

Machine Id CONNWELD 8X20 4 DECK CONNWELD EAST SCREEN CENTER TUBE (S/N 1-1910052) Component Gearbox Eluid

DA SYNTHETIC ISO 150 (--- GAL)

RECOMMENDATION

We suspect abnormal contamination may be due to sampling method. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

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All component wear rates are normal.

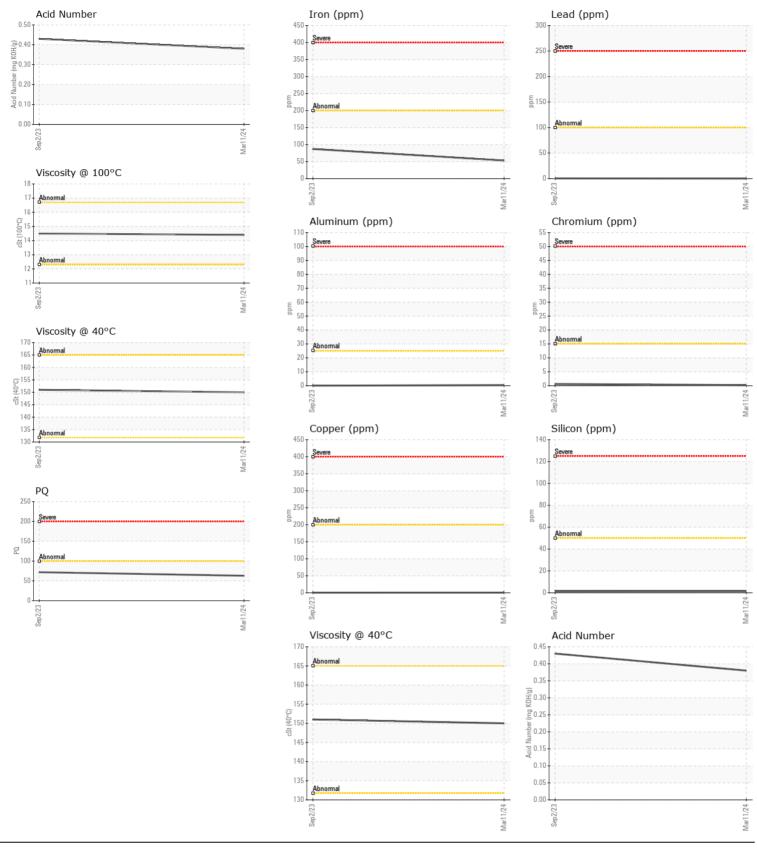
CONTAMINATION

Moderate concentration of visible dirt/debris present in the oil.

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2		
Sample Number		Client Info		TO10003356	TO10002049			
Sample Date		Client Info		11 Mar 2024	02 Sep 2023			
Machine Age	hrs	Client Info		9000	0			
Oil Age	hrs	Client Info		1000	0			
Filter Age	hrs	Client Info		0	0			
Oil Changed		Client Info		Changed	Changed			
Filter Changed		Client Info		Changed	N/A			
Sample Status				ABNORMAL	NORMAL			
PQ		ASTM D8184		63	72			
Iron	ppm	ASTM D5185m	>200	53	87			
Chromium	ppm	ASTM D5185m	>15	<1	<1			
Nickel	ppm	ASTM D5185m	>15	0	<1			
Titanium	ppm	ASTM D5185m		0	0			
Silver	ppm	ASTM D5185m		0	0			
Aluminum	ppm	ASTM D5185m	>25	<1	0			
Lead	ppm	ASTM D5185m	>100	0	<1			
Copper	ppm	ASTM D5185m	>200	<1	<1			
Tin	ppm	ASTM D5185m	>25	0	0			
Vanadium	ppm	ASTM D5185m		0	0			
White Metal	scalar	*Visual	NONE	NONE	NONE			
Yellow Metal	scalar	*Visual	NONE	NONE	NONE			
Silicon	ppm	ASTM D5185m	>50	2	1			
Potassium	ppm ppm	ASTM D5185m	>20	0	1			
Potassium Water	ppm	ASTM D5185m WC Method	>20 >0.2	0 NEG	1 NEG			
Potassium Water Silt	ppm scalar	ASTM D5185m WC Method *Visual	>20 >0.2 NONE	0 NEG NONE	1 NEG NONE			
Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185m WC Method *Visual *Visual	>20 >0.2 NONE NONE	0 NEG NONE MODER	1 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 MODER NONE	1 NEG NONE 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 MODER NONE NORML	1 NEG NONE NONE NONE NORML	 		
Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual	>20 >0.2 NONE NONE NONE	0 NEG NONE MODER NONE NORML NORML	1 NEG NONE 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 MODER NONE NORML	1 NEG NONE NONE NONE NORML	 		
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NONE NORML NORML NEG	1 NEG NONE NONE 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	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NORML NORML NEG	1 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 ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NONE NORML NORML NEG 1 0	1 NEG NONE NONE NORML NORML NEG 0 0			
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 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NORML NORML NEG 1 0	1 NEG NONE NONE NORML NORML NEG 0 0 0			
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 *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NORML NORML NEG 1 0 0 4	1 NEG NONE NONE NORML NORML NEG 0 0 0 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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NORML NORML NEG 1 0 0 4 <1	1 NEG NONE NONE NORML NORML NEG 0 0 0 0 0 0 1			
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NORML NORML NEG 1 0 0 4 <1 2	1 NEG NONE NONE NORML NORML NEG 0 0 0 0 0 1 1			
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NORML NORML NEG 1 0 0 4 <1 2 14	1 NEG NONE NONE NORML NORML NEG 0 0 0 0 0 1 1 1 6			
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NORML NORML NEG 1 0 0 4 <1 2 14 2 14	1 NEG NONE NONE NORML NORML NEG 0 0 0 0 0 0 1 1 1 6 139			
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum 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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NORML NORML NEG 1 0 4 <1 0 4 <1 2 14 164 0	1 NEG NONE NONE NORML NEG 0 0 0 0 0 0 0 1 1 1 6 139 6			
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm scalar scalar scalar scalar scalar ppm 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 ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE MODER NORML NORML NEG 1 0 0 4 <1 2 14 2 14 164 0 0 11691	1 NEG NONE NONE NORML NEG 0 0 0 0 0 0 0 1 1 1 6 139 6 4636			
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Acid Number (AN)	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 0 0 4 <1 2 14 2 14 164 0 11691 0.38	1 NEG NONE NONE NORML NORML NEG 0 0 0 0 0 1 1 1 6 139 6 4636 0.43			
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Malybdenum Maganese Magnesium Calcium Phosphorus Zinc Sulfur Acid Number (AN)	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 0 0 4 <1 2 14 164 0 11691 0.38 150	1 NEG NONE NONE NORML NORML NEG 0 0 0 0 0 1 1 1 6 139 6 4636 0.43 151			
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Acid Number (AN)	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 0 0 4 <1 2 14 2 14 164 0 11691 0.38	1 NEG NONE NONE NORML NORML NEG 0 0 0 0 0 1 1 1 6 139 6 4636 0.43			



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 ANCHOR STONE TULSA ROCK Sample No. Received TULSA ROCK QUARRY, 66TH ST N 145TH AVENUE : TO10003356 : 19 Mar 2024 Lab Number : 06123228 Tested : 20 Mar 2024 TULSA, OK : 22 Mar 2024 - Jonathan Hester US 74137 Unique Number : 10937379 Diagnosed Test Package : MOB 2 (Additional Tests: KV100, PQ, VI) Contact: MIKE SNYDER Certificate L2367 msnyder@anchorstoneco.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: (417)850-9635 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: