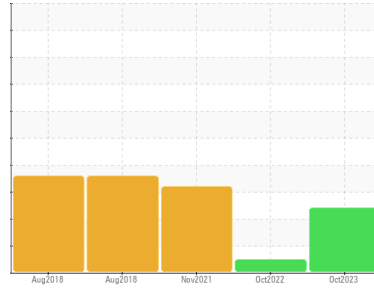


PROBLEM SUMMARY

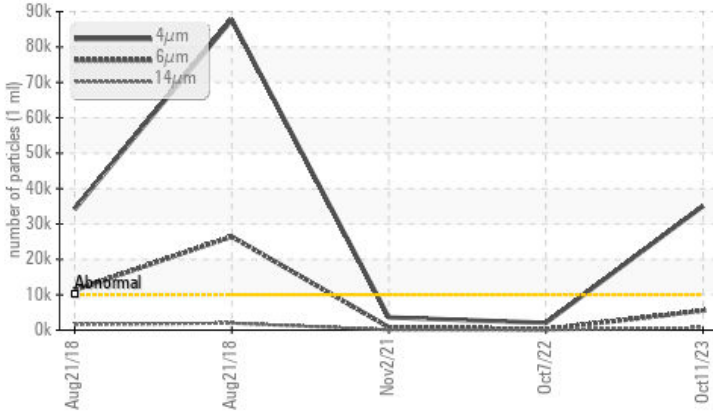
Area
075 G5 [2994724]
Machine Id
B5 Blower
Component
Inboard Bearing
Fluid
SHELL CORENA S4 R46 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

If possible filter the oil using B6=75 or better quality filter elements. No other corrective action at this time.

PROBLEMATIC TEST RESULTS

Sample Status	ASTM D7647	ASTM D7647	ABNORMAL	NORMAL	SEVERE
Particles >4µm	>10000	▲ 35057	2049	3587	
Particles >6µm	>2500	▲ 5502	243	813	
Particles >14µm	>160	▲ 701	37	89	
Particles >21µm	>40	▲ 396	10	24	
Particles >38µm	>10	▲ 40	1	2	
Oil Cleanliness	ISO 4406 (c) >20/18/14	▲ 22/20/17	18/15/12	19/17/14	

Customer Id: HEXGEI
Sample No.: PLS0000675
Lab Number: 05999784
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Mike Johnson +1 (615)771-6030
mike.johnson@amrri.com

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

07 Oct 2022 Diag: Mike Johnson

NORMAL



Oil is acceptable for continued use. Resample at next normal interval. Wear particles are low and acceptable. Contamination is on par with new unfiltered oil. Fluid health is acceptable for continued use.

view report



02 Nov 2021 Diag: Mike Johnson

WATER



Emulsified water present in sample. Investigate possible sources of water contamination. Consider water filtration if oil is regularly subjected to water contamination. Consider changing oil if water filtration not possible. Resample at next normal interval. Wear metals are low and acceptable. Contamination is on par with new unfiltered oil. Water levels are above 1000 ppm. Fluid health is acceptable for continued use.

view report



21 Aug 2018 Diag:

ADDITIVES



Please verify that the oil in use is Castrol HD AW 46. The additive concentrations, and AN values, in use do not appear to match with HD AW 46.

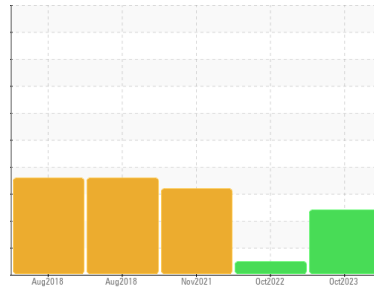
No corrective action at this time. Continue to monitor. The wear rates are low and normal. Particle contamination levels have improved, but are still elevated. Concentrations at this level can impact long term reliability of mechanical systems. Fluid health indicators suggest that the oil is acceptable for continued use.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
075 G5 [2994724]
Machine Id
B5 Blower
Component
Inboard Bearing
Fluid
SHELL CORENA S4 R46 (--- GAL)

DIAGNOSIS

Recommendation

If possible filter the oil using B6=75 or better quality filter elements. No other corrective action at this time.

Wear

The wear rate is low and steady.

Contamination

The solid particulate contaminant load is slightly elevated.

Fluid Condition

Fluid health indicators suggest the oil is suitable for continued use.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PLS0000675	PLS05685062	PLS05404545
Sample Date	Client Info			11 Oct 2023	07 Oct 2022	02 Nov 2021
Machine Age	yrs	Client Info		12	0	6
Oil Age	yrs	Client Info		1	8	1
Oil Changed	Client Info			Not Chngd	N/A	N/A
Sample Status				ABNORMAL	NORMAL	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>2	NEG	NEG	NEG

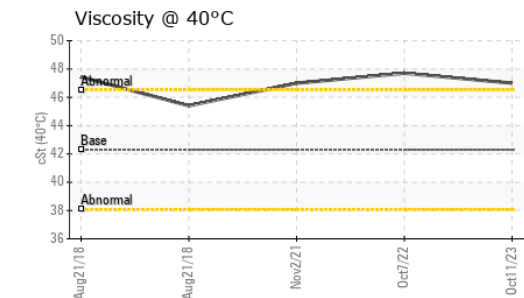
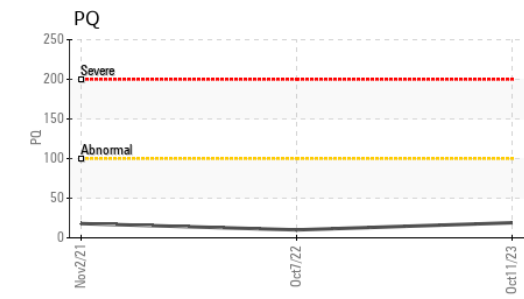
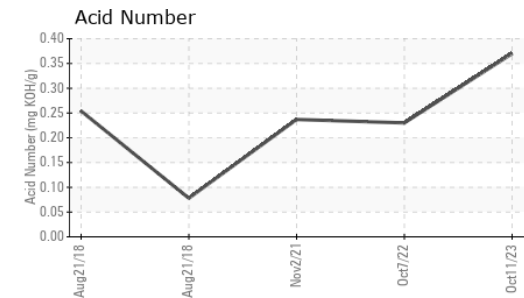
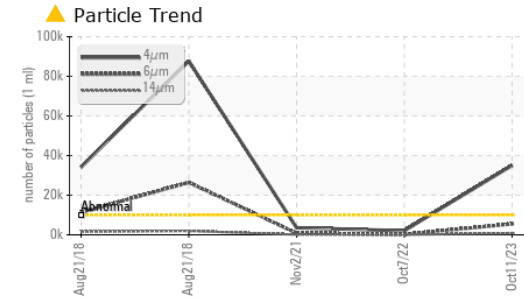
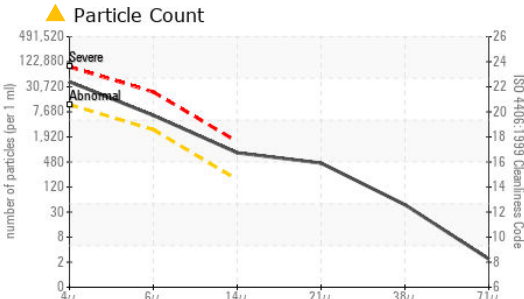
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		19	10	18
Iron	ppm	ASTM D5185m	>20	2	<1	2
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	<1	<1
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	0	<1	<1
Tin	ppm	ASTM D5185m	>20	0	0	0
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	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m		140	77	80
Zinc	ppm	ASTM D5185m		0	18	2
Sulfur	ppm	ASTM D5185m		120	204	236

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	0	<1	0
Sodium	ppm	ASTM D5185m		<1	4	3
Potassium	ppm	ASTM D5185m	>20	0	0	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0.1	0
Nitration	Abs/cm	*ASTM D7624		4.3	5.1	4.9
Sulfation	Abs.1mm	*ASTM D7415		9.3	8.9	8.5

OIL ANALYSIS REPORT



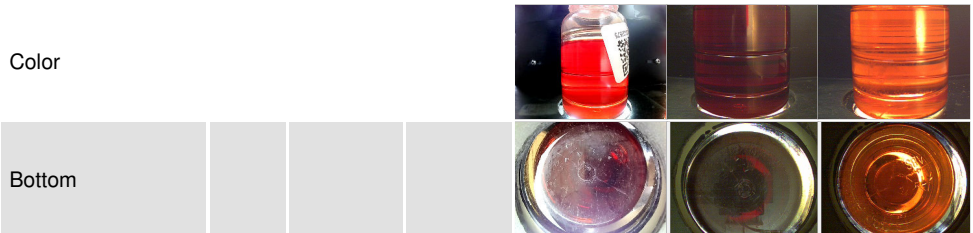
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 35057	2049	3587
Particles >6µm	ASTM D7647	>2500	▲ 5502	243	813
Particles >14µm	ASTM D7647	>160	▲ 701	37	89
Particles >21µm	ASTM D7647	>40	▲ 396	10	24
Particles >38µm	ASTM D7647	>10	▲ 40	1	2
Particles >71µm	ASTM D7647	>3	2	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 22/20/17	18/15/12	19/17/14

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414		2.7	3.6	3.3
Acid Number (AN)	mg KOH/g ASTM D8045		0.37	0.23	0.237

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	NONE
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	>2	NEG	NEG	▲ 0.2%
Free Water	scalar *Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445	42.3	47.0	47.7	47.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PLS0000675 **Received** : 06 Nov 2023
Lab Number : 05999784 **Diagnosed** : 20 Nov 2023
Unique Number : 10728144 **Diagnostician** : Mike Johnson
Test Package : IND 2 (Additional Tests: FT-IR, PQ, PrtCount)

HEXION INC - GONZALES PLANT
 4338 HWY 73
 GEISMAR, LA
 US 70734
 Contact: Shannon Ourso
 shannon.ourso@hexion.com;mike.johnson@amrri.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.

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