

Machine Id 734 omponent **Hoisting Gearbox** GEAR OIL LS 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

FLUID CONDITION

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

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0033200		
Sample Date		Client Info		17 Jun 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				ABNORMAL		
Iron		ASTM D5185m	. 200	175		
Iron Chromium	ppm		>200 >10	-		
	ppm	ASTM D5185m		<1		
Nickel Titanium	ppm	ASTM D5185m	>10	0		
	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m		<1		
	ppm	ASTM D5185m		<1		
Copper	ppm	ASTM D5185m		65 0		
Tin	ppm			0		
Vanadium	ppm	ASTM D5185m	NONE			
White Metal Yellow Metal	scalar scalar	*Visual *Visual	NONE	NONE		
	304141	visuai	NONE	NONE		
Silicon	ppm	ASTM D5185m	NONE	▲ 100		
			>20			
Silicon	ppm	ASTM D5185m		<b>▲</b> 100		
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>20	▲ 100 <1		
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>20 >0.2	▲ 100 <1 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>20 >0.2 NONE	▲ 100 <1 NEG NONE		
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>20 >0.2 NONE NONE	▲ 100 <1 NEG NONE NONE		  
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual	>20 >0.2 NONE NONE NONE	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NONE NORML	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NORE NORML	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NEG</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.2 NONE NONE NORML NORML >0.2	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NEG</li> <li>56</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORE NORML	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>56</li> <li>&lt;1</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML >0.2	100 <1 NEG NONE NONE NORML NORML NORML S6 <1 2		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML >0.2	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>56</li> <li>&lt;1</li> <li>2</li> <li>4</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NORML NORML >0.2	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>56</li> <li>&lt;1</li> <li>2</li> <li>4</li> <li>2</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML >0.2 150	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>56</li> <li>&lt;1</li> <li>2</li> <li>4</li> <li>2</li> <li>86</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NORML NORML >0.2 150	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>56</li> <li>&lt;1</li> <li>2</li> <li>4</li> <li>2</li> <li>86</li> <li>66</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NORME NORML >0.2 150 10 70 2000	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>56</li> <li>&lt;1</li> <li>2</li> <li>4</li> <li>2</li> <li>86</li> <li>66</li> <li>367</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Malybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML >0.2 150 150 10 70 2000 50	<ul> <li>100</li> <li>1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>56</li> <li>&lt;1</li> <li>2</li> <li>4</li> <li>2</li> <li>86</li> <li>66</li> <li>367</li> <li>16</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NORME NORML >0.2 150 10 70 2000	<ul> <li>100</li> <li>&lt;1</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>56</li> <li>&lt;1</li> <li>2</li> <li>4</li> <li>2</li> <li>86</li> <li>66</li> <li>367</li> </ul>		

NORMAL

**ABNORMAL** NORMAL

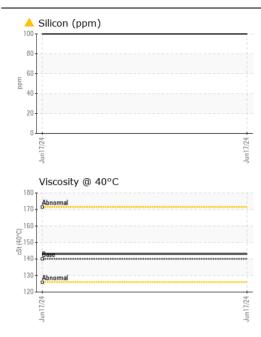
**WEAR** 

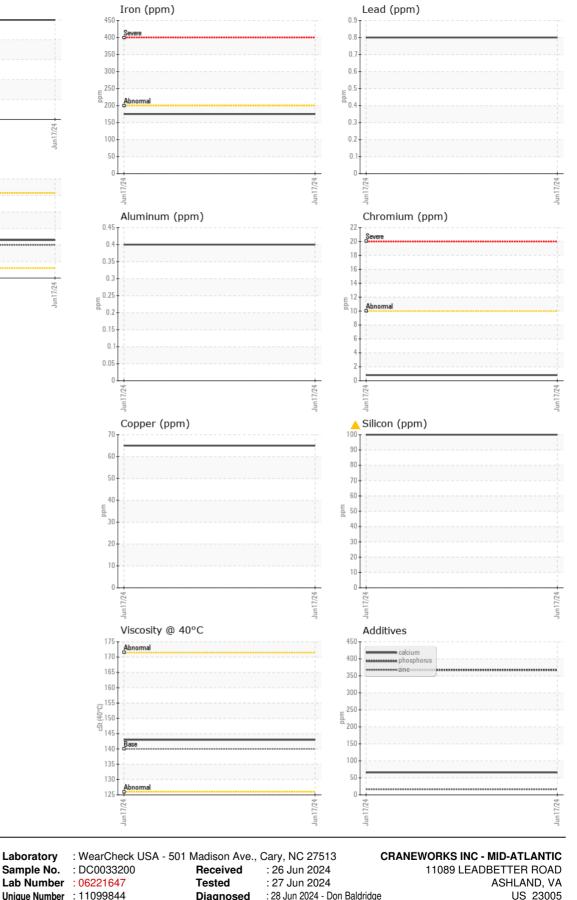
CONTAMINATION

**FLUID CONDITION** 

Report Id: CRAASHMA [WUSCAR] 06221647 (Generated: 06/29/2024 04:14:41) Rev: 1

Contact/Location: JASON WILDE - CRAASHMA





Diagnosed Unique Number : 11099844 : 28 Jun 2024 - Don Baldridge Test Package : MOB 1 Contact: JASON WILDE Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jcwilde@vacraneworks.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)

Laboratory

Sample No.

Contact/Location: JASON WILDE - CRAASHMA Page 2 of 2

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