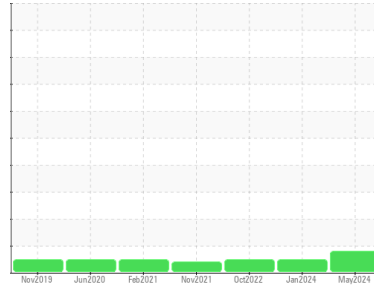




# OIL ANALYSIS REPORT

## Sample Rating Trend



**SEDIMENT**



Machine Id  
**VACPUMP-045 - EAST (S/N 1812B1604)**  
 Component  
**Pump**  
 Fluid  
**SHELL MORLINA S4 B 320 (--- GAL)**

### DIAGNOSIS

#### ▲ Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### 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. The condition of the oil is suitable for further service.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0902635</b>	WC0855702	WC0743378
Sample Date	Client Info		<b>13 May 2024</b>	08 Jan 2024	27 Oct 2022
Machine Age	hrs	Client Info	<b>22509</b>	20394	17550
Oil Age	hrs	Client Info	<b>2117</b>	2002	2238
Oil Changed		Client Info	<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.1	<b>NEG</b>	NEG	NEG

### WEAR METALS

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

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	2
Magnesium	ppm	ASTM D5185m	<b>1</b>	0	0
Calcium	ppm	ASTM D5185m	<b>6</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>118</b>	88	265
Zinc	ppm	ASTM D5185m	<b>3</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>211</b>	268	543

### CONTAMINANTS

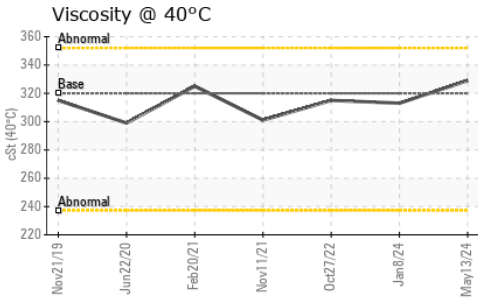
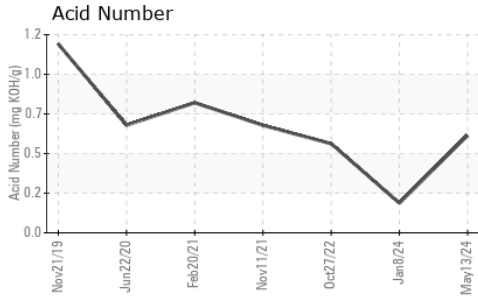
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<b>2</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>6</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	<1

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.59</b>	0.18	0.54



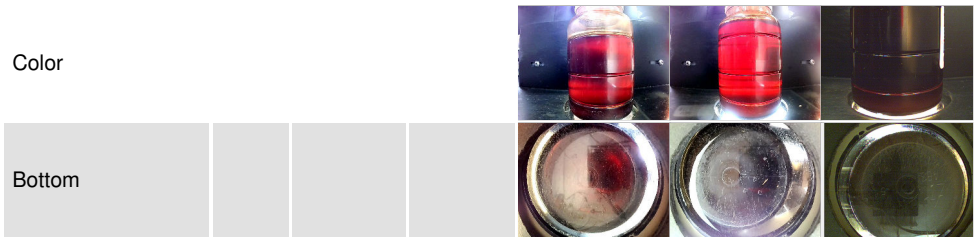
# OIL ANALYSIS REPORT



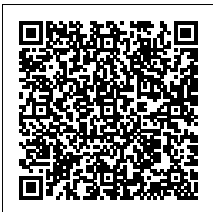
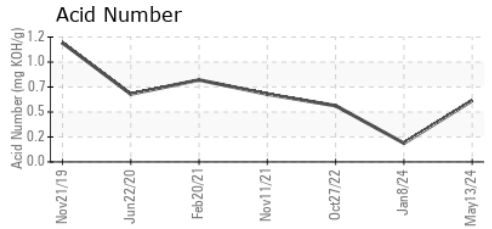
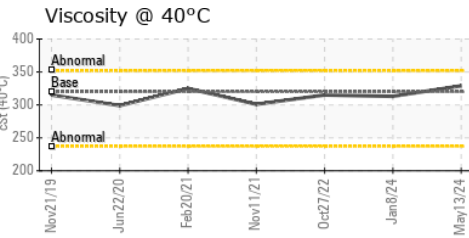
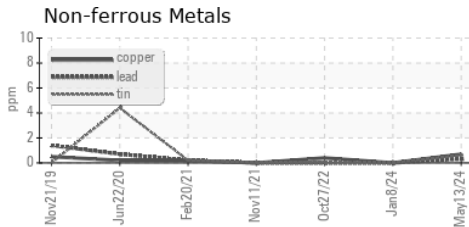
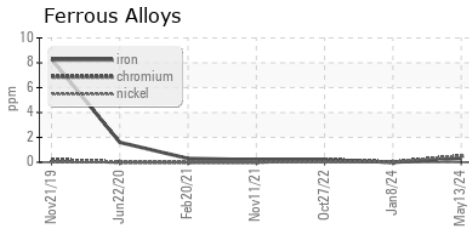
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	▲ MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	320	<b>329</b>	313	315

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.** : WC0902635      **Received** : 16 May 2024  
**Lab Number** : 06181489      **Tested** : 17 May 2024  
**Unique Number** : 11032815      **Diagnosed** : 20 May 2024 - Angela Borella  
**Test Package** : IND 2

**PRINSCO - PRINSBURG**  
 PO BOX 265  
 PRINSBURG, MN  
 US 56281  
 Contact: KYLE SPORTEL  
 kyles@prinsco.com  
 T: (320)978-4116  
 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)