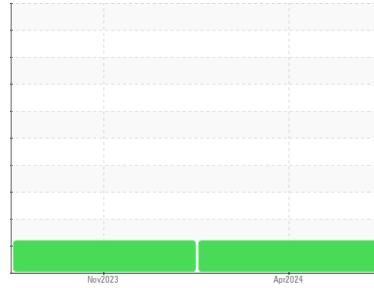




# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Area  
**South Molding**  
 Machine Id  
**Press 12**  
 Component  
**12 Gearbox**  
 Fluid  
**GEAR OIL ISO 320 (--- GAL)**

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

#### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>SBP0007443</b>	SBP0005196	---
Sample Date	Client Info		<b>18 Apr 2024</b>	10 Nov 2023	---
Machine Age	days	Client Info	<b>0</b>	0	---
Oil Age	days	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	Not Changd	---
Sample Status			<b>ABNORMAL</b>	ABNORMAL	---

### WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>29</b>	25	---
Iron	ppm	ASTM D5185m >200	<b>25</b>	20	---
Chromium	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	0	---
Lead	ppm	ASTM D5185m >100	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >200	<b>1</b>	<1	---
Tin	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>35</b>	35	---
Barium	ppm	ASTM D5185m 15	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 15	<b>&lt;1</b>	0	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m 50	<b>&lt;1</b>	<1	---
Calcium	ppm	ASTM D5185m 50	<b>0</b>	<1	---
Phosphorus	ppm	ASTM D5185m 350	<b>326</b>	346	---
Zinc	ppm	ASTM D5185m 100	<b>0</b>	0	---
Sulfur	ppm	ASTM D5185m 12500	<b>9794</b>	8999	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>6</b>	4	---
Sodium	ppm	ASTM D5185m	<b>0</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	---
Water	%	ASTM D6304 >0.2	<b>0.001</b>	0.011	---
ppm Water	ppm	ASTM D6304 >2000	<b>2</b>	112.1	---

### FLUID CLEANLINESS

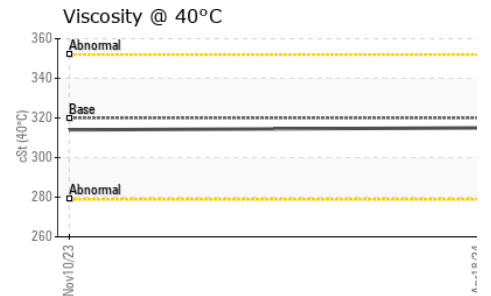
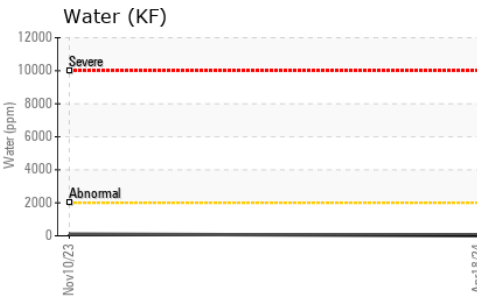
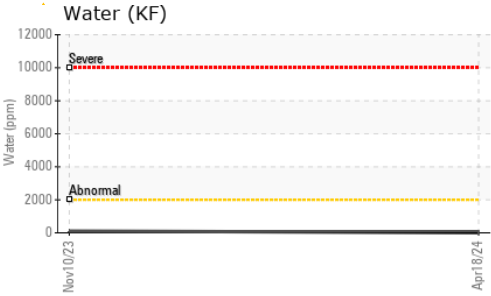
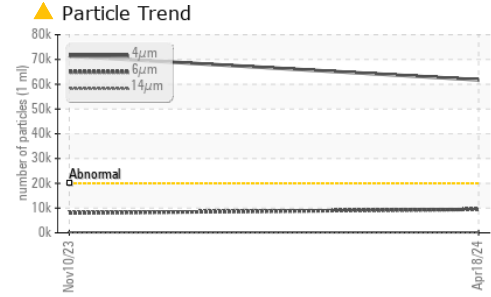
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 61775</b>	▲ 71330	---
Particles >6µm	ASTM D7647	>5000	<b>● 9464</b>	● 8010	---
Particles >14µm	ASTM D7647	>640	<b>216</b>	202	---
Particles >21µm	ASTM D7647	>160	<b>44</b>	42	---
Particles >38µm	ASTM D7647	>40	<b>3</b>	1	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/20/15</b>	▲ 23/20/15	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	<b>0.88</b>	0.75	---



# OIL ANALYSIS REPORT



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

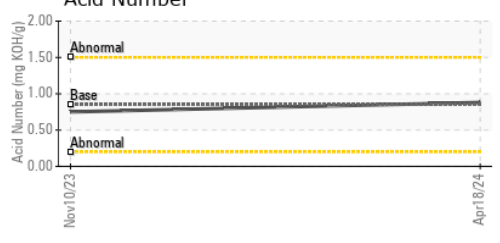
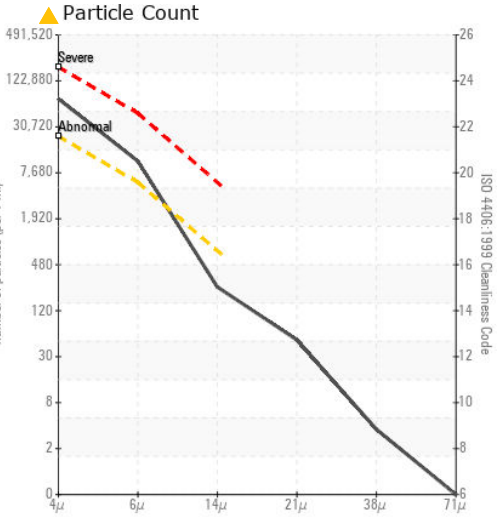
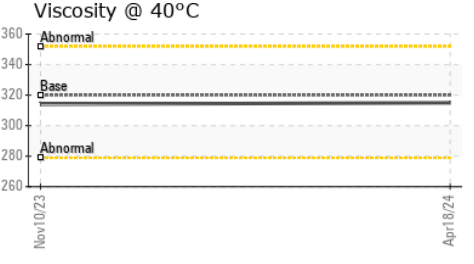
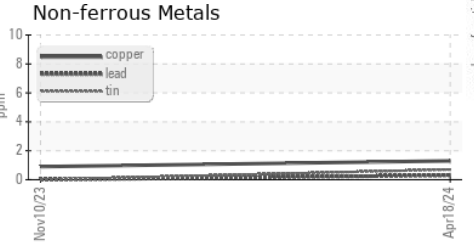
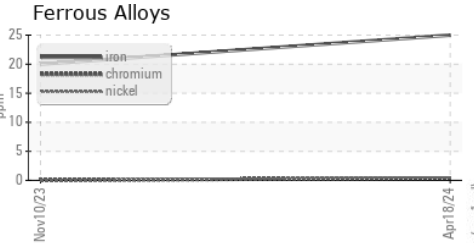
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	315	314

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

**Color**

**Bottom**

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0007443  
**Lab Number** : 06156972  
**Unique Number** : 10992395  
**Test Package** : PLANT

**BECTON DICKINSON BROKEN BOW**  
 150 S 1ST AVE  
 BROKEN BOW, NE  
 US 68822  
 Contact: JUSTIN HURLBURT  
 Justin\_W\_Hurlburt@bd.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)