

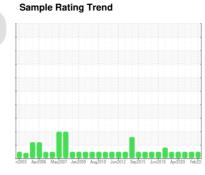
OIL ANALYSIS REPORT

[21-3682]

TURBLEX AERATION BLOWER 2 (S/N 3889)

Hydraulic System

SHELL TELLUS 46 (273 GAL)





Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

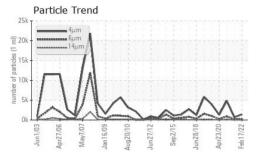
Fluid Condition

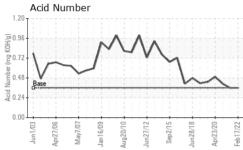
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

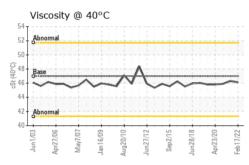
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0528879	WC0528872	WC0408705
Sample Date		Client Info		17 Feb 2022	11 Jun 2021	29 Oct 2020
Machine Age	hrs	Client Info		106737	103797	101738
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Filtered	Filtered
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1	0	<1
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>20	1	1	1
Tin	ppm	ASTM D5185m	>20	0	0	0
Antimony	ppm	ASTM D5185m		0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
		7.0 20.00		U	U	V
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm		limit/base			
		method ASTM D5185m		current	history1	history2
Boron	ppm	method ASTM D5185m	0.0	current 3	history1	history2
Boron Barium	ppm	method ASTM D5185m ASTM D5185m	0.0	current 3 0	history1 1 0	history2 2 0
Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0.0	current 3 0	history1 1 0 <1	history2 2 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0 0	current 3 0 0 0	history1 1 0 <1 0 4 126	history2 2 0 <1 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0 0	current 3 0 0 0 3 137 437	history1 1 0 <1 0 4 126 354	history2 2 0 <1 0 4 125 376
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	method ASTM D5185m	0.0 0 0 11 35 266 276	current 3 0 0 0 3 137 437	history1 1 0 <1 0 4 126 354 463	history2 2 0 <1 0 4 125 376 474
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0.0 0 0 11 35 266	current 3 0 0 0 3 137 437	history1 1 0 <1 0 4 126 354	history2 2 0 <1 0 4 125 376
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0.0 0 0 11 35 266 276	current 3 0 0 0 3 137 437	history1 1 0 <1 0 4 126 354 463	history2 2 0 <1 0 4 125 376 474
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0.0 0 0 11 35 266 276 1847	current 3 0 0 0 3 137 437 467 1991	history1 1 0 <1 0 4 126 354 463 1565	history2 2 0 <1 0 4 125 376 474 1789
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base	current 3 0 0 0 3 137 437 467 1991 current	history1 1 0 <1 0 4 126 354 463 1565 history1	history2 2 0 <1 0 4 125 376 474 1789 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base	current 3 0 0 0 3 137 437 467 1991 current	history1 1 0 <1 0 4 126 354 463 1565 history1	history2 2 0 <1 0 4 125 376 474 1789 history2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base	current 3 0 0 0 3 137 437 467 1991 current 4	history1 1 0 <1 0 4 126 354 463 1565 history1 4	history2 2 0 <1 0 4 125 376 474 1789 history2 3 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base >15	current 3 0 0 0 3 137 437 467 1991 current 4 2 0	history1 1 0 <1 0 4 126 354 463 1565 history1 4 2 0	history2 2 0 <1 0 4 125 376 474 1789 history2 3 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base >15 >20	current 3 0 0 0 3 137 437 467 1991 current 4 2 0 current	history1 1 0 <1 0 4 126 354 463 1565 history1 4 2 0 history1	history2 2 0 <1 0 4 125 376 474 1789 history2 3 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base >15 >20	current 3 0 0 0 3 137 437 467 1991 current 4 2 0 current 1379	history1 1 0 <1 0 4 126 354 463 1565 history1 4 2 0 history1 699	history2 2 0 <1 0 4 125 376 474 1789 history2 3 0 history2 4832
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base >15 >20 limit/base	current 3 0 0 0 3 137 437 467 1991 current 4 2 0 current 1379 165	history1 1 0 <1 0 4 126 354 463 1565 history1 4 2 0 history1 699 149	history2 2 0 <1 0 4 125 376 474 1789 history2 3 0 history2 4832 928
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	0.0 0 0 11 35 266 276 1847 limit/base >15 >20 limit/base	current 3 0 0 0 3 137 437 467 1991 current 4 2 0 current 1379 165 14	history1 1 0 <1 0 4 126 354 463 1565 history1 4 2 0 history1 699 149 21	history2 2 0 <1 0 4 125 376 474 1789 history2 3 3 0 history2 4832 928 99
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	0.0 0 0 11 35 266 276 1847 limit/base >15 >20 limit/base >140 >10	current 3 0 0 0 3 137 437 467 1991 current 4 2 0 current 1379 165 14 3	history1 1 0 <1 0 4 126 354 463 1565 history1 4 2 0 history1 699 149 21 8	history2 2 0 <1 0 4 125 376 474 1789 history2 3 0 history2 4832 928 99 35

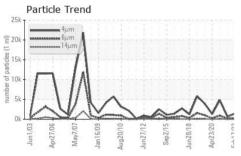


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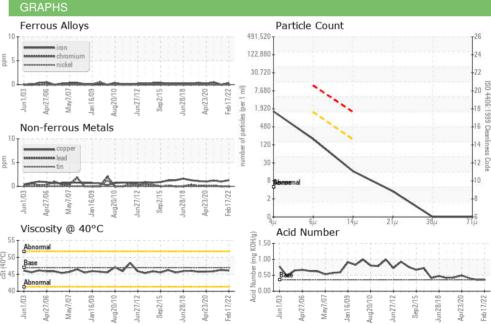






FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.36	0.36	0.359	0.408
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.99	46.1	46.3	45.9
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color	
Bottom	
GRAPHS	







Certificate 12367

Laboratory Sample No.

Test Package : IND 2

Lab Number : 05477067

: WC0528879 Unique Number : 9866281

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 Feb 2022 **Tested** : 28 Feb 2022

Diagnosed

: 01 Mar 2022 - Jonathan Hester

US 01001 Contact: Paul Orzechowski paul.orzechowski@veolia.com

VEOLIA NORTH AMERICA

190 M STREET EXTENSION

T: (413)575-3782 F: (413)732-7071

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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) AGAWAM, MA