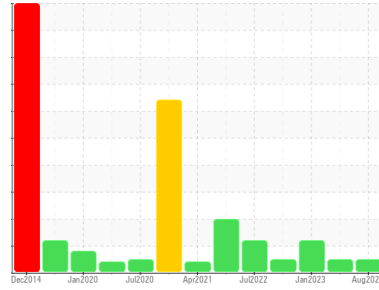


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
BT-FOR-A6 (S/N TANK FT6 AGITATOR)

Component
Gearbox

Fluid
SHELL OMALA S2 GX 220 (--- GAL)

DIAGNOSIS

Recommendation

No corrective actions at this time.

Wear

Wear rate is low and steady.

Contamination

Contaminant levels are typical for new oil from the drum

Fluid Condition

Fluid health properties suggest oil is acceptable for continued use.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PLS0000565	PLS0000706	PLS0000631
Sample Date	Client Info		09 Aug 2023	01 May 2023	26 Jan 2023
Machine Age	mths	Client Info	0	0	3
Oil Age	mths	Client Info	0	3	0
Oil Changed	Client Info		N/A	Changed	N/A
Sample Status			NORMAL	NORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		13	10	12
Iron	ppm	ASTM D5185m >200	25	20	15
Chromium	ppm	ASTM D5185m >15	0	<1	0
Nickel	ppm	ASTM D5185m >15	0	<1	0
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	<1	0
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	2	0	<1
Tin	ppm	ASTM D5185m >25	0	<1	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	2	<1	0
Barium	ppm	ASTM D5185m 0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m 0	<1	<1	<1
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m 0	2	0	2
Calcium	ppm	ASTM D5185m 0.0	5	<1	4
Phosphorus	ppm	ASTM D5185m 290	266	321	298
Zinc	ppm	ASTM D5185m 3.8	26	0	16
Sulfur	ppm	ASTM D5185m 8167	10411	13610	9114

CONTAMINANTS

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

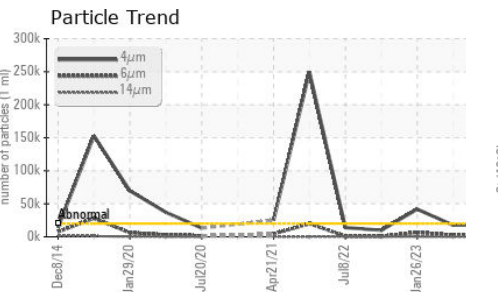
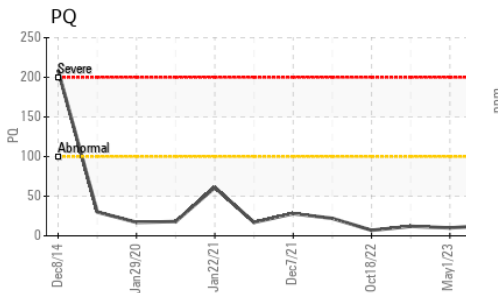
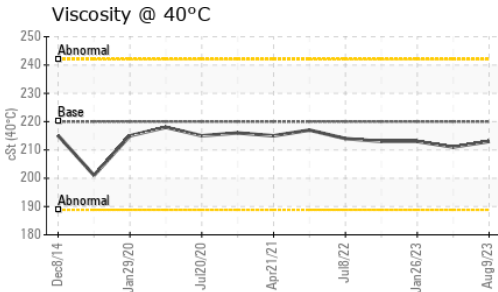
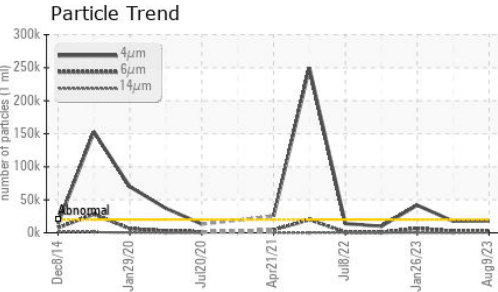
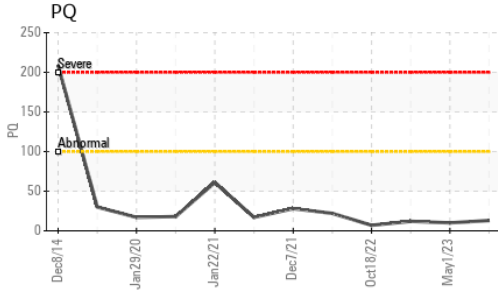
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624	2.9	3.1	3.2
Sulfation	Abs/.1mm	*ASTM D7415	12.0	12.5	12.3

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	17959	17638	▲ 41770
Particles >6µm	ASTM D7647	>5000	3174	2392	▲ 6716
Particles >14µm	ASTM D7647	>640	283	68	315
Particles >21µm	ASTM D7647	>160	88	7	71
Particles >38µm	ASTM D7647	>40	4	0	6
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	21/19/15	21/18/13	▲ 23/20/15

OIL ANALYSIS REPORT


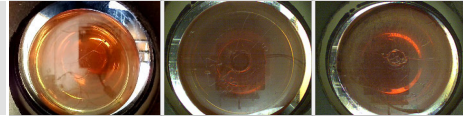


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	*ASTM D7414	3.1	3.1	3.0
Acid Number (AN)	mg KOH/g	ASTM D8045	0.55	0.52	0.59

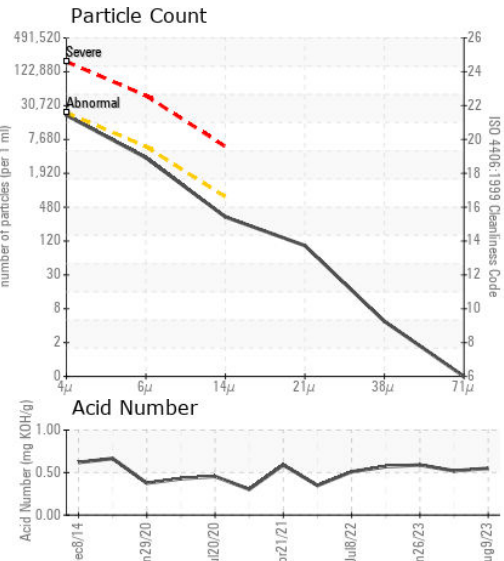
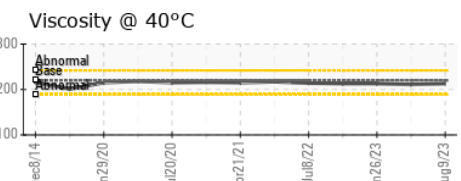
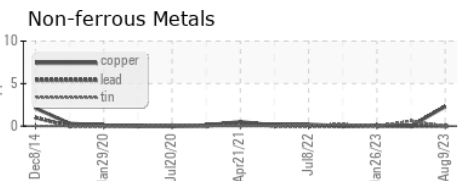
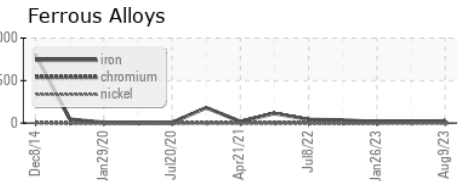
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213	211	213

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PLS0000565 **Received** : 16 Aug 2023
Lab Number : **05925997** **Diagnosed** : 23 Aug 2023
Unique Number : 10605944 **Diagnostician** : Mike Johnson
Test Package : PLANT (Additional Tests: FT-IR, PrtCount)

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

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)