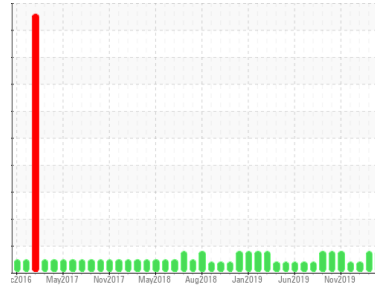




Machine Id
Press #3 6561231
 Component
Hydraulic System
 Fluid
SHELL TELLUS S2 M 46 (251 GAL)



DIAGNOSIS

Recommendation
 We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear
 All component wear rates are normal.

Contamination
 MPC (Membrane Patch Colorimetry) test indicates a high concentration of varnish present. The amount and size of particulates present in the system are acceptable.

Fluid Condition
 The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PTK0000645	PTK0000640	PTK0000210
Sample Date	Client Info			17 Mar 2020	26 Feb 2020	28 Jan 2020
Machine Age	hrs	Client Info		34893	34440	33800
Oil Age	hrs	Client Info		2176	34885	34245
Oil Changed	Client Info			Not Chngd	Not Chngd	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG

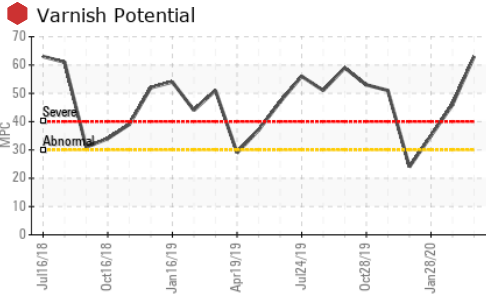
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	<1	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	<1	0	<1
Copper	ppm	ASTM D5185m	>75	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	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		<1	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	0	2
Calcium	ppm	ASTM D5185m		14	28	29
Phosphorus	ppm	ASTM D5185m		246	283	271
Zinc	ppm	ASTM D5185m		262	339	318
Sulfur	ppm	ASTM D5185m		525	640	647

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<1	<1	<1
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	4	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		216	305	298
Particles >6µm		ASTM D7647	>2500	46	86	79
Particles >14µm		ASTM D7647	>320	4	10	8
Particles >21µm		ASTM D7647	>80	3	3	4
Particles >38µm		ASTM D7647	>20	1	0	1
Particles >71µm		ASTM D7647	>4	0	0	3
Oil Cleanliness		ISO 4406 (c)	>18/15	15/13/9	15/14/10	15/13/10

OIL ANALYSIS REPORT

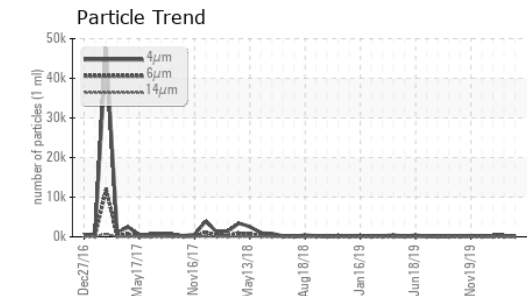
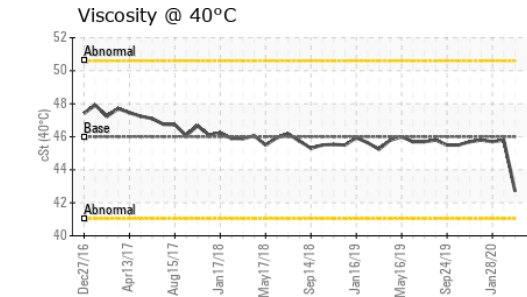
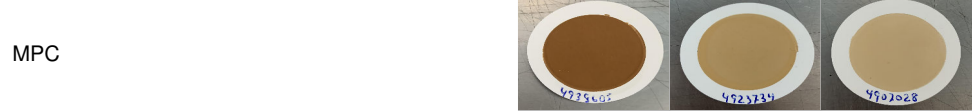
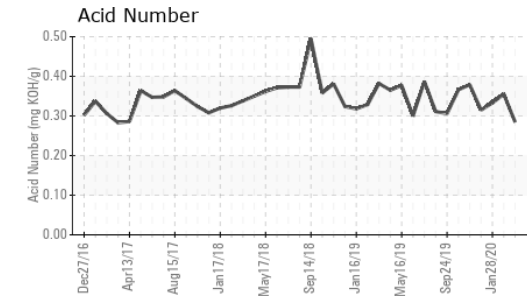
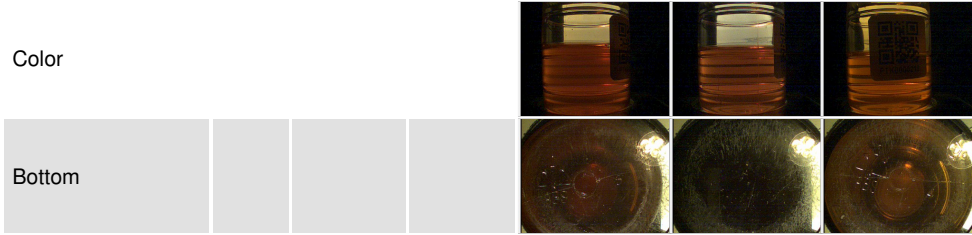
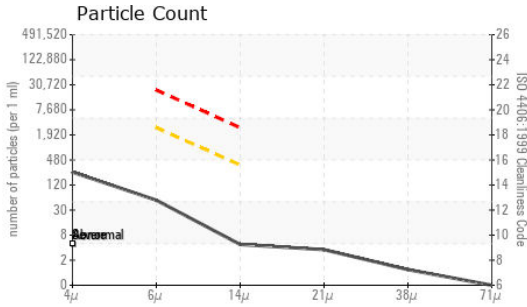


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.285	0.355	0.333
MPC Varnish Potential	Scale	ASTM D7843	>15	63	46	35

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.0	42.7	45.8	45.7

SAMPLE IMAGES		method	limit/base	current	history1	history2
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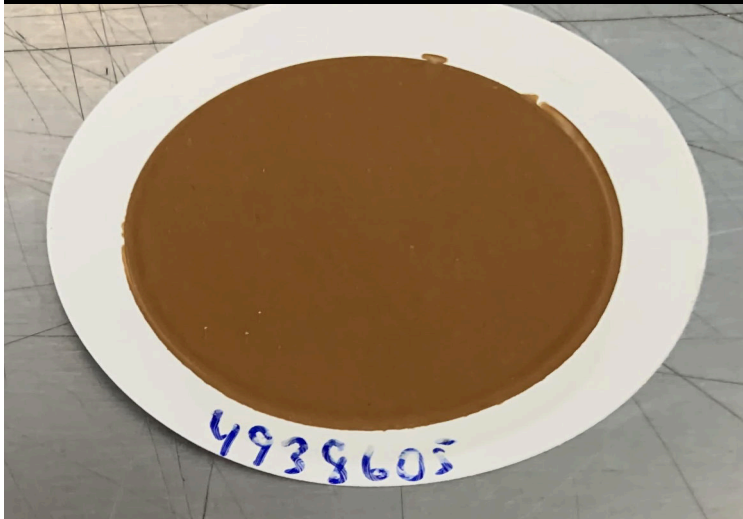
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PTK0000645 **Received** : 20 Mar 2020
Lab Number : **04938605** **Diagnosed** : 24 Mar 2020
Unique Number : 8968706 **Diagnostician** : Doug Bogart
Test Package : MOB 2 (Additional Tests: MPC)

NIAGARA BOTTLING
 11031 88TH AVE
 PLEASANT PRAIRIE, WI
 US 53158
 Contact: AJ

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)

T: (909)239-7599
 F:

MPC (Varnish Test)



Sample Color & Clarity



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