

OIL ANALYSIS REPORT

075 G5 [2994724]

B4 Blower

Component **Inboard Bearing**

SHELL CORENA S4 R46 (--- GAL)

Sample Rating Trend



Recommendation

Filter oil if possible using B6=75 filter media or better. Re-sample at next normal interval.

Wear particles are low and acceptable.

Contamination

Particle count is on par with new unfiltered oil. Elevated contamination can lead to machine wear.

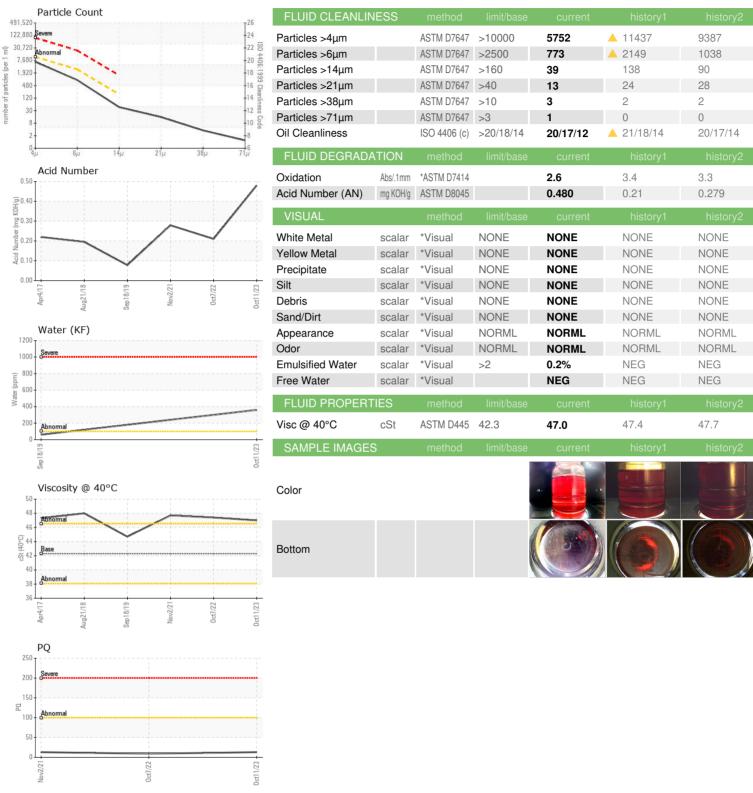
Fluid Condition

Fluid health is acceptable for continued use.

Sample Number Client Info PLS0000672 PLS05685060 PLS05404544 Sample Date Client Info 11 Oct 2023 07 Oct 2022 02 Nov 2021 Machine Age mths Client Info 6 8 1 Oil Age mths Client Info 6 8 1 Oil Changed Client Info Not Changd N/A N/A Sample Status Method Immitidate Not Changd N/A N/A WEAR METALS method Immitidate Current bistory1 bistory2 PQ ASTM D5185m >20 2 2 2 2 Chromium ppm ASTM D5185m >20 0 0 0 Chromium ppm ASTM D5185m >20 0 0 0 PQ ASTM D5185m >20 0 0 0 0 Itanium ppm ASTM D5185m >20 0 0 0 Itanium ppm	SAMPLE INFORM	MOITA	method	limit/base	current	history1	history2
Machine Age mths Client Info 12 0 6 Oil Changed Client Info 6 8 1 Oil Changed Client Info Not Changd N/A N/A Sample Status NORMAL N/A N/A AN/A WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 13 9 13 9 13 Iron ppm ASTM D8185m >20 0 0 0 Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m >20 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 1 Lead ppm ASTM D5185m >2	Sample Number		Client Info		PLS0000672	PLS05685060	PLS05404544
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Oil Changed Sample Status Client Info Not Changd NORMAL N/A N/A WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 13 9 13 Iron ppm ASTM D5185m >20 2 ≥0 2 Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Titanium ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m >20 0 0 1 Lead ppm ASTM D5185m >20 0 0 -1 Lead ppm ASTM D5185m >20 0 0 -1 Copper ppm ASTM D5185m >20 0 0 -1 Tin ppm ASTM D5185m >20 0 0 0 Vanadium	Machine Age	mths	Client Info		12	0	6
Sample Status method limit/base current history1 history2 PQ ASTM D8184 13 9 13 Iron ppm ASTM D8185m >20 2 ≥0 2 Chromium ppm ASTM D8185m >20 0 0 0 Nickel ppm ASTM D8185m >20 0 0 0 Silver ppm ASTM D8185m 0 0 0 0 Aluminum ppm ASTM D8185m >20 0 0 0 Aluminum ppm ASTM D8185m >20 0 0 0 Aluminum ppm ASTM D8185m >20 0 0 0 Lead ppm ASTM D8185m >20 0 0 0 Lead ppm ASTM D8185m >20 0 0 0 Lead ppm ASTM D8185m >20 0 0 0 Capper </th <th>Oil Age</th> <th>mths</th> <th>Client Info</th> <th></th> <th>6</th> <th>8</th> <th>1</th>	Oil Age	mths	Client Info		6	8	1
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PQ	Sample Status				NORMAL	ABNORMAL	ATTENTION
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Magnesium ppm ASTM D5185m <1 0 ▲ 0 Calcium ppm ASTM D5185m 2 0 ▲ 0 Phosphorus ppm ASTM D5185m 168 84 ▲ 80 Zinc ppm ASTM D5185m <1		• •					
Calcium ppm ASTM D5185m 2 0 △ 0 Phosphorus ppm ASTM D5185m 168 84 △ 80 Zinc ppm ASTM D5185m <1 5 △ 10 Sulfur ppm ASTM D5185m 121 233 △ 236 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 0 0 Sodium ppm ASTM D5185m >20 0 0 <1 Potassium ppm ASTM D5185m >20 0 0 <1 Water % ASTM D6304 >2 0.036 NEG NEG ppm Water ppm ASTM D6304 360 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0 Nitration Abs/cm	Barium	ppm	ASTM D5185m		0	0	0
Phosphorus ppm ASTM D5185m 168 84 ▲ 80 Zinc ppm ASTM D5185m <1	Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m		0	0	0
Zinc ppm ASTM D5185m <1	Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0	0 0 <1	0 0 <1
Sulfur ppm ASTM D5185m 121 233 ▲ 236 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 0 0 Sodium ppm ASTM D5185m >1 5 1 Potassium ppm ASTM D5185m >20 0 0 <1 Water % ASTM D6304 >2 0.036 NEG NEG ppm Water ppm ASTM D6304 360 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0 Nitration Abs/cm *ASTM D7624 4.3 5.2 4.7	Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1	0 0 <1 0	0 0 <1 • 0
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 0 0 Sodium ppm ASTM D5185m <1 5 1 Potassium ppm ASTM D5185m >20 0 0 <1 Water % ASTM D6304 >2 0.036 NEG NEG ppm Water ppm ASTM D6304 360 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0 Nitration Abs/cm *ASTM D7624 4.3 5.2 4.7	Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1 2	0 0 <1 0	0 0 <1 • 0
Silicon ppm ASTM D5185m >15 0 0 0 Sodium ppm ASTM D5185m <1	Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1 2 168	0 0 <1 0 0 84	0 0 <1 \$\triangle 0 \$\triangle 0 \$\triangle 80
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Potassium ppm ASTM D5185m >20 0 0 <1	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1 2 168 <1 121	0 0 <1 0 0 84 5 233	0 0 <1 \$\triangle 0 \$\triangle 0 \$\triangle 80 \$\triangle 10 \$\triangle 236
Water % ASTM D6304 >2 0.036 NEG NEG ppm Water ppm ASTM D6304 360 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0 Nitration Abs/cm *ASTM D7624 4.3 5.2 4.7	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 <1 2 168 <1 121	0 0 <1 0 0 84 5 233 history1	0 0 <1 ▲ 0 ▲ 0 ▲ 80 ▲ 10 ▲ 236
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Soot % % *ASTM D7844 0 0.1 0 Nitration Abs/cm *ASTM D7624 4.3 5.2 4.7	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15	0 0 0 <1 2 168 <1 121 current 0 <1	0 0 <1 0 0 84 5 233 history1 0 5	0 0 <1 ▲ 0 ▲ 0 ▲ 80 ▲ 10 ▲ 236 history2 0 1 <1
Nitration Abs/cm *ASTM D7624 4.3 5.2 4.7	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15	0 0 0 <1 2 168 <1 121 current 0 <1 0	0 0 0 <1 0 0 84 5 233 history1 0 5 0 NEG	0 0 <1 ▲ 0 ▲ 0 ▲ 80 ▲ 10 ▲ 236 history2 0 1 <1 NEG
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Sulfation Abs/.1mm *ASTM D7415 9.4 8.9 8.5	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304	>15 >20 >2	0 0 0 <1 2 168 <1 121 current 0 <1 0 0.036 360 current	0 0 0 <1 0 0 84 5 233 history1 0 5 0 NEG	0 0 0 <1 △ 0 △ 80 △ 10 △ 236 history2 0 1 <1 NEG
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OIL ANALYSIS REPORT





Certificate L2367

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PLS0000672 : 05999782

: 10728142

Diagnosed : 22 Nov 2023 Diagnostician : Mike Johnson

Received

Test Package : IND 2 (Additional Tests: FT-IR, KF, PQ, PrtCount) 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)

: 06 Nov 2023

HEXION INC - GONZALES PLANT

4338 HWY 73 GEISMAR, LA US 70734

Contact: Shannon Ourso

shannon.ourso@hexion.com;mike.johnson@amrri.com

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F: