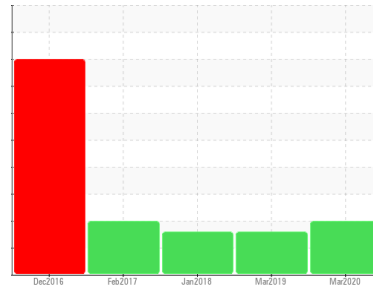




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
LINE 2 BLOW MOLDING MACHINE (S/N 2014-3056)

Component
Hydraulic System

Fluid
LUBRIPLATE SYN LUBE SYNTHETIC FLUID ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

The iron level is abnormal. All other component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0439858	WC0326382	WC12331587
Sample Date	Client Info		25 Mar 2020	25 Mar 2019	16 Jan 2018
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	Filtered	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	▲ 48	▲ 43	▲ 40
Chromium	ppm	ASTM D5185m >20	2	1	1
Nickel	ppm	ASTM D5185m >20	0	<1	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	<1	0	0
Aluminum	ppm	ASTM D5185m >20	<1	<1	0
Lead	ppm	ASTM D5185m >20	<1	<1	0
Copper	ppm	ASTM D5185m >20	10	8	10
Tin	ppm	ASTM D5185m >20	<1	<1	<1
Antimony	ppm	ASTM D5185m	0	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	98	<1	1
Barium	ppm	ASTM D5185m	<1	0	0
Molybdenum	ppm	ASTM D5185m	2	<1	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1	2	0
Calcium	ppm	ASTM D5185m	49	50	48
Phosphorus	ppm	ASTM D5185m	269	255	269
Zinc	ppm	ASTM D5185m	323	294	328
Sulfur	ppm	ASTM D5185m	2597	3206	3232

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	3	2	2
Sodium	ppm	ASTM D5185m	9	5	5
Potassium	ppm	ASTM D5185m >20	2	2	1

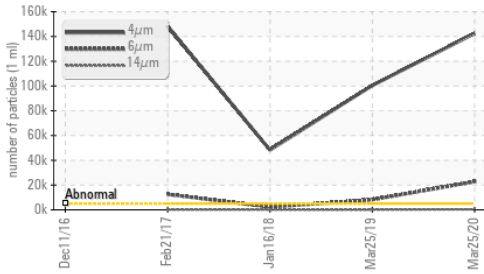
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 142419	▲ 100430	▲ 48265
Particles >6µm	ASTM D7647	>1300	▲ 22808	▲ 8187	▲ 2237
Particles >14µm	ASTM D7647	>160	▲ 351	71	133
Particles >21µm	ASTM D7647	>40	77	13	38
Particles >38µm	ASTM D7647	>10	4	0	4
Particles >71µm	ASTM D7647	>3	0	0	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 24/22/16	▲ 24/20/13	▲ 23/18/14

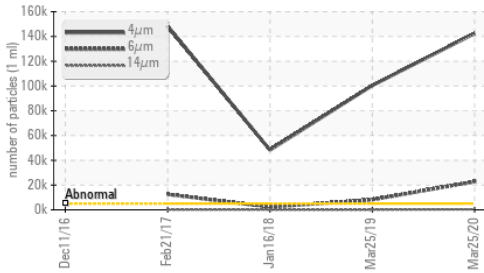


OIL ANALYSIS REPORT

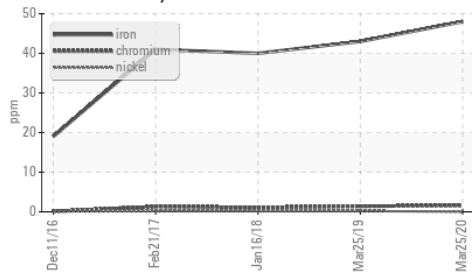
▲ Particle Trend



▲ Particle Trend



▲ Ferrous Alloys

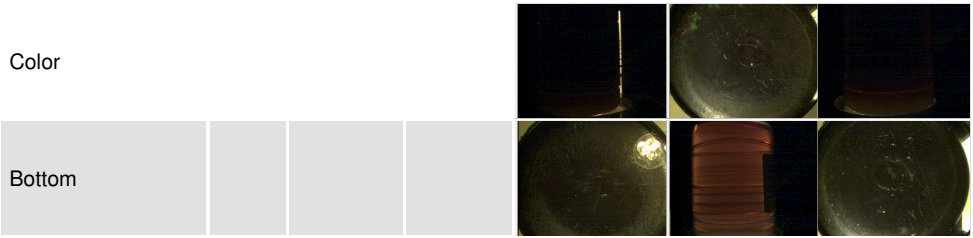


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.287	0.269	0.254

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	LIGHT	LIGHT	VLITE
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	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

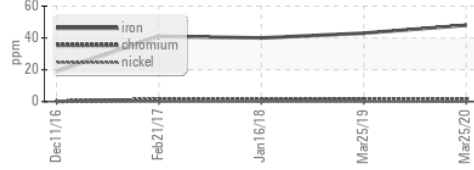
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	44	45.0	45.47	45.85

SAMPLE IMAGES

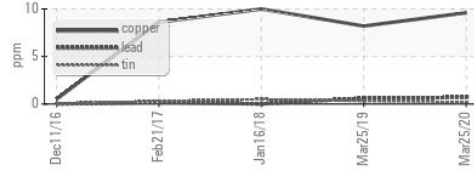


GRAPHS

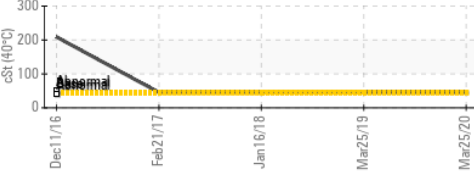
▲ Ferrous Alloys



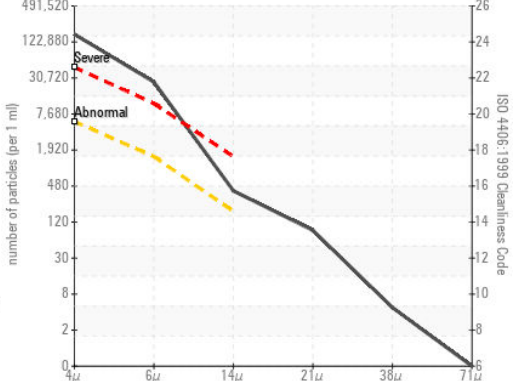
Non-ferrous Metals



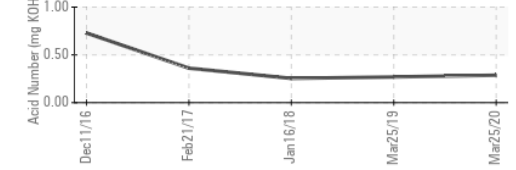
Viscosity @ 40°C



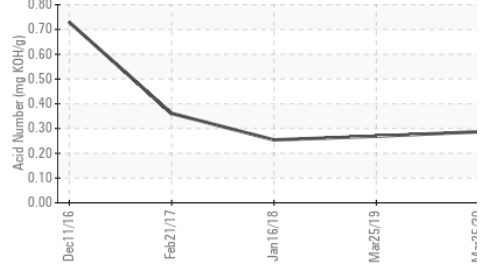
▲ Particle Count



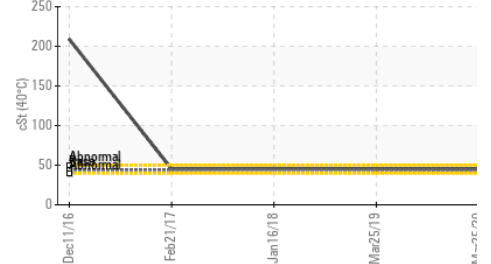
Acid Number



Acid Number



Viscosity @ 40°C



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0439858 **Received** : 24 Apr 2020
Lab Number : **04962527** **Tested** : 27 Apr 2020
Unique Number : 9007668 **Diagnosed** : 27 Apr 2020 - Don Baldrige
Test Package : IND 2 (Additional Tests: PQ)

Altium Packaging - CARSON - Plant 8535A
 1500 E 223RD ST
 CARSON, CA
 US 90745
 Contact: CRISTINA VEGA
 Cristina.Vega@altiumpkg.com
 T: (310)952-8736
 F: (310)984-3417

Certificate L2367
 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)