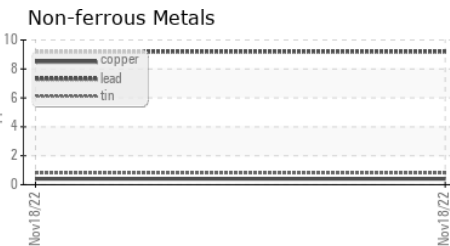
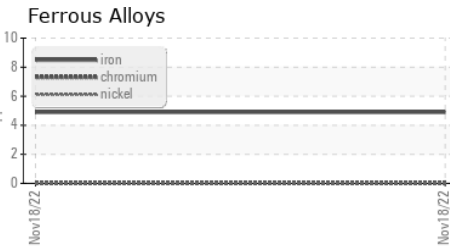
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	▲ MODER	---	---
Debris	scalar	*Visual	NONE	▲ LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	▲ HAZY	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual		▲ 0.2%	---	---
Free Water	scalar	*Visual		▲ 1.0	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	152	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0753572 **Received** : 19 Dec 2022
Lab Number : 05720742 **Diagnosed** : 20 Dec 2022
Unique Number : 10260318 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF)

PIEDMONT NATURAL GAS / DUKE ENERGY
 680 REV BILL RD
 MAXTON, NC
 US 28364
 Contact: ANDREW CAVENAUGH
 andrew.cavenaugh@duke-energy.com
 T: (910)227-0302
 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)