

## **OIL ANALYSIS REPORT**

Sample Rating Trend



### Machine Id SHUTTLE WAGON NXT423 ARIES2303 Component Front Axle Fluid UTH (--- 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.

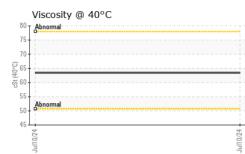
## Fluid Condition

The condition of the oil is acceptable for the time in service.

Sample Number	ATION	method				history2
		Client Info		ML0002696		
Sample Date		Client Info		10 Jul 2024		
Machine Age	hrs	Client Info		1034		
Oil Age	hrs	Client Info		1034		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	56		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	1		
Lead	ppm	ASTM D5185m	>25	0		
Copper	ppm	ASTM D5185m	>50	3		
Tin		ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m	>10	0		
	ppm			-		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		86		
Barium	ppm	ASTM D5185m		0		
Volybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		10		
Magnesium	ppm	ASTM D5185m		0		
•	ppm ppm	ASTM D5185m ASTM D5185m		0 1031		
Calcium				-		
Calcium Phosphorus	ppm	ASTM D5185m		1031		
Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m		1031 717		
Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	1031 717 1051		
Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		1031 717 1051 5804	 	
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method		1031 717 1051 5804 current	 	
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	>75	1031 717 1051 5804 current 31	 	
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	>75	1031 717 1051 5804 <u>current</u> 31 7	  history1 	   history2 
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	>75 >20	1031 717 1051 5804 <u>current</u> 31 7 <1	  history1  	  history2  
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 limit/base	1031 717 1051 5804 current 31 7 <1 current	  history1   history1	  history2   history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m	>75 >20 limit/base NONE	1031 717 1051 5804 current 31 7 <1 current NONE	  history1   history1 	  history2   history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual	>75 >20 limit/base NONE NONE	1031 717 1051 5804 current 31 7 <1 current NONE NONE	  history1   history1 	  history2  history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE	1031 717 1051 5804 current 31 7 <1 current NONE NONE NONE NONE	  history1   history1  	  history2  history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D	>75 >20 limit/base NONE NONE NONE NONE NONE	1031 717 1051 5804 <u>current</u> 31 7 <1 current NONE NONE NONE NONE	  history1   history1   	<ul> <li></li> <li></li> <li>history2</li> <li></li> <li></li> <li>history2</li> <li></li> <li></li></ul>
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Visual *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE	1031 717 1051 5804 current 31 7 <1 current NONE NONE NONE NONE NONE NONE NONE	<ul> <li></li> <li></li> <li></li> <li>history1</li> <li></li> <li>history1</li> <li></li> <li></li></ul>	<ul> <li></li> <li></li> <li>history2</li> <li></li> <li>history2</li> <li></li> <li>history2</li> <li></li> <li>&lt;</li></ul>
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE	1031 717 1051 5804 current 31 7 <1 current NONE NONE NONE NONE NONE NONE NONE NON	  history1    history1      	<ul> <li></li> <li></li> <li>history2</li> <li></li> <li>history2</li> <li></li> <li>history2</li> <li></li> <li>&lt;</li></ul>
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>75 220 limit/base NONE NONE NONE NONE NONE NORE NORML NORML	1031 717 1051 5804 <b>current</b> 31 7 <1 <b>current</b> NONE NONE NONE NONE NONE NONE NONE NON	  history1    history1      	history2
Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE	1031 717 1051 5804 current 31 7 <1 current NONE NONE NONE NONE NONE NONE NONE NON	  history1    history1        -	  history2   history2  history2   



# **OIL ANALYSIS REPORT**



FLUID PROPERTIES	method	limit/base	current	history1	histo
Visc @ 40°C cSt	ASTM D445		63.4		
SAMPLE IMAGES	method	limit/base	current	history1	histo
Color			na imaga	na ima na	no (mo
Color			no image	no image	no ima
Bottom			no image	no image	no ima
GRAPHS				1	
Ferrous Alloys					
50 - iron nickel					
40					
톮 30 -					
20 -					
10-					
Jui10/24		Jul10/24			
Non-ferrous Metals		-,			
10 9					
8 -					
7					
Ē. 5-					
3					
2					
		54			
Jul10/24		Jul10/24			
Viscosity @ 40°C					
<sup>80</sup> Abnormal					
70					
35 60					
55					
50 - Abnormal					
45					
Jul1 0/24		Jul10/24			
<u>د</u>		7			
: WearCheck USA - 501 Mac			MCCLUN	IG-LOGAN EQUIPME	
		Jul 2024 Jul 2024		1345 MO GI	UNTAIN F EN ALLEI
		Jul 2024 - Se	an Felton	GL	



Unique Number : 11125386 Diagnosed : 17 Jul 2024 - Sean Felton Test Package : CONST Contact: Alex Anderson Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. aanderson@mcclung-logan.com \* - 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)

> Submitted By: Service - Alex Anderson Page 2 of 2

US 23060

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