

# [512280 LIBERTY] GENIE S-65 S6011-22685

Swing Drive

GEAR OIL SAE 80W90 (--- GAL)

## RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

#### **WEAR**

Gear wear is indicated.

### CONTAMINATION

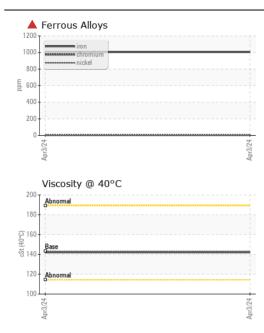
There is no indication of any contamination in the oil.

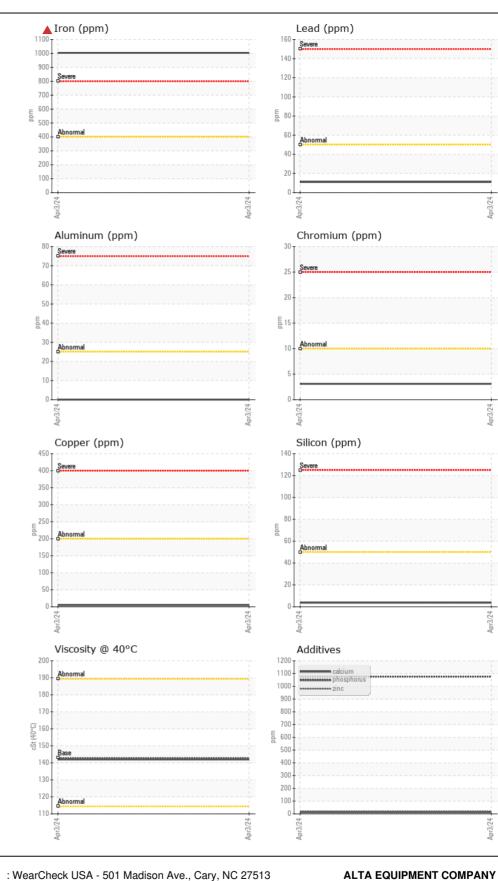
## FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP454255		
Sample Date		Client Info		03 Apr 2024		
Machine Age	hrs	Client Info		2050		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Not Changd		
Sample Status				SEVERE		
			400	A 1004		
Iron	ppm	ASTM D5185m	>400	▲ 1004 0		
Chromium	ppm	ASTM D5185m	>10	3		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	05	0		
Aluminum	ppm	ASTM D5185m	>25	0		
Lead	ppm	ASTM D5185m	>50	11		
Copper	ppm	ASTM D5185m	>200	5		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m	NONE	0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>50	4		
Silicon Potassium	ppm ppm	ASTM D5185m ASTM D5185m	>50 >20	4 0		
				-		
Potassium		ASTM D5185m	>20	0		
Potassium Water	ppm	ASTM D5185m WC Method	>20 >0.2	0 NEG		
Potassium Water Silt	ppm scalar	ASTM D5185m WC Method *Visual	>20 >0.2 NONE	0 NEG NONE		
Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185m WC Method *Visual *Visual	>20 >0.2 NONE NONE	0 NEG NONE NONE		
Potassium Water Silt Debris Sand/Dirt	ppm scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual	>20 >0.2 NONE NONE NONE	0 NEG NONE NONE	  	   
Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NONE NORML	0 NEG NONE NONE NONE NORML	   	  
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NONE NORML NORML >0.2	0 NEG NONE NONE NORE NORML NORML NEG		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> </ul>	0 NEG NONE NONE NORML NORML NEG		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> <li>400</li> </ul>	0 NEG NONE NONE NORML NORML NEG 7 72		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> <li>400</li> <li>200</li> </ul>	0 NEG NONE NONE NORML NORML NEG 7 72 15		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> <li>400</li> </ul>	0 NEG NONE NONE NORML NORML NEG 7 72 72 15 0		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> <li>400</li> <li>200</li> <li>12</li> </ul>	0 NEG NONE NONE NORML NORML NEG 7 72 15 0 11		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> <li>400</li> <li>200</li> <li>12</li> <li>12</li> </ul>	0 NEG NONE NONE NORML NORML NEG 7 72 15 0 11 2		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> <li>400</li> <li>200</li> <li>12</li> <li>12</li> <li>150</li> </ul>	0 NEG NONE NONE NORML NORML NEG 7 72 15 0 11 2 13		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> <li>400</li> <li>200</li> <li>12</li> <li>12</li> <li>150</li> <li>1650</li> </ul>	0 NEG NONE NONE NORML NORML NEG 7 7 72 15 0 11 2 13 1076		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> <li>400</li> <li>200</li> <li>12</li> <li>150</li> <li>1650</li> <li>125</li> </ul>	0 NEG NONE NONE NORML NORML NEG 7 7 72 15 0 11 2 13 1076 21		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.2</li> <li>&gt;170</li> <li>400</li> <li>200</li> <li>12</li> <li>12</li> <li>150</li> <li>1650</li> </ul>	0 NEG NONE NONE NORML NORML NEG 7 7 72 15 0 11 2 13 1076		

Contact/Location: MIKE MARTIN - VOLVO5054







1	d	Laboratory	: WearCheck USA - 501	ALTA EQUIPMENT COMPANY				
a:드	ANAB	Sample No.	: VCP454255	Received	: 16 Apr 2024	1035 WYLIE DRIVE		
er a	ACCREDITED	Lab Number	: 06150803	Tested	: 17 Apr 2024	BLOOMINGTON, IL		
	TESTING LABORATORY	Unique Number	: 10980881	Diagnosed	: 19 Apr 2024 - Jonathan Hester	US 61705		
5.3	Certificate L2367	Test Package	: MOB 1	-		Contact: MIKE MARTIN		
<u>A</u>	To discuss thi	s sample report,	mike.martin@altaequipment.com					
APT	* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.							
-ru	Statements of	conformity to su	pecifications are based on	the simple acc	eptance decision rule (JCGM	106:2012) F:		

Contact/Location: MIKE MARTIN - VOLVO5054 Page 2 of 2