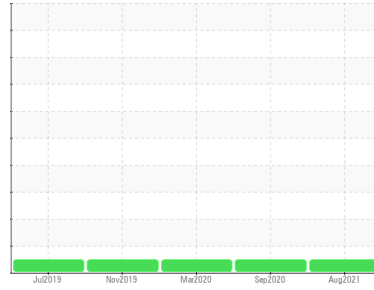




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**VACPUMP-046 - WEST**  
 Component  
**Pump**  
 Fluid  
**SHELL MORLINA S4 B 320 (--- 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.

### 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		<b>WC0590376</b>	WC0485562	WC0411092
Sample Date	Client Info		<b>24 Aug 2021</b>	10 Sep 2020	17 Mar 2020
Machine Age	hrs	Client Info	<b>11985</b>	6025	2131
Oil Age	hrs	Client Info	<b>2001</b>	2386	2131
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m >5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >7	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m >12	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >30	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m >9	<b>5</b>	0	2
Antimony	ppm	ASTM D5185m	<b>2</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>1</b>	1	<1
Barium	ppm	ASTM D5185m	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>198</b>	204	140
Zinc	ppm	ASTM D5185m	<b>0</b>	0	<1
Sulfur	ppm	ASTM D5185m	<b>415</b>	517	757

## CONTAMINANTS

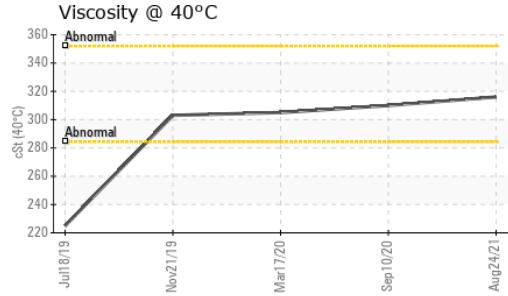
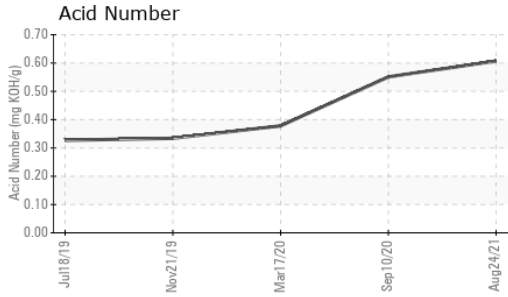
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<b>&lt;1</b>	1	3
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.607</b>	0.551	0.378



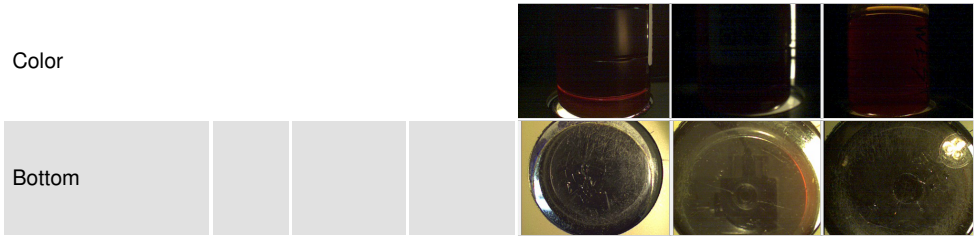
# OIL ANALYSIS REPORT



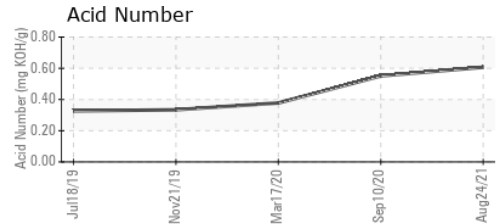
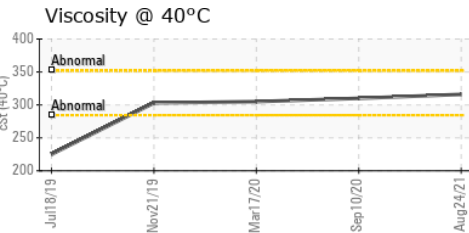
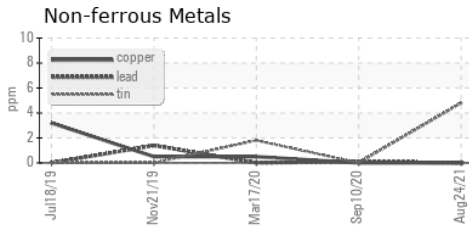
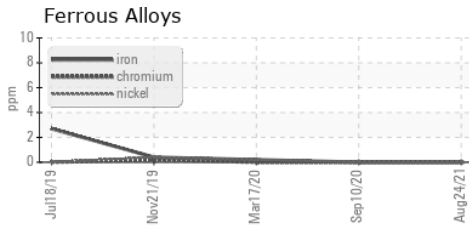
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	316	310	305

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.** : WC0590376 **Received** : 30 Aug 2021  
**Lab Number** : 05338147 **Diagnosed** : 31 Aug 2021  
**Unique Number** : 9642186 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

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 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)