



PROBLEM SUMMARY

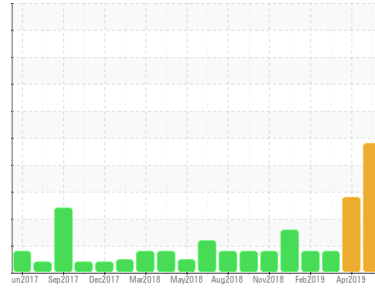
Sample Rating Trend

ISO



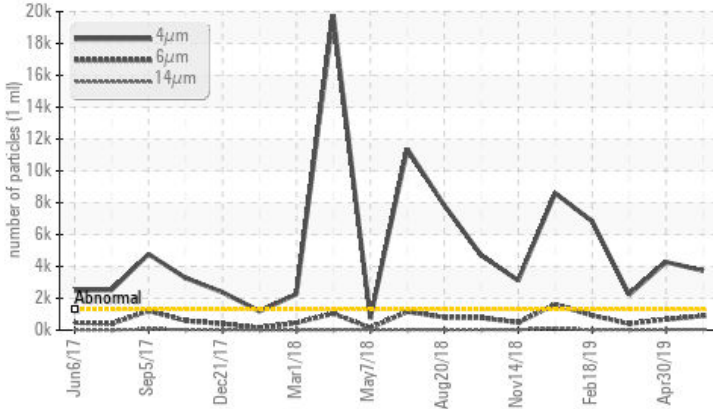
Area
RAW MATS
Machine Id
2 BALL MILL

Component
Gearbox
Fluid
MOBIL SHC 630 (29 GAL)



COMPONENT CONDITION SUMMARY

Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	ATTENTION
Particles >4µm	ASTM D7647	>1300	🔴 3733	🔴 4276	🟢 2227
Particles >6µm	ASTM D7647	>320	🔴 899	🔴 674	🟢 394
Particles >14µm	ASTM D7647	>40	🔴 45	36	23
Oil Cleanliness	ISO 4406 (c)	>17/15/12	🔴 19/17/13	🔴 19/17/12	🟢 18/16/12

Customer Id: JAMPUL
Sample No.: WC0341524
Lab Number: 04730719
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	MISSED	Jul 09 2019	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

30 Apr 2019 Diag: Jonathan Hester

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



29 Mar 2019 Diag: Wes Davis

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



18 Feb 2019 Diag: Wes Davis

ISO



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. Particles >4µm are abnormally high. Particles >6µm are abnormally high. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

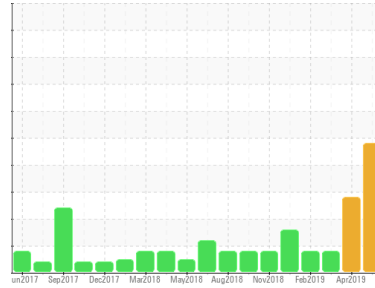
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
RAW MATS
 Machine Id
2 BALL MILL
 Component
Gearbox
 Fluid
MOBIL SHC 630 (29 GAL)

DIAGNOSIS

Recommendation

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

Wear

All 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		WC0341524	WC0312552	WC04685137
Sample Date	Client Info		03 Jun 2019	30 Apr 2019	29 Mar 2019
Machine Age	days	Client Info	0	0	0
Oil Age	days	Client Info	0	0	0
Oil Changed	Client Info		N/A	Not Changd	Not Changd
Sample Status			SEVERE	SEVERE	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		18	15	14
Iron	ppm	ASTM D5185m >200	2	1	2
Chromium	ppm	ASTM D5185m >15	0	0	0
Nickel	ppm	ASTM D5185m >15	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	<1	0	<1
Aluminum	ppm	ASTM D5185m >25	0	<1	<1
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	<1	<1	0
Tin	ppm	ASTM D5185m >25	0	0	0
Antimony	ppm	ASTM D5185m	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	5	<1	0
Barium	ppm	ASTM D5185m	<1	0	0
Molybdenum	ppm	ASTM D5185m	13	7	7
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	0	0	0
Calcium	ppm	ASTM D5185m	10	0	0
Phosphorus	ppm	ASTM D5185m	445	390	453
Zinc	ppm	ASTM D5185m	4	7	8
Sulfur	ppm	ASTM D5185m	156	96	87

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	30	34	28
Sodium	ppm	ASTM D5185m	0	<1	1
Potassium	ppm	ASTM D5185m >20	<1	<1	<1
Water	%	ASTM D6304 >0.2	0.005	0.004	0.001
ppm Water	ppm	ASTM D6304 >2000	50	40	10

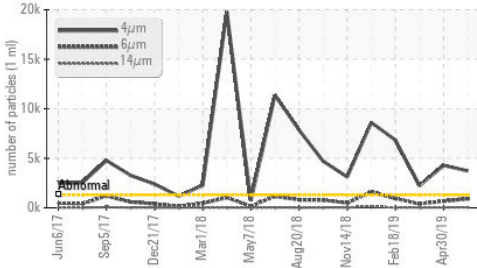
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>1300	3733	4276	2227
Particles >6µm	ASTM D7647	>320	899	674	394
Particles >14µm	ASTM D7647	>40	45	36	23
Particles >21µm	ASTM D7647	>10	8	12	7
Particles >38µm	ASTM D7647	>3	0	0	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>17/15/12	19/17/13	19/17/12	18/16/12

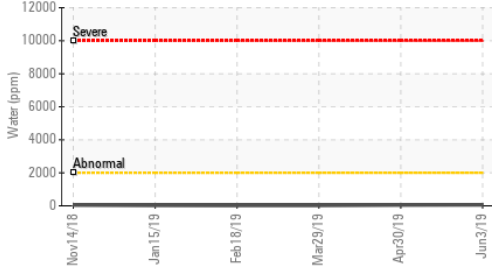


OIL ANALYSIS REPORT

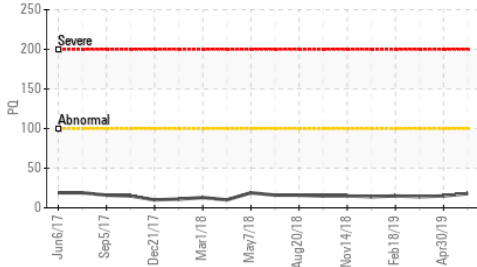
Particle Trend



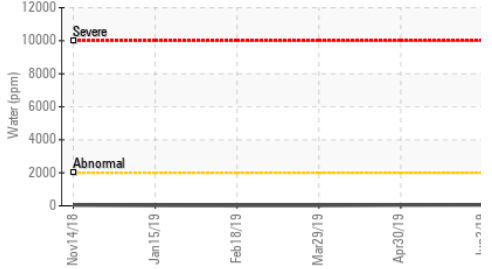
Water (KF)



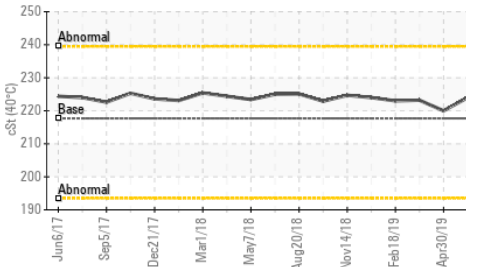
PQ



Water (KF)



Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.335	0.067	0.436

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	217.7	224	220	223.2

SAMPLE IMAGES

Color

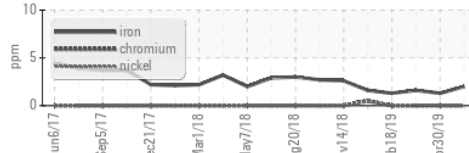


Bottom

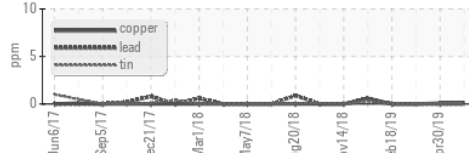


GRAPHS

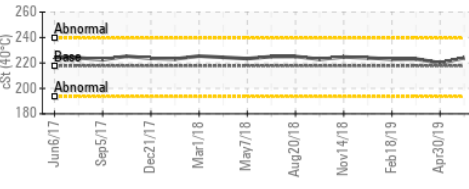
Ferrous Alloys



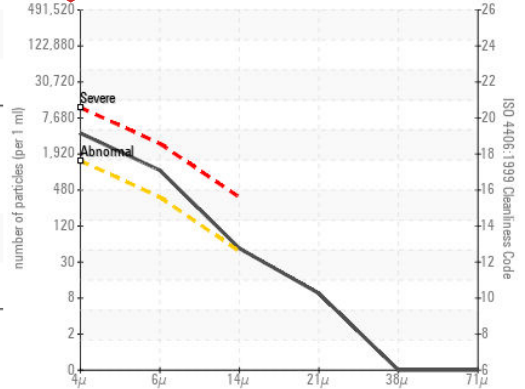
Non-ferrous Metals



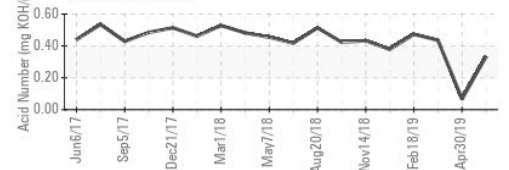
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0341524

Lab Number : **04730719**

Unique Number : 8627498

Test Package : IND 2 (Additional Tests: KF, PQ, PrtCount)

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)

Received : 10 Jun 2019

Tested : 11 Jun 2019

Diagnosed : 11 Jun 2019 - Don Baldrige

JAMES HARDIE BUILDING PRODUCTS - PULASKI

1000 JAMES HARDIE WAY

PULASKI, VA

US 24031

Contact: MICHAEL MITCHELL

mike.mitchell@jameshardie.com

T:

F: