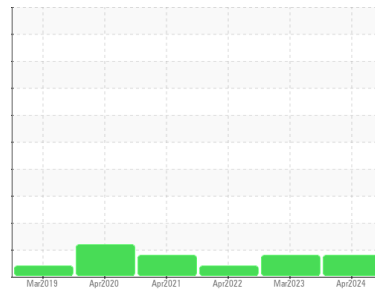




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

## MACHINE 6 (S/N NO1A0100064)

Component

### Hydraulic System

Fluid

### SAFETY-KLEEN PERFORMANCE PLUS HYDRAULIC AW 46 (100 LTR)

#### DIAGNOSIS

##### Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

##### Wear

All component wear rates are normal.

##### Contamination

There is a light amount of silt (particulates < 14 microns in size) 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		<b>WC0910102</b>	WC0800137	WC0668617
Sample Date	Client Info		<b>01 Apr 2024</b>	27 Mar 2023	07 Apr 2022
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Filtered
Sample Status			<b>ATTENTION</b>	ATTENTION	ABNORMAL

#### CONTAMINATION

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

#### WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<b>2</b>	2	<1
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>3</b>	3	<1
Tin	ppm	ASTM D5185m	>20	<b>1</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

#### ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>0</b>	0	1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>11</b>	17	8
Calcium	ppm	ASTM D5185m	48	<b>68</b>	64	61
Phosphorus	ppm	ASTM D5185m	340	<b>350</b>	350	309
Zinc	ppm	ASTM D5185m	430	<b>411</b>	450	424
Sulfur	ppm	ASTM D5185m		<b>878</b>	1070	710

#### CONTAMINANTS

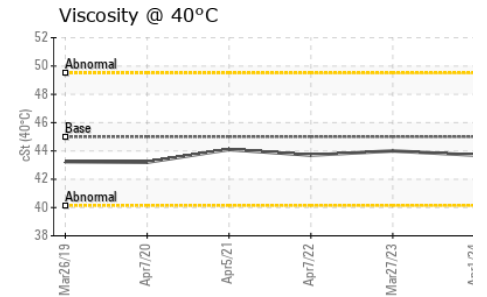
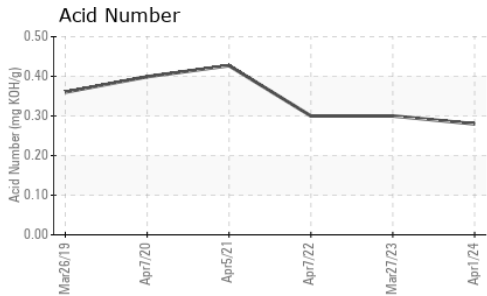
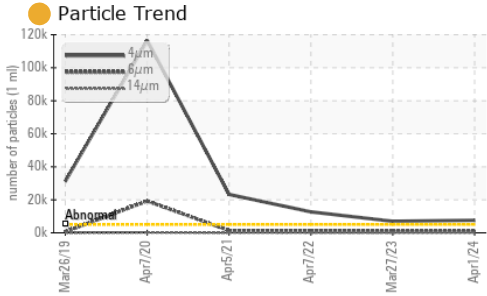
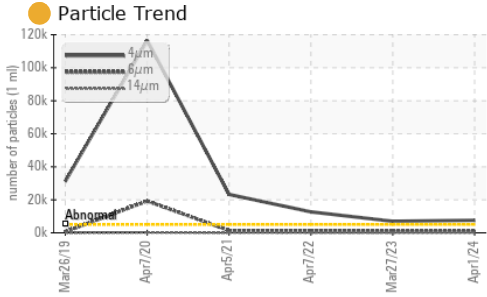
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1

#### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>7642</b>	6993	12687
Particles >6µm	ASTM D7647	>1300	<b>868</b>	882	1294
Particles >14µm	ASTM D7647	>160	<b>48</b>	46	63
Particles >21µm	ASTM D7647	>40	<b>13</b>	12	13
Particles >38µm	ASTM D7647	>10	<b>1</b>	0	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>20/17/13</b>	20/17/13	21/17/13



# OIL ANALYSIS REPORT

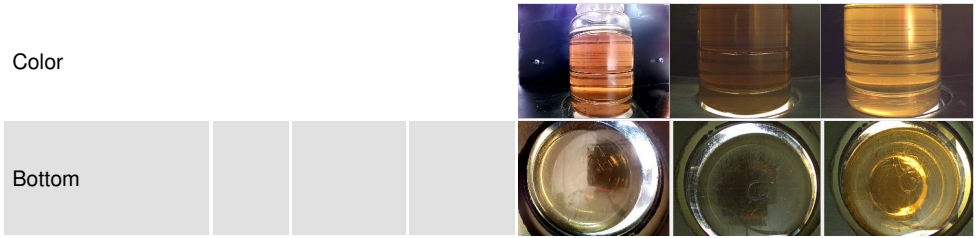


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.28</b>	0.30	0.30

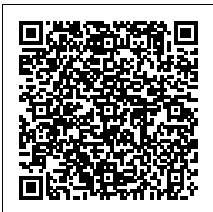
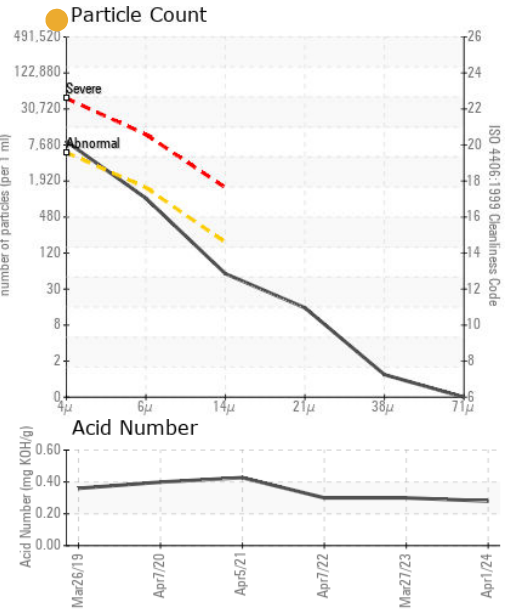
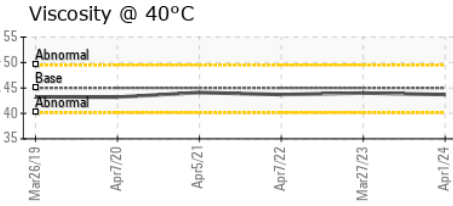
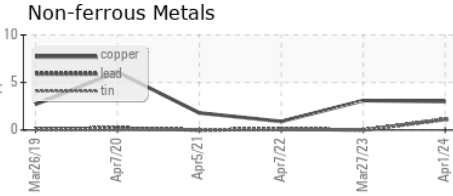
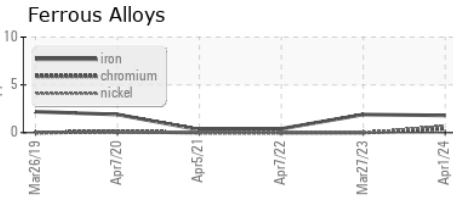
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.0	<b>43.7</b>	44.0	43.7

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0910102  
**Lab Number** : 06147292  
**Unique Number** : 10977370  
**Test Package** : IND 2  
**Received** : 12 Apr 2024  
**Tested** : 15 Apr 2024  
**Diagnosed** : 15 Apr 2024 - Wes Davis

**Altium Packaging - SAMUELSON - Plant 1302A**  
 1070 SAMUELSON ST  
 CITY OF INDUSTRY, CA  
 US 91748-1219  
 Contact: ERIC LOYA  
 Eric.Loya@altiumpkg.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)