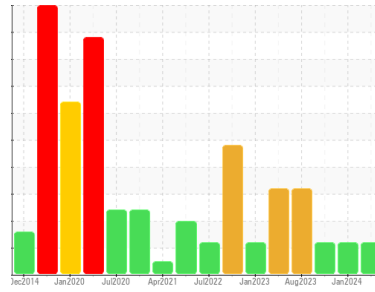


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**BT-FOR-A2 (S/N TANK FT2 AGITATOR)**  
Component  
**Gearbox**  
Fluid  
**SHELL OMALA S2 GX 220 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

Wear particles are low and acceptable.

### Contamination

Particle contamination is elevated. Filtration can help extend machine life.

### Fluid Condition

Fluid health indicators are acceptable for continued use provided that contamination can be brought under control.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PLS0000868</b>	PLS0000810	PLS0000779
Sample Date	Client Info		<b>17 Apr 2024</b>	31 Jan 2024	25 Oct 2023
Machine Age	mths	Client Info	<b>3</b>	3	0
Oil Age	mths	Client Info	<b>0</b>	0	1
Oil Changed	Client Info		<b>N/A</b>	N/A	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>15</b>	17	38
Iron	ppm	ASTM D5185m >200	<b>43</b>	36	65
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >100	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 6.2	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 0.0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>4</b>	4	0
Calcium	ppm	ASTM D5185m 0.0	<b>6</b>	4	0
Phosphorus	ppm	ASTM D5185m 290	<b>324</b>	299	189
Zinc	ppm	ASTM D5185m 3.8	<b>14</b>	28	22
Sulfur	ppm	ASTM D5185m 8167	<b>12477</b>	9785	8736

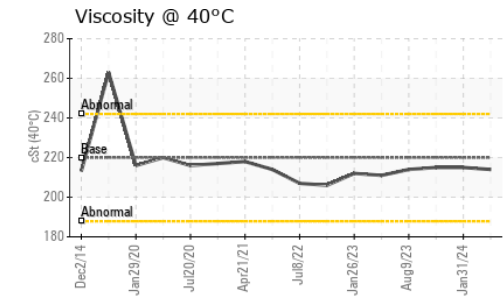
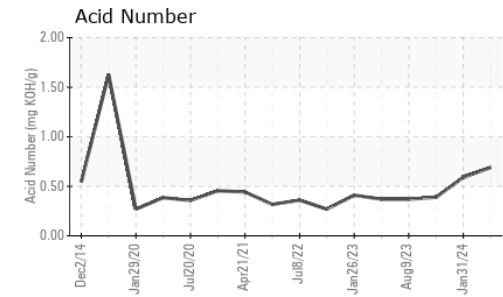
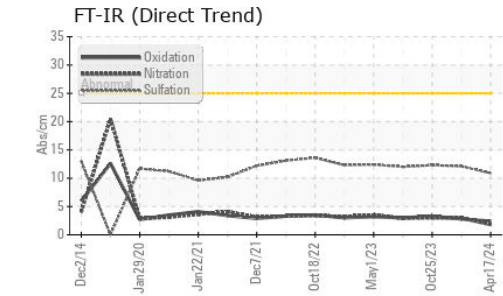
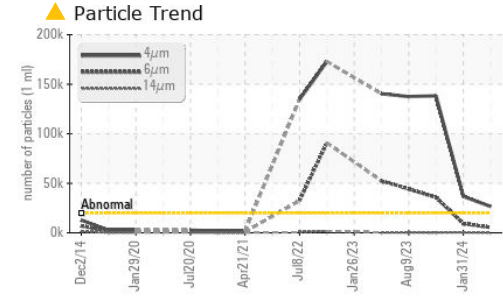
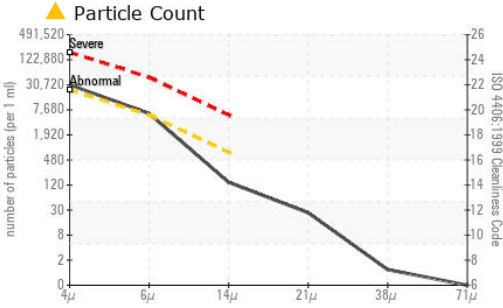
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>2</b>	2	1
Sodium	ppm	ASTM D5185m	<b>2</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	<1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	<b>1.8</b>	3.0	3.0
Sulfation	Abs./1mm	*ASTM D7415	<b>10.9</b>	12.1	12.3

# OIL ANALYSIS REPORT



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PLS0000868  
**Lab Number** : 06154197  
**Unique Number** : 10989620  
**Test Package** : IND 2 ( Additional Tests: FT-IR, PQ, PrtCount )

**Received** : 19 Apr 2024  
**Tested** : 06 May 2024  
**Diagnosed** : 07 May 2024 - Mike Johnson

**HEXION - BAYTOWN PLANT**  
 8450 WEST BAY RD  
 BAYTOWN, TX  
 US 77520  
 Contact: BILL MINER  
 bill.miner@momentive.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)

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4μm	ASTM D7647	>20000	▲ <b>26590</b>	▲ 36698	▲ 138272
Particles >6μm	ASTM D7647	>5000	▲ <b>5441</b>	▲ 9348	▲ 35742
Particles >14μm	ASTM D7647	>640	<b>123</b>	362	186
Particles >21μm	ASTM D7647	>160	<b>23</b>	64	17
Particles >38μm	ASTM D7647	>40	<b>1</b>	3	0
Particles >71μm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ <b>22/20/14</b>	▲ 22/20/16	▲ 24/22/15

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414		<b>2.4</b>	2.8	3.3
Acid Number (AN)	mg KOH/g ASTM D8045		<b>0.69</b>	0.59	0.39

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar *Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar *Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar *Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar *Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar *Visual	NONE	<b>LIGHT</b>	NONE	NONE
Sand/Dirt	scalar *Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar *Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar *Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar *Visual	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar *Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445	220	<b>214</b>	215	215

SAMPLE IMAGES	method	limit/base	current	history1	history2
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