

WEAR
CONTAMINATION
FLUID CONDITION

NORMAL NORMAL

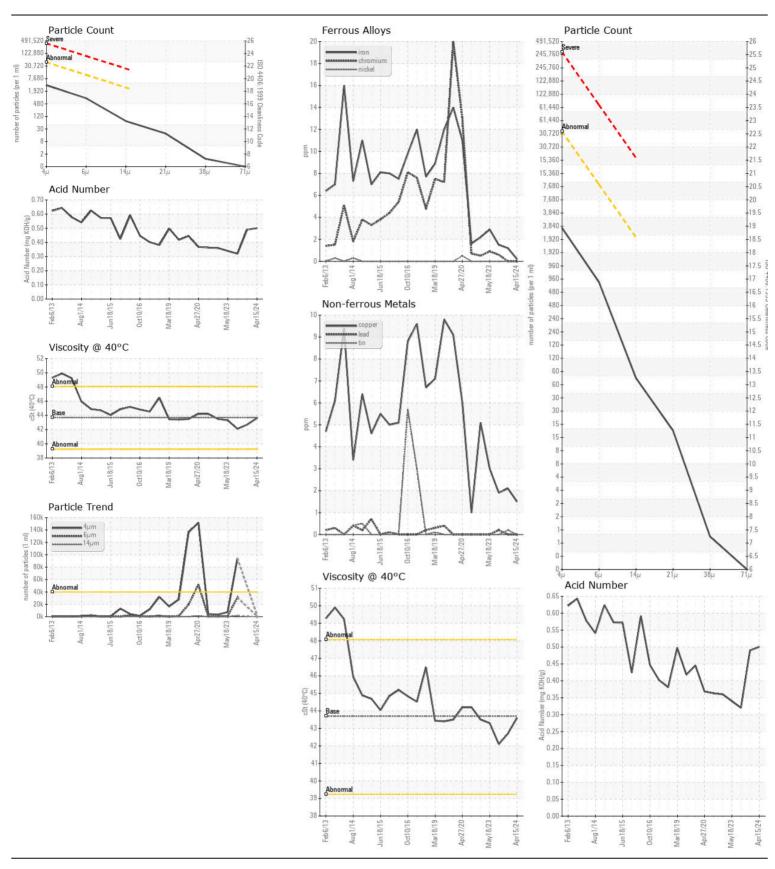


AMR-Cheyenne Machine Id 17529 VOLVO EC460CL 110459

Hydraulic System

CHEVRON HYDRAULIC OIL AW ISO 46 (139 GAL)

Test	CHEVRON HYDRAULIC OIL A	W ISO 46 (1:	39 GA	\L)				
Name	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Name	TESSIMIENS/TISIC							
Machine Age Ins Client Info 15413 8869 14810 Client Filter Age Ins Client Info 0 0 0 0 0 0 0 0 0	Resample at the next service interval to monitor.					15 Apr 2024	14 Mar 2024	06 Oct 2023
Oil Age hrs Client Info O O O O O O O O O			hrs					
Filter Age Dischanged Client Info Dischanged Client Info Net Changed Client Info Net Changed Chang		•		Client Info		0	0	
O Changed Chent Info Shi Changed Chent Info Shi Changed Changed Chent Info Shi Changed				Client Info			0	0
Filter Changed Sample Status North Rand ABNORMAL ABNORMAL		Oil Changed				Not Changd	Changed	Not Changd
Normal				Client Info		Not Changd		
All component wear rates are normal. Chromium ppm ASTM 0585m >10 0 0 0 0 0 0 0 0 0						NORMAL	ABNORMAL	
All component wear rates are normal. Chromium ppm ASTM 0585m >10 0 0 0 0 0 0 0 0 0	WEAD	Iron	nnm	ASTM D5185m	> 25	_1	1	2
Nickel	WEAR							
Titanium ppm ASTM D5185n 0 0 0 0 0 0 0 0 0	All component wear rates are normal.							
Silver ppm ASTM 05185m 20 0 0 0 0 0 0 0 0					>10			
Aluminum ppm ASTM D5885m >20 0 0 2 0 0 0 2 0 0						-		
Lead ppm ASTM D6185m >20 0 0 <1					>20			
Copper						-		
Tin								
Vanadium ppm ASTM D5185m NONE NON								
White Metal Yellow Metal Scalar Visual NONE NONE NONE NONE NONE NONE NONE					>10			
Yellow Metal Scalar Visual NONE					NONE	-		
Silicon ppm ASTM D5185m >50 <1 0 <1								
Potassium ppm ASTM D5185m ≥20 10 1 1 1 Mater WC Method >0.1 NEG NEG NEG NEG Particles >4μm ASTM D7647 >40000 3214				v 150aa1			14014	TYOTYL
Potassium ppm ASTM D5185m ≥20 10 1 1 1 Mater WC Method >0.1 NEG NEG NEG NEG Particles >4μm ASTM D7647 >40000 3214	CONTAMINATION	Silicon	ppm	ASTM D5185m	>50	<1	0	<1
cleanliness code. The system and fluid cleanliness is acceptable. Particles > 4µm		Potassium	ppm	ASTM D5185m	>20	10	1	1
Particles > 4µm ASTM D7647 >40000 3214 39015 Particles > 6µm ASTM D7647 >10000 776 30917 Particles > 21µm ASTM D7647 >2500 63 1678 Particles > 38µm ASTM D7647 >640 16 379 Particles > 38µm ASTM D7647 >640 16 8 Particles > 371µm ASTM D7647 >40 0 1 Particles > 379 ASTM D5185m 2 3 -1 Particles > 379 ASTM D5185m 366 379 361 Particles > 379 ASTM D5185m 366 379 361 Particles > 370 ASTM D5185m 366 379 379 Particles > 370 370 370 370 Particles > 370 370	, , , ,	Water		WC Method	>0.1	NEG	NEG	NEG
Particles >14µm		Particles >4µm		ASTM D7647	>40000	3214		4 94015
Particles >21µm ASTM D7647 >640 16 379 Particles >38µm ASTM D7647 >160 1 8 Particles >38µm ASTM D7647 >40 0 1 Oil Cleanliness ISO 4406 (c) >222018 19/17/13 △ 24/22/18 Silt scalar *Visual NONE		Particles >6µm		ASTM D7647	>10000	776		▲ 30917
Particles >38μm ASTM D7647 >160 1 8 Particles >71μm ASTM D7647 >40 0 1 SO 4406 (c) ≥2220/18 19/17/13 NONE NONE NONE Debris Scalar *Visual NONE NONE NONE NONE NONE NONE NONE NONE Data Sand/Dirt Scalar *Visual NONE NO		Particles >14μm		ASTM D7647	>2500	63		1678
Particles >71 μm		Particles >21μm		ASTM D7647	>640	16		379
Oil Cleanliness SO 4406 (c) >22/20/18 19/17/13 △ 24/22/18 Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NORML N				ASTM D7647	>160	1		8
Silt Scalar *Visual NONE NORML						0		
Debris Scalar *Visual NONE NORML N					>22/20/18			
Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML			scalar					
Appearance						_		
Odor scalar *Visual NORML NORML NORML NORML NEG NEG					_			
Emulsified Water scalar *Visual >0.1 NEG NEG NEG		• • • • • • • • • • • • • • • • • • • •						
Sodium ppm ASTM D5185m 2 0 < 1								
Boron ppm ASTM D5185m 0 0 0 0		Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Boron ppm ASTM D5185m 0 0 0 0	FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	0	<1
Molybdenum ppm ASTM D5185m 2 3 <1		Boron	ppm	ASTM D5185m		0	0	0
Molybdenum ppm ASTM D5185m 2 3 <1		Barium	ppm	ASTM D5185m		0	0	3
Magnesium ppm ASTM D5185m 24 36 1 Calcium ppm ASTM D5185m 100 110 126 Phosphorus ppm ASTM D5185m 296 339 361 Zinc ppm ASTM D5185m 356 398 454 Sulfur ppm ASTM D5185m 906 974 1013 Acid Number (AN) mg KOH/g ASTM D8045 0.50 0.49 0.32		Molybdenum	ppm	ASTM D5185m		2	3	<1
Calcium ppm ASTM D5185m 100 110 126 Phosphorus ppm ASTM D5185m 296 339 361 Zinc ppm ASTM D5185m 356 398 454 Sulfur ppm ASTM D5185m 906 974 1013 Acid Number (AN) mg KOH/g ASTM D8045 0.50 0.49 0.32		Manganese	ppm			0	0	0
Phosphorus ppm ASTM D5185m 296 339 361 Zinc ppm ASTM D5185m 356 398 454 Sulfur ppm ASTM D5185m 906 974 1013 Acid Number (AN) mg KOH/g ASTM D8045 0.50 0.49 0.32		0	ppm			24	36	1
Zinc ppm ASTM D5185m 356 398 454 Sulfur ppm ASTM D5185m 906 974 1013 Acid Number (AN) mg KOH/g ASTM D8045 0.50 0.49 0.32		Calcium	ppm	ASTM D5185m				
Sulfur ppm ASTM D5185m 906 974 1013 Acid Number (AN) mg KOH/g ASTM D8045 0.50 0.49 0.32		Phosphorus	ppm	ASTM D5185m		296	339	
Acid Number (AN) mg KOH/g ASTM D8045 0.50 0.49 0.32			ppm					
(
Visc @ 40°C cSt ASTM D445 43.7 43.6 42.7 42.1		. ,						
		Visc @ 40°C	cSt	ASTM D445	43.7	43.6	42.7	42.1





Certificate L2367

Laboratory Sample No. Lab Number

: 06151918 Unique Number: 10981996

: DJJ0024030 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Apr 2024 **Tested** : 18 Apr 2024

: 19 Apr 2024 - Doug Bogart Diagnosed

ADVANTAGE METALS RECYCLING - CHEYENNE

1015 S. PACKARD ST KANSAS CITY, KS US 66105

Contact: BRIAN JACOBS

BRIAN.JACOBS@ADVANTAGERECYCLING.COM

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.

T: (816)808-4711 F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)