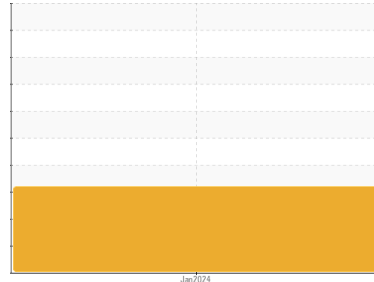




OIL ANALYSIS REPORT

Sample Rating Trend



Area
Berry Plastics - 888068
 Machine Id
AG240
 Component
Gear Unit
 Fluid
GEAR OIL ISO 320 (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Wear

Iron ppm levels are noted.

Contamination

Particles >4µm and oil cleanliness are abnormally high. Silicon ppm levels are notably high. Particles >6µm are notably high.

The sample submitted is 16 times dirtier than the ISO dirt count recommendation of 19/16/14.

Fluid Condition

Visc @ 40°C is abnormally low.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Machine ID	Client Info		Extruder B	---	---
Department	Client Info		Sales	---	---
Sample From	Client Info		Machine	---	---
Production Stage	Client Info		Initial	---	---
Sent to WC	Client Info		01/17/2024	---	---
Sample Number	Client Info		E30001164	---	---
Sample Date	Client Info		12 Jan 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >150	47	---	---
Chromium	ppm	ASTM D5185(m) >10	<1	---	---
Nickel	ppm	ASTM D5185(m) >10	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >25	<1	---	---
Lead	ppm	ASTM D5185(m) >100	<1	---	---
Copper	ppm	ASTM D5185(m) >50	<1	---	---
Tin	ppm	ASTM D5185(m) >10	0	---	---
Antimony	ppm	ASTM D5185(m) >5	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

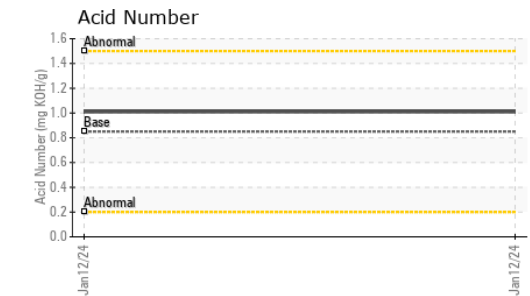
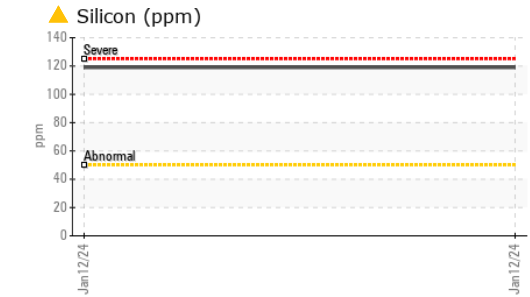
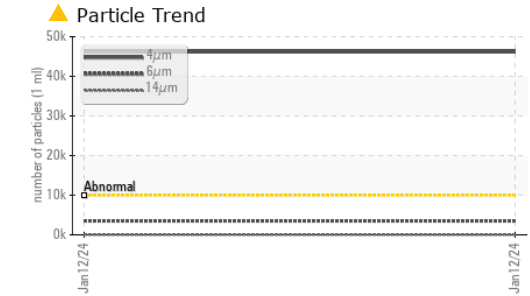
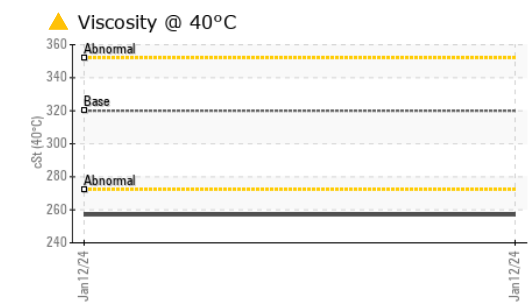
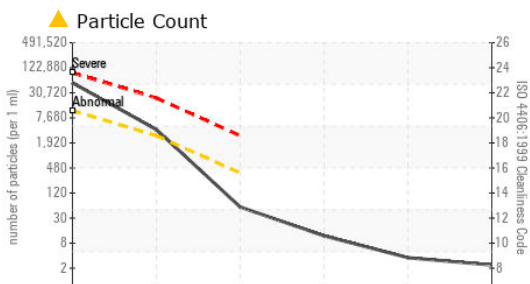
ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 50	16	---	---
Barium	ppm	ASTM D5185(m) 15	0	---	---
Molybdenum	ppm	ASTM D5185(m) 15	0	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m) 50	0	---	---
Calcium	ppm	ASTM D5185(m) 50	20	---	---
Phosphorus	ppm	ASTM D5185(m) 350	215	---	---
Zinc	ppm	ASTM D5185(m) 100	1	---	---
Sulfur	ppm	ASTM D5185(m) 12500	5583	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	▲ 119	---	---
Sodium	ppm	ASTM D5185(m)	1	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---
Water	%	ASTM D6304* >0.1	0.009	---	---
ppm Water	ppm	ASTM D6304* >1000	97	---	---

OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001164 **Received** : 19 Jan 2024
Lab Number : **02610039** **Diagnosed** : 23 Jan 2024
Unique Number : 5711125 **Diagnostician** : Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

Environmental 360 Solutions Ltd.
 640 Victoria Street
 Cobourg, ON
 CA K9A 5H5
 Contact: Tatiana Sorkina
 tsorkina@e360s.ca
 T: (800)263-3939
 F: (905)373-4950

To discuss this sample report, contact Customer Service at 1-905-372-2251.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 46179	---	---
Particles >6µm	ASTM D7647	>2500	▲ 3512	---	---
Particles >14µm	ASTM D7647	>320	49	---	---
Particles >21µm	ASTM D7647	>80	10	---	---
Particles >38µm	ASTM D7647	>20	3	---	---
Particles >71µm	ASTM D7647	>4	2	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 23/19/13	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.85	1.01	---	---

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*	>0.1	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	320	▲ 257	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	25.5	30.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	103	160	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2	
Color					no image	no image
Bottom					no image	no image