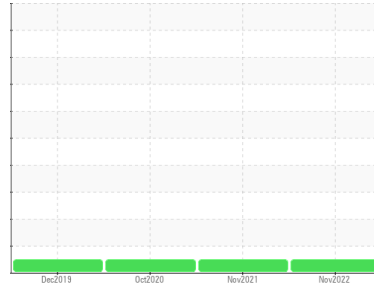




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**GROVE 10061373 - 4TH AXLE (S/N 41006058)**

Component  
**Right Planetary**

Fluid  
**SHELL SPIRAX S6 AXRME 75W90 (1 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>WC0680546</b>	WC0626729	WC0456475
Sample Date	Client Info		<b>20 Nov 2022</b>	29 Nov 2021	27 Oct 2020
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>23</b>	1	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	<b>7</b>	6	5
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	2	<1
Lead	ppm	ASTM D5185m >100	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >50	<b>3</b>	10	2
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m >5	<b>---</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>261</b>	272	253
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m	<b>18</b>	10	0
Phosphorus	ppm	ASTM D5185m	<b>1326</b>	1401	1428
Zinc	ppm	ASTM D5185m	<b>12</b>	0	1
Sulfur	ppm	ASTM D5185m	<b>29352</b>	23525	23537

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	1
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	1	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	8

## FLUID DEGRADATION

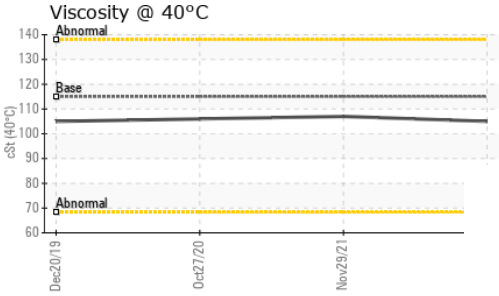
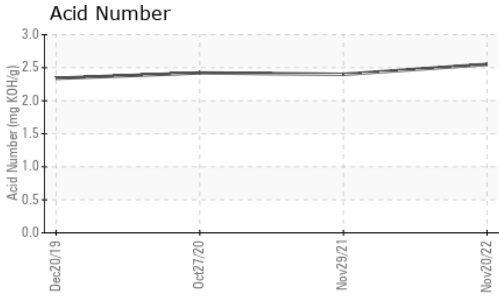
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>2.55</b>	2.400	2.422

## VISUAL

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



# OIL ANALYSIS REPORT

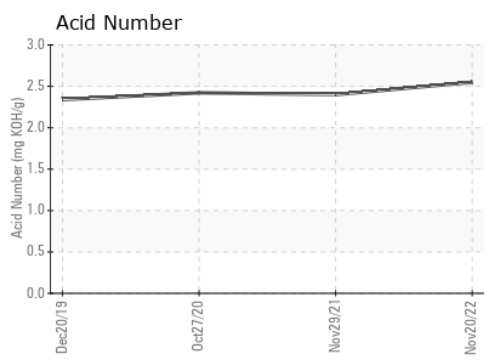
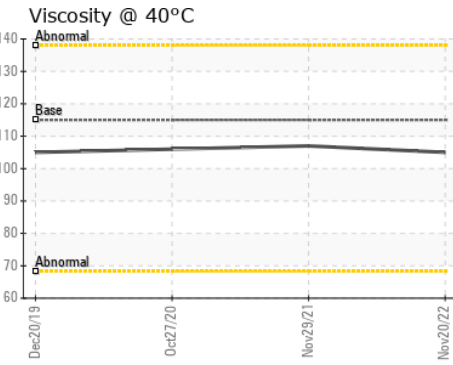
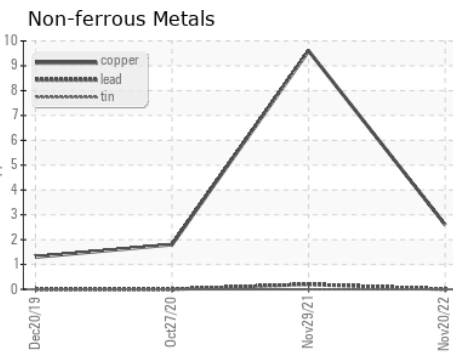
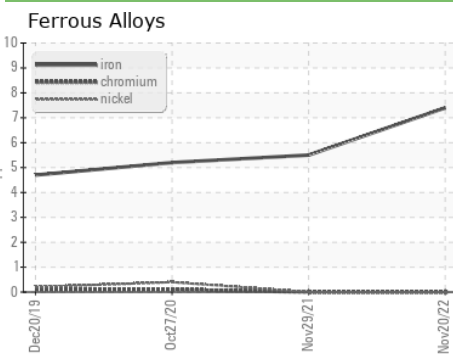


FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	115	<b>105</b>	107	106

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0680546  
**Lab Number** : **05715189**  
**Unique Number** : 10254765  
**Test Package** : IND 2  
**Received** : 12 Dec 2022  
**Diagnosed** : 14 Dec 2022  
**Diagnostician** : Jonathan Hester

**FLUOR MARINE PROPULSION LLC**  
 2401 RIVER RD  
 SCHENECTADY, NY  
 US 12309  
 Contact: Service Manager

Certificate L2367  
 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)