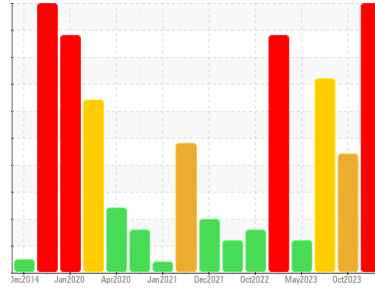


PROBLEM SUMMARY

Sample Rating Trend



WEAR



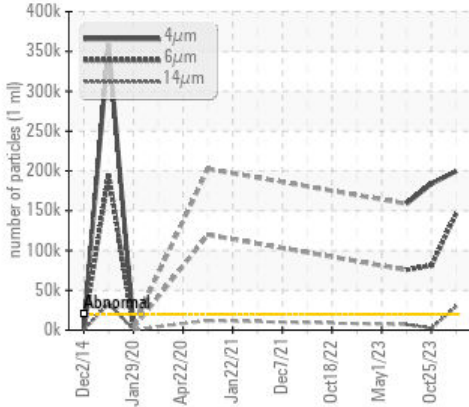
Machine Id
BT-FOR-A7 (S/N TANK FT7 AGITATOR)

Component
Gearbox
Fluid

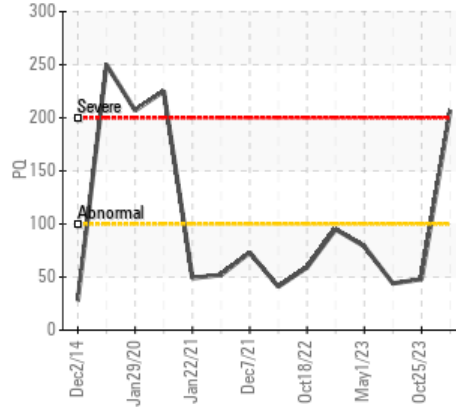
SHELL OMALA S2 GX 220 (--- GAL)

COMPONENT CONDITION SUMMARY

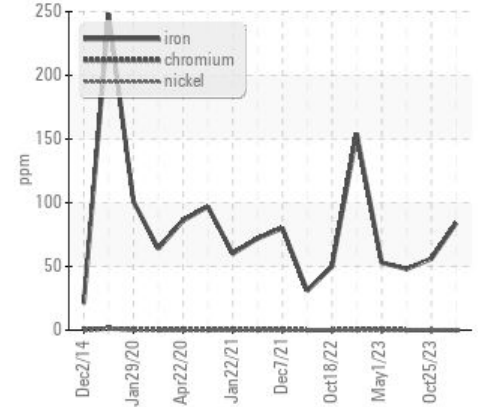
Particle Trend



PQ



Ferrous Alloys



RECOMMENDATION

Filter oil if possible using B6=75 filter media or better. If filtration is not possible consider changing oil. No other action required at this time. Resample at next normal interval.

PROBLEMATIC TEST RESULTS

Sample Status		ASTM D8184	SEVERE	SEVERE	SEVERE
PQ			▲ 207	48	44
Iron	ppm	ASTM D5185m >200	▲ 84	56	48
Particles >4µm		ASTM D7647 >20000	● 199674	183672	▲ 158644
Particles >6µm		ASTM D7647 >5000	● 146589	81053	● 75548
Particles >14µm		ASTM D7647 >640	● 29815	▲ 2529	● 6914
Particles >21µm		ASTM D7647 >160	● 6012	▲ 244	● 1363
Oil Cleanliness		ISO 4406 (c) >21/19/16	● 25/24/22	● 25/24/19	● 24/23/20

Customer Id: MOMBAY
Sample No.: PLS0000718
Lab Number: 06077613
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

25 Oct 2023 Diag: Mike Johnson

ISO



Filter oil if possible using B6=75 filter media or better. If filtration is not possible consider changing oil. No other action required at this time. Resample at next normal interval. Wear particles are steady. Particle contamination is highly elevated. Filtration can help extend machine life. Fluid health is acceptable for continued use provided that contamination can be brought under control.

view report



09 Aug 2023 Diag: Mike Johnson

ISO



Filter oil if possible using B6=75 filter media or better. If filtration is not possible consider changing oil. No other action required at this time. Resample at next normal interval. Wear particles are steady. Particle contamination is highly elevated. Filtration can help extend machine life. Fluid health is acceptable for continued use provided that contamination can be brought under control.

view report



01 May 2023 Diag: Mike Johnson

VISUAL METAL



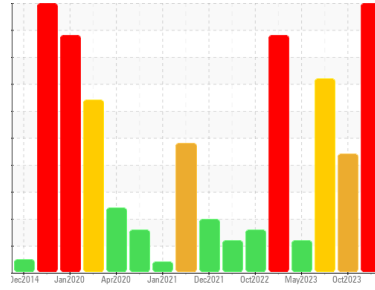
Ferrous wear rate has returned to the typical trend. There is sufficient visual evidence (above 40 micron particles) that a particle count could not be performed. If this unit is being sampled from a drain line RESAMPLE and be sure to flush the drain line before collecting the sample. The unit should be filtered using B6=75 quality filter media to remove particulate and wear debris. Fe wear rate is within the typical historical range for this drive. Fe wear rates are always higher with drives given their operating contact modes, but filtration helps to control the wear rate. Particle count could not be provided due to the debris in the oil. Filtration is strongly recommended. Fluid health properties suggest oil is acceptable for continued use.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
BT-FOR-A7 (S/N TANK FT7 AGITATOR)

Component

Gearbox

Fluid

SHELL OMALA S2 GX 220 (--- GAL)

DIAGNOSIS

Recommendation

Filter oil if possible using B6=75 filter media or better. If filtration is not possible consider changing oil. No other action required at this time. Resample at next normal interval.

Wear

Iron wear particles are elevated from previous samples. This could indicate accelerated wear.

Contamination

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

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PLS0000718	PLS0000784	PLS0000562
Sample Date	Client Info		31 Jan 2024	25 Oct 2023	09 Aug 2023
Machine Age	mths	Client Info	3	0	0
Oil Age	mths	Client Info	0	1	0
Oil Changed	Client Info		N/A	Changed	N/A
Sample Status			SEVERE	SEVERE	SEVERE

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		▲ 207	48	44
Iron	ppm	ASTM D5185m >200	▲ 84	56	48
Chromium	ppm	ASTM D5185m >15	0	0	0
Nickel	ppm	ASTM D5185m >15	0	0	0
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	0	0
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	0	0	<1
Tin	ppm	ASTM D5185m >25	0	0	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 6.2	0	0	0
Barium	ppm	ASTM D5185m 0.0	<1	0	<1
Molybdenum	ppm	ASTM D5185m 0	0	0	<1
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	1	0	4
Calcium	ppm	ASTM D5185m 0.0	5	0	5
Phosphorus	ppm	ASTM D5185m 290	303	218	273
Zinc	ppm	ASTM D5185m 3.8	15	0	14
Sulfur	ppm	ASTM D5185m 8167	9749	8641	10188

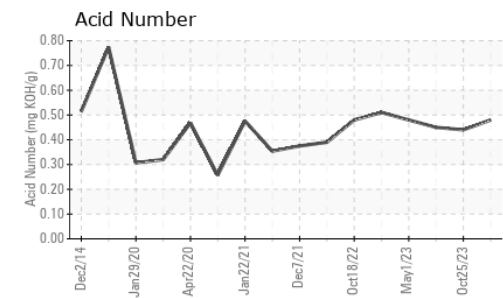
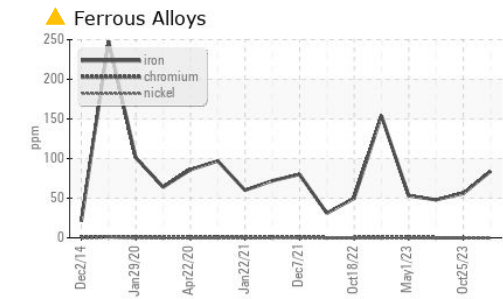
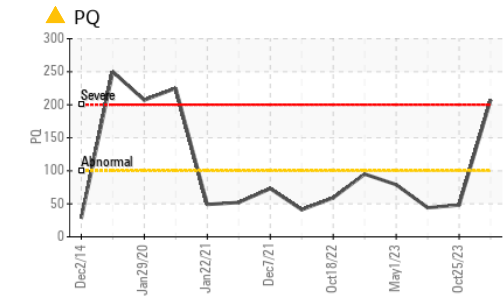
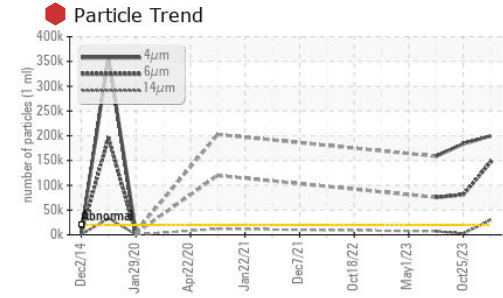
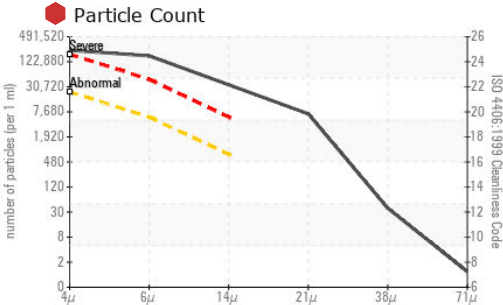
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	3	1	2
Sodium	ppm	ASTM D5185m	0	1	0
Potassium	ppm	ASTM D5185m >20	0	0	<1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624	3.0	3.0	2.9
Sulfation	Abs.1mm	*ASTM D7415	12.1	12.1	11.8

OIL ANALYSIS REPORT



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PLS0000718 **Received** : 01 Feb 2024
Lab Number : 06077613 **Tested** : 02 Feb 2024
Unique Number : 10859704 **Diagnosed** : 09 Feb 2024 - Mike Johnson
Test Package : IND 2 (Additional Tests: FT-IR, PQ, PrtCount)

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)

T:
F:

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	199674	183672	158644
Particles >6µm	ASTM D7647	>5000	146589	81053	75548
Particles >14µm	ASTM D7647	>640	29815	2529	6914
Particles >21µm	ASTM D7647	>160	6012	244	1363
Particles >38µm	ASTM D7647	>40	33	2	23
Particles >71µm	ASTM D7647	>10	1	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	25/24/22	25/24/19	24/23/20

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm *ASTM D7414		2.9	3.0	2.8
Acid Number (AN)	mg KOH/g ASTM D8045		0.48	0.44	0.45

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	>0.2	NEG	NEG	NEG
Free Water	scalar *Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445	220	215	210	210

SAMPLE IMAGES	method	limit/base	current	history1	history2
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