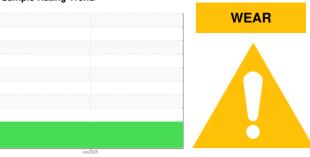


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

ACL 1 PRESS 2

Hydraulic System

SHELL TELLUS 46 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

The copper level is abnormal. All other component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

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

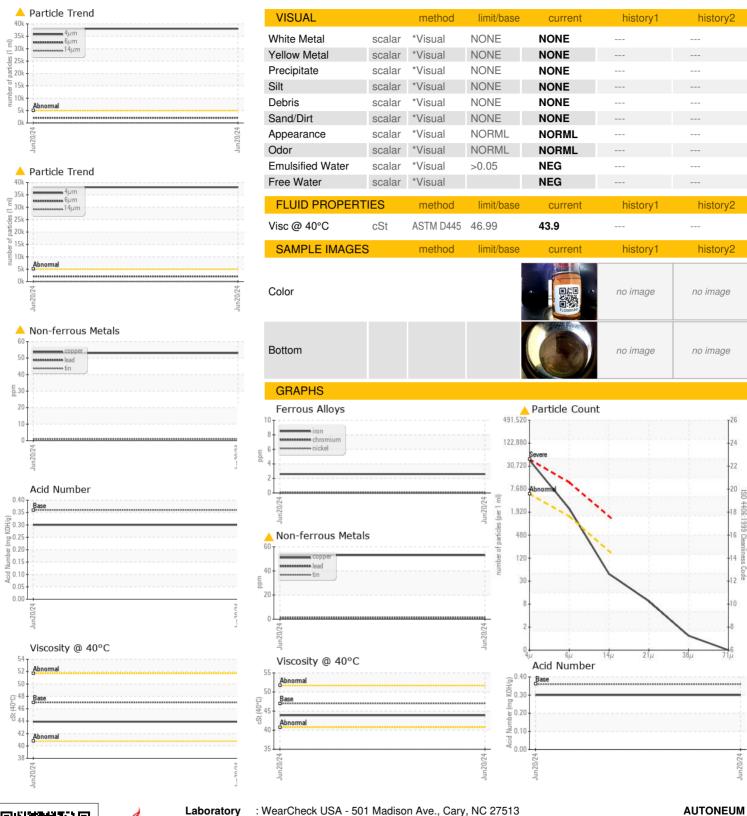
			J	lun 2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
	MATION		IIIIII/Dase			HISTOLYZ
Sample Number		Client Info		TLC0001845		
Sample Date		Client Info		20 Jun 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	3		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead	ppm	ASTM D5185m	>20	1		
Copper	ppm	ASTM D5185m	>20	<u> </u>		
Tin	ppm	ASTM D5185m	>20	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
	mag				history1	history2
Boron	ppm	ASTM D5185m	0.0	2		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0.0	2 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0.0	2 0 <1		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0 0	2 0 <1 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0	2 0 <1 <1 47		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0 0 11 35	2 0 <1 <1 47 73		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0 0 11 35 266	2 0 <1 <1 47 73 328		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0 0 11 35	2 0 <1 <1 47 73		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0 0 11 35 266 276	2 0 <1 <1 47 73 328 370		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base	2 0 <1 <1 47 73 328 370 992 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0 0 11 35 266 276 1847	2 0 <1 <1 47 73 328 370 992	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base	2 0 <1 <1 47 73 328 370 992 current 5	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base >15	2 0 <1 <1 47 73 328 370 992 current 5 2		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base >15 >20	2 0 <1 <1 47 73 328 370 992 current 5 2 2		history2 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	ASTM D5185m method ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base >15 >20 limit/base	2 0 <1 <1 <1 47 73 328 370 992 current 5 2 2 current 38050	history1 history1	history2 history2
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	ASTM D5185m method ASTM D5185m	0.0 0 0 11 35 266 276 1847 limit/base >15 >20 limit/base >5000 >1300	2 0 <1 <1 <1 47 73 328 370 992 current 5 2 2 current A 38050 2080	history1 history1	history2 history2
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	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	0.0 0 0 11 35 266 276 1847 limit/base >15 >20 limit/base >5000 >1300 >160	2 0 <1 <1 <1 47 73 328 370 992 current 5 2 2 current △ 38050 ○ 2080 41		history2 history2
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	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 >5000 >1300 >160 >40	2 0 <1 <1 <1 47 73 328 370 992 current 5 2 2 current 38050 2080 41 8		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0.0 0 0 11 35 266 276 1847 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	2 0 <1 <1 <1 47 73 328 370 992 current 5 2 2 current A 38050 2080 41 8 1		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0.0 0 0 11 35 266 276 1847 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10 >3	2 0 <1 <1 <1 47 73 328 370 992	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0.0 0 0 11 35 266 276 1847 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	2 0 <1 <1 <1 47 73 328 370 992 current 5 2 2 current A 38050 2080 41 8 1		history2 history2

Acid Number (AN)

mg KOH/g ASTM D8045 0.36



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

Lab Number : 06218146 Unique Number : 11096343

: TLC0001845

Received : 24 Jun 2024 **Tested** : 25 Jun 2024

Diagnosed : 25 Jun 2024 - Don Baldridge

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

 st - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

AUTONEUM 1103 POWDERHOUSE RD

AIKEN, SC US 29803

Contact: JEFFREY WASHICK jeffrey.washick@autoneum.com

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