

PROBLEM SUMMARY

Sample Rating Trend

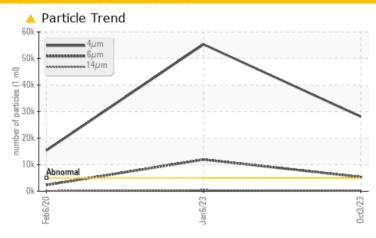


Machine Id **812**

Component **Hydraulic System**

SHELL TELLUS S2 MX 46 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TES	ST RESULT	S			
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >4μm	ASTM D7647	>5000	28083	▲ 55307	<u>▲</u> 15369
Particles >6μm	ASTM D7647	>1300	▲ 5358	<u>▲</u> 11947	<u>2333</u>
Particles >14μm	ASTM D7647	>160	<u>^</u> 222	435	121
Particles >21µm	ASTM D7647	>40	<u> </u>	<u> </u>	45
Oil Cleanliness	ISO 4406 (c)	>19/17/14	22/20/15	<u>\$\Delta\$ 23/21/16</u>	<u>^</u> 21/18/14

Customer Id: AISCRO Sample No.: PCA0108015 Lab Number: 05975708 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

06 Jan 2023 Diag: Don Baldridge



We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



06 Feb 2020 Diag: Jonathan Hester



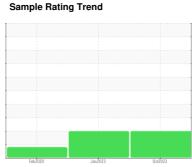


No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT



ISO



Machine Id 812 Component

Hydraulic System

SHELL TELLUS S2 MX 46 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

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

		Feb	2020	Jan 2023 Oct 202	13	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108015	PCA0090069	PCA0015622
Sample Date		Client Info		03 Oct 2023	06 Jan 2023	06 Feb 2020
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	1	2	2
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>20	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	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	<1
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	1
	PPIII	AOTIVI DOTOSIII	U	U	0	I
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Manganese Magnesium	• • • • • • • • • • • • • • • • • • • •			-		
•	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 70	<1 2	0 <1 37 280	<1 21 113 248
Magnesium Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 70 10	<1 2 38	0 <1 37	<1 21 113
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 70 10 300	<1 2 38 267	0 <1 37 280	<1 21 113 248
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 70 10 300 325 665	<1 2 38 267 321 659 current	0 <1 37 280 330 803 history1	<1 21 113 248 319 1237 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 70 10 300 325 665	<1 2 38 267 321 659 current	0 <1 37 280 330 803 history1 <1	<1 21 113 248 319 1237 history2 <1
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	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 70 10 300 325 665 limit/base >15	<1 2 38 267 321 659 current 0 <1	0 <1 37 280 330 803 history1	<1 21 113 248 319 1237 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm 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 70 10 300 325 665	<1 2 38 267 321 659 current	0 <1 37 280 330 803 history1 <1	<1 21 113 248 319 1237 history2 <1
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 70 10 300 325 665 limit/base >15 >20	<1 2 38 267 321 659 current 0 <1 0 current	0 <1 37 280 330 803 history1 <1 0 0 history1	<1 21 113 248 319 1237 history2 <1 0 <1
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 70 10 300 325 665 limit/base >15 limit/base >20 limit/base >5000	<1 2 38 267 321 659 current 0 <1 0 current	0 <1 37 280 330 803 history1 <1 0 0 history1 ▲ 55307	<1 21 113 248 319 1237 history2 <1 0 <1 history2 15369
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 70 10 300 325 665 limit/base >15 >20 limit/base >5000 >1300	<1 2 38 267 321 659 current 0 <1 0 current 28083 5358	0 <1 37 280 330 803 history1 <1 0 0 history1 △ 55307 △ 11947	<1 21 113 248 319 1237 history2 <1 0 <1 history2 △ 15369 △ 2333
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647	0 70 10 300 325 665 limit/base >15 >20 limit/base >5000 >1300 >160	<1 2 38 267 321 659 current 0 <1 0 current ▲ 28083 ▲ 5358 ▲ 222	0 <1 37 280 330 803 history1 <1 0 0 history1 △ 55307 △ 11947 △ 435	<1 21 113 248 319 1237 history2 <1 0 <1 history2 ▲ 15369 ▲ 2333 121
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 70 10 300 325 665 limit/base >15 >20 limit/base >5000 >1300 >40	<1 2 38 267 321 659 current 0 <1 0 current 28083 5358 222 55	0 <1 37 280 330 803 history1 <1 0 0 history1 ▲ 55307 ▲ 11947 ▲ 435 ▲ 101	<1 21 113 248 319 1237 history2 <1 0 <1 history2 △ 15369 △ 2333 121 45
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 70 10 300 325 665 limit/base >15 >20 limit/base >5000 >1300 >40 >10	<1 2 38 267 321 659 current 0 <1 0 current 28083 5358 222 55 4	0 <1 37 280 330 803 history1 <1 0 0 history1 ▲ 55307 ▲ 11947 ▲ 435 ▲ 101 4	<1 21 113 248 319 1237 history2 <1 0 <1 history2 ▲ 15369 ▲ 2333 121 45 6
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 70 10 300 325 665 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10 >3	<1 2 38 267 321 659	0 <1 37 280 330 803 history1 <1 0 0 history1 ▲ 55307 ▲ 11947 ▲ 435 ▲ 101 4 1	<1 21 113 248 319 1237 history2 <1 0 <1 history2 ▲ 15369 ▲ 2333 121 45 6 1
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 70 10 300 325 665 limit/base >15 >20 limit/base >5000 >1300 >40 >10	<1 2 38 267 321 659 current 0 <1 0 current 28083 5358 222 55 4	0 <1 37 280 330 803 history1 <1 0 0 history1 ▲ 55307 ▲ 11947 ▲ 435 ▲ 101 4	<1 21 113 248 319 1237 history2 <1 0 <1 history2 ▲ 15369 ▲ 2333 121 45 6

Acid Number (AN)

mg KOH/g ASTM D8045 0.35

0.29

0.30

0.251



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number **Unique Number**

: PCA0108015 : 05975708

: 10687658 Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 11 Oct 2023 Diagnosed : 13 Oct 2023

Diagnostician : Don Baldridge

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.

AISIN CHEMICAL 1004 INDUSTRIAL WAY CROTHERSVILLE, IN US 47229

Contact: AL TANNER

atanner@aisinchemin.com T:

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

Contact/Location: AL TANNER - AISCRO