WEAR
CONTAMINATION
FLUID CONDITION

NORMAL

ABNORMAL

NORMAL

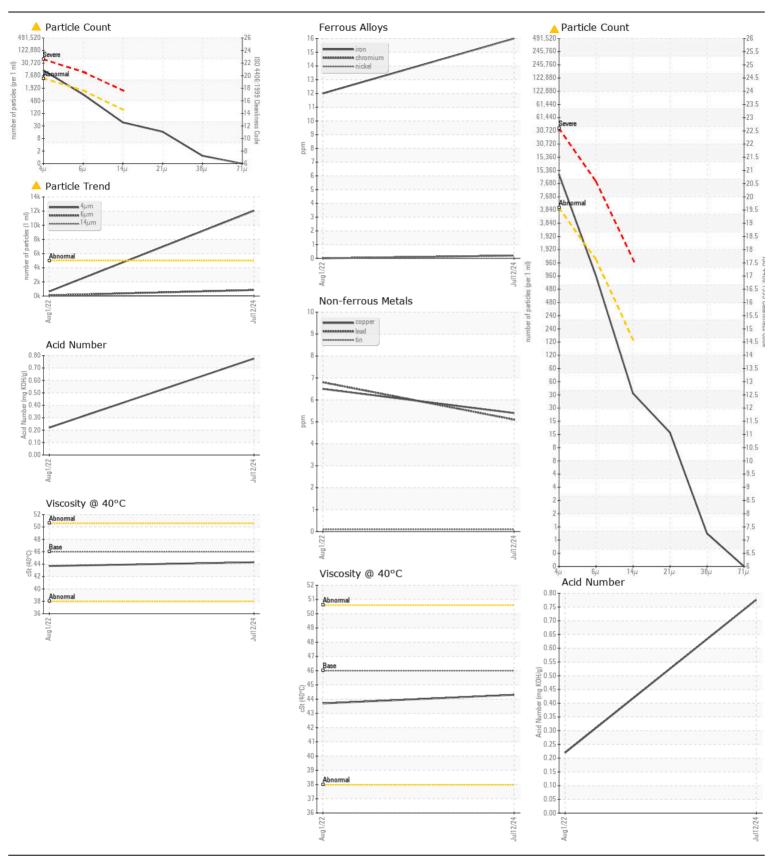
Ascendum Machinery

VOLVO SD115B R-04 (S/N 236316)

Hydraulic System

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

Test								
No corrective action is recommended at this time. Resample at the next service interval to monitor. Sample Date Machine Age his Client Info 997 2011 10 10 10	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Nachine Age hrs Client Info 97 2008 2011	No corrective action is recommended at this time. Resample at the	Sample Number		Client Info		ASC0009713		
Machine Age hrs Client Info 997 2011		Sample Date		Client Info				
Filter Age		•	hrs	Client Info				
		-	hrs			997		
		•	hrs					
Note							Ü	
Iron		_		Client Info			0	
All component wear rates are normal.		Sample Status				ABNORMAL	NORMAL	
All component wear rates are normal.	WEAR	Iron	ppm	ASTM D5185m	>20	16	12	
Titanium ppm		Chromium	ppm	ASTM D5185m	>10	<1	0	
Silver ppm ASTM D5185m >10 2 <1 · Aluminum ppm ASTM D5185m >10 2 <1 · Lead ppm ASTM D5185m >10 5 7 · Copper ppm ASTM D5185m >10 5 7 · Tin ppm ASTM D5185m >10 <1 <1 < Vanadium ppm ASTM D5185m >10 <1 <1 < Vanadium ppm ASTM D5185m >10 <1 <1 < Value	All component wear rates are normal.			ASTM D5185m	>10	<1	0	
Aluminum ppm ASTM D5185m >10 2 <1		Titanium	ppm	ASTM D5185m		<1	0	
Lead		Silver	ppm	ASTM D5185m		0	<1	
Copper		Aluminum	ppm	ASTM D5185m	>10	2	<1	
Tin		Lead	ppm	ASTM D5185m	>10	5	7	
Vanadium Vanadium		Copper	ppm	ASTM D5185m	>75	5	6	
White Metal Yellow Metal Potassium ppm ASTM D5185m > 20 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 3 2 2 3 2 2 3 3 2 2 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 3 2 2 3		Tin	ppm	ASTM D5185m	>10	<1	<1	
Yellow Metal Scalar "Visual NONE		Vanadium	ppm	ASTM D5185m		0	0	
Silicon ppm ASTM D5185m >20 3 2		White Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium ppm ASTM 05185m >20 3 2		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium ppm ASTM 05185m >20 3 2	CONTAMINATION	Silicon	maa	ASTM D5185m	>20	3	2	
Mater WC Method >0.1 NEG NEG Particles >4μm ASTM D7647 >1000 NEG 653 Particles >6μm ASTM D7647 >1000 NEG S343 98 Particles >21μm ASTM D7647 >1600 39 5 Particles >32μm ASTM D7647 >100 14 2 Particles >32μm ASTM D7647 >10 1 0 Particles >32μm ASTM D7647 >10 1 0 Particles >71μm ASTM D7647 >10 NONE NO	There is a high amount of silt (particulates < 14 microns in size)							
Particles >4μm ASTM D7647 >5000			1-1-					
Particles >6µm		Particles >4µm				<u> </u>	653	
Particles >14µm							98	
Particles >38μm ASTM D7647 >10 1 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness Sitt Socalar *Visual NONE NONE NONE Debris Scalar *Visual NONE NONE NONE NONE NONE Debris Scalar *Visual NONE NONE NONE NONE NONE NONE Sand/Dirt Scalar *Visual NONE NONE NONE NONE NONE NONE Appearance Scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water Scalar *Visual NORML NORML NORML NORML NORML Emulsified Water Scalar *Visual NORML NORML NORML NORML NORML Emulsified Water Scalar *Visual NORML NORML NORML NORML NORML NORML NOR		•		ASTM D7647	>160	39	5	
Particles > 71 \rm ASTM D7647 > 3 0 0 0 Oil Cleanliness ISO 4406 (c) \$1917114 2171712 17/14/10 Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML		Particles >21µm		ASTM D7647	>40	14	2	
Oil Cleanliness Sith Scalar *Visual NONE NORML		Particles >38μm		ASTM D7647	>10	1	0	
Silt Scalar *Visual NONE NONE NONE NONE NORML		Particles >71μm		ASTM D7647	>3	0	0	
Debris Scalar *Visual NONE NORML NORML		Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u> </u>	17/14/10	
Sand/Dirt Scalar *Visual NONE NONE NONE Appearance Scalar *Visual NORML NORM		Silt	scalar	*Visual	NONE	NONE	NONE	
Appearance Scalar *Visual NORML NORM		Debris	scalar	*Visual	NONE	NONE	NONE	
Odor Scalar *Visual NORML NORML NORML NORML Emulsified Water Scalar *Visual >0.1 NEG NEG		Sand/Dirt	scalar		NONE	NONE	NONE	
Emulsified Water scalar *Visual >0.1 NEG NEG		• •	scalar	*Visual			NORML	
Sodium ppm ASTM D5185m 14 4 4				*Visual	NORML	NORML		
Boron ppm ASTM D5185m 14 4 <1 Barium ppm ASTM D5185m 0.0 0 0 0 0 Molybdenum ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 0 Magnesium ppm ASTM D5185m 0.0 ASTM D5185m 0.0 3 0 0 0 0 Magnesium ppm ASTM D5185m 0.0 ASTM D5185m 0.0 3 0 0 0 0 0 0 0 0		Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Boron ppm ASTM D5185m 14 4 <1 Barium ppm ASTM D5185m 0.0 0 0 0 0 Molybdenum ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 Magnesium ppm ASTM D5185m 0.0 3 0 0 0 0 Magnesium ppm ASTM D5185m 0.0 ASTM D5185m 0.0 3 0 0 0 0 Magnesium ppm ASTM D5185m 0.0 ASTM D5185m 0.0 3 0 0 0 0 0 0 0 0	FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	0	
Barium ppm ASTM D5185m 0.0 0 0 0 0 0 0 0 0	TEGIS CONSTITION				14			
Molybdenum ppm ASTM D5185m 0.0 3 0 Manganese ppm ASTM D5185m 0.0 <1 <1 Magnesium ppm ASTM D5185m 2.6 43 2 Calcium ppm ASTM D5185m 49 407 256 Phosphorus ppm ASTM D5185m 354 413 447 Zinc ppm ASTM D5185m 419 365 160 Sulfur ppm ASTM D5185m 3719 1272 1923 Acid Number (AN) mg KOH/g ASTM D8045 0.776 0.22	•							
Manganese ppm ASTM D5185m 0.0 <1							0	
Magnesium ppm ASTM D5185m 2.6 43 2 Calcium ppm ASTM D5185m 49 407 256 Phosphorus ppm ASTM D5185m 354 413 447 Zinc ppm ASTM D5185m 419 365 160 Sulfur ppm ASTM D5185m 3719 1272 1923 Acid Number (AN) mg KOH/g ASTM D8045 0.776 0.22		•						
Calcium ppm ASTM D5185m 49 407 256 Phosphorus ppm ASTM D5185m 354 413 447 Zinc ppm ASTM D5185m 419 365 160 Sulfur ppm ASTM D5185m 3719 1272 1923 Acid Number (AN) mg KOH/g ASTM D8045 0.776 0.22		_		ASTM D5185m	2.6		2	
Zinc ppm ASTM D5185m 419 365 160 Sulfur ppm ASTM D5185m 3719 1272 1923 Acid Number (AN) mg KOH/g ASTM D8045 0.776 0.22		Calcium	ppm			407	256	
Zinc ppm ASTM D5185m 419 365 160 Sulfur ppm ASTM D5185m 3719 1272 1923 Acid Number (AN) mg KOH/g ASTM D8045 0.776 0.22		Phosphorus		ASTM D5185m	354	413	447	
Acid Number (AN) mg KOH/g ASTM D8045 0.776 0.22		Zinc	ppm	ASTM D5185m	419	365	160	
		Sulfur	ppm	ASTM D5185m	3719	1272	1923	
Visc @ 40°C cSt ASTM D445 46 44.3 43.7		Acid Number (AN)	mg KOH/g	ASTM D8045		0.776	0.22	
		Visc @ 40°C	cSt	ASTM D445	46	44.3	43.7	





Certificate L2367

Laboratory Sample No.

: ASC0009713 Lab Number : 06235858 Unique Number : 11124692

Test Package : CONST

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 15 Jul 2024 **Tested** : 16 Jul 2024

: 16 Jul 2024 - Don Baldridge Diagnosed

CAROLINA EXCAVATING

1036 BRANCHVIEW DR, SUITE 106 CONCORD, NC

US 28025 Contact: KEVIN LADGERWOOD

kevin@carlinaexcavation.com

T: F:

* - 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)