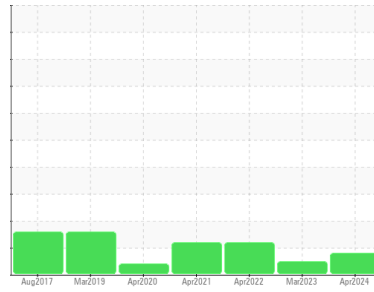




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

## MACHINE 1 (S/N 4575)

Component

### Hydraulic System

Fluid

### SAFETY-KLEEN PERFORMANCE PLUS HYDRAULIC AW 46 (55 GAL)

#### 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>WC0910113</b>	WC0800127	WC0668607
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>	NORMAL	ATTENTION

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>&lt;1</b>	<1	<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	0
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<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

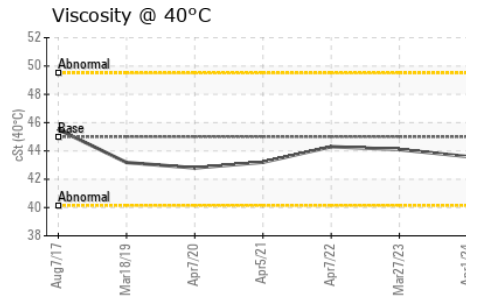
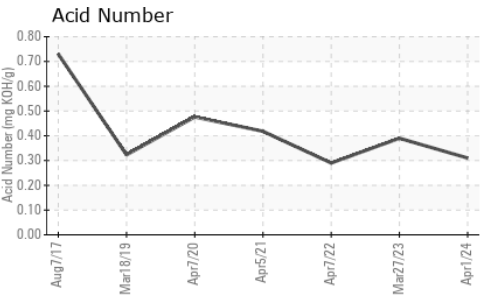
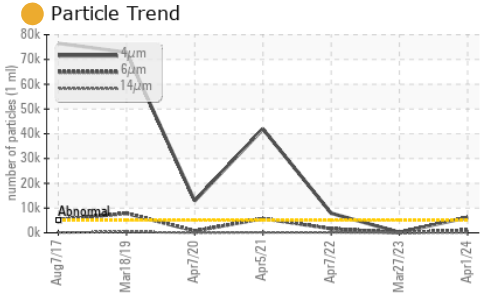
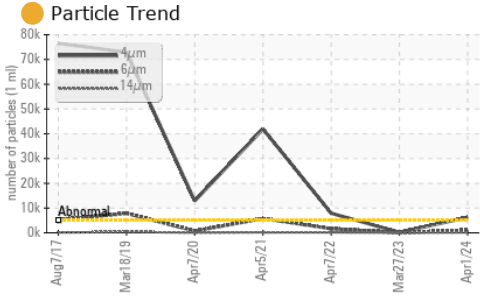
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	2	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>5</b>	35	31
Calcium	ppm	ASTM D5185m	48	<b>61</b>	83	82
Phosphorus	ppm	ASTM D5185m	340	<b>355</b>	349	315
Zinc	ppm	ASTM D5185m	430	<b>428</b>	440	435
Sulfur	ppm	ASTM D5185m		<b>873</b>	1032	708

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	2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>6246</b>	183	7903
Particles >6µm		ASTM D7647	>1300	<b>1062</b>	57	1644
Particles >14µm		ASTM D7647	>160	<b>89</b>	9	165
Particles >21µm		ASTM D7647	>40	<b>25</b>	3	44
Particles >38µm		ASTM D7647	>10	<b>1</b>	1	3
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/17/14</b>	15/13/10	20/18/15



# OIL ANALYSIS REPORT

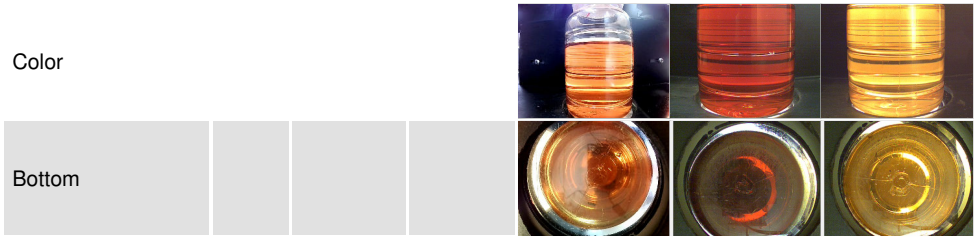


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.31</b>	0.39	0.29

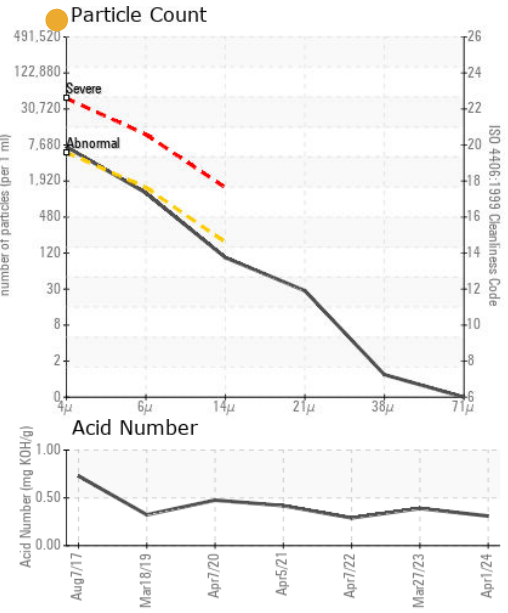
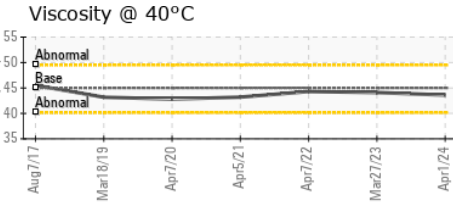
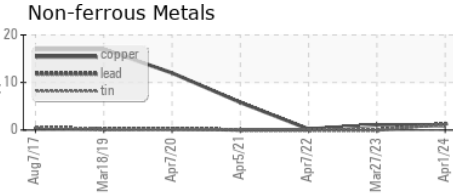
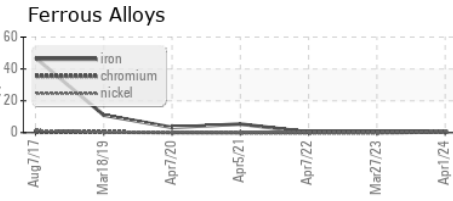
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	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>43.6</b>	44.1	44.3

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0910113  
**Lab Number** : 06147305  
**Unique Number** : 10977383  
**Test Package** : IND 2

**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)