



Ascendum Machinery VOLVO EC220E EX-4 (S/N 310878)

Right Travel

VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

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M	=7	4	-

All component wear rates are normal.

CONTAMINATION

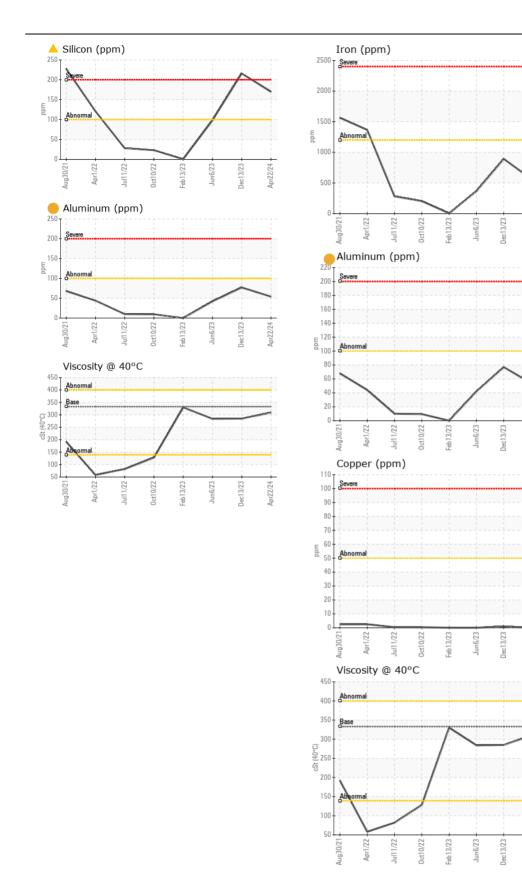
Elemental levels of silicon (Si) and aluminum (AI) indicate aluminasilicate (coarse dirt) ingress.

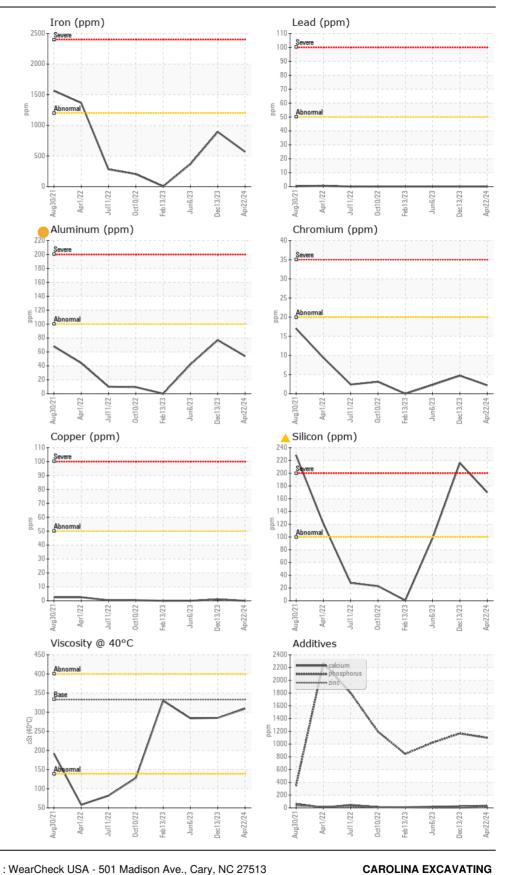
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The condition of the oil is acceptable for the time in service.

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Barium ppm ASTM D5185m 0.0 0 0 0 Molybdenum ppm ASTM D5185m 0.9 0 <1	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 >0.25 NONE NONE NORML NORML	6 NEG NONE NONE NORML NORML NEG	9 NEG NONE NONE NORML NORML NEG	4 NEG NONE NONE NORML NORML NEG	
Molybdenum ppm ASTM D5185m 0.9 0 <1	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.25 NONE NONE NORML NORML >0.25	6 NEG NONE NONE NORML NORML NEG 3	9 NEG NONE NONE NORML NORML NEG	4 NEG NONE NONE NORML NORML NEG	
Manganese ppm ASTM D5185m 0.0 3 5 2 Magnesium ppm ASTM D5185m 39 5 5 1 Calcium ppm ASTM D5185m 93 34 24 18 Phosphorus ppm ASTM D5185m 920 1098 1167 1022 Zinc ppm ASTM D5185m 104 10 0 0 Sulfur ppm ASTM D5185m 20179 34106 36126 34416	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	>20 >0.25 NONE NONE NORML >0.25	6 NEG NONE NONE NORML NORML NEG 3 194	9 NEG NONE NONE NORML NORML NEG 1 209	4 NEG NONE NONE NORML NORML NEG <1 212	
Magnesium ppm ASTM D5185m 39 5 5 1 Calcium ppm ASTM D5185m 93 34 24 18 Phosphorus ppm ASTM D5185m 920 1098 1167 1022 Zinc ppm ASTM D5185m 104 10 0 0 Sulfur ppm ASTM D5185m 20179 34106 36126 34416	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	>20 >0.25 NONE NONE NORML NORML >0.25	6 NEG NONE NONE NORML NORML NEG 3 194 0	9 NEG NONE NONE NORML NORML NEG 1 209 0	4 NEG NONE NONE NORML NORML NEG <1 212 0	
Calcium ppm ASTM D5185m 93 34 24 18 Phosphorus ppm ASTM D5185m 920 1098 1167 1022 Zinc ppm ASTM D5185m 104 10 0 0 Sulfur ppm ASTM D5185m 20179 34106 36126 34416	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	>20 >0.25 NONE NORM NORML >0.25 1111 0.0	6 NEG NONE NONE NORML NORML NEG 3 194 0 0	9 NEG NONE NONE NORML NORML NEG 1 209 0 <1	4 NEG NONE NONE NORML NORML NEG <1 212 0 <1	
Phosphorus ppm ASTM D5185m 920 1098 1167 1022 Zinc ppm ASTM D5185m 104 10 0 0 Sulfur ppm ASTM D5185m 20179 34106 36126 34416	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.25 NONE NONE NORML >0.25 1111 0.0 0.9 0.0	6 NEG NONE NONE NORML NORML NEG 3 194 0 0 3	9 NEG NONE NONE NORML NORML NEG 1 209 0 <1 5	4 NEG NONE NONE NORML NORML NEG <1 212 0 <1 2	
Zinc ppm ASTM D5185m 104 10 0 0 Sulfur ppm ASTM D5185m 20179 34106 36126 34416	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.25 NONE NONE NORML NORML >0.25 1111 0.0 0.9 0.0 39	6 NEG NONE NONE NORML NORML NEG 3 194 0 0 3 5	9 NEG NONE NONE NORML NORML NEG 1 209 0 <1 5 5	4 NEG NONE NONE NORML NORML NEG <1 212 0 <1 212 0 <1 2 1	
Sulfur ppm ASTM D5185m 20179 34106 36126 34416	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar 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	>20 >0.25 NONE NONE NORML NORML >0.25 1111 0.0 0.9 0.0 39 93	6 NEG NONE NONE NORML NORML NEG 3 194 0 0 3 5 3 34	9 NEG NONE NONE NORML NORML NEG 1 209 0 <1 5 5 5 24	4 NEG NONE NONE NORML NORML NEG <1 212 0 <1 2 1 2 1 1 8	
	Potassium Water 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 ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.25 NONE NONE NORML >0.25 1111 0.0 0.0 0.0 39 93 920	6 NEG NONE NONE NORML NORML NEG 3 194 0 0 3 5 34 5 34 1098	9 NEG NONE NONE NORML NORML NEG 1 209 0 <1 5 5 5 24 1167	4 NEG NONE NONE NORML NORML NEG <1 212 0 <1 212 0 <1 212 1 18 1022	
	Potassium Water Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Boron Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc	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	>20 >0.25 NONE NONE NORML NORML >0.25 1111 0.0 0.9 0.9 39 93 920 104	6 NEG NONE NONE NORML NORML NEG 3 194 0 0 3 5 34 5 34 1098 10	9 NEG NONE NONE NORML NORML NEG 1 209 0 <1 5 5 5 24 1167 0	4 NEG NONE NONE NORML NORML NEG <1 212 0 <1 212 0 <1 212 0 <1 1 18 1022 0	

Submitted By: CLAYTON SMITH





Dr77/74

Apr22/24

Apr22/24 .

: 29 Apr 2024 - Don Baldridge

: 25 Apr 2024

: 26 Apr 2024

Received

Diagnosed

Tested



CAROLINA EXCAVATING 1036 BRANCHVIEW DR, SUITE 106 CONCORD, NC US 28025 Contact: KEVIN LADGERWOOD kevin@carlinaexcavation.com T: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: CARCONVC [WUSCAR] 06160771 (Generated: 04/29/2024 11:04:17) Rev: 1

Laboratory

Sample No.

Certificate L2367

Lab Number

Unique Number : 10996194

Test Package : MOBCE

: ASC0001744

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.

: 06160771

Submitted By: CLAYTON SMITH Page 2 of 2