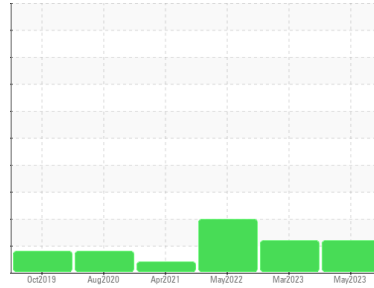




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
LINE 2 (S/N 3000)

Component
Hydraulic System

Fluid
SAFETY-KLEEN PERFORMANCE PLUS HYDRAULIC AW 46 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0801321	WC0801293	WC0574578
Sample Date	Client Info	17 May 2023	23 Mar 2023	18 May 2022
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Not Changed	Not Changed	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	4	2	2
Chromium	ppm ASTM D5185m >20	<1	0	0
Nickel	ppm ASTM D5185m >20	<1	0	0
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >20	0	0	0
Lead	ppm ASTM D5185m >20	0	0	0
Copper	ppm ASTM D5185m >20	2	1	<1
Tin	ppm ASTM D5185m >20	0	0	0
Antimony	ppm ASTM D5185m	---	---	---
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	0	0	0
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	<1	<1	<1
Manganese	ppm ASTM D5185m	0	<1	0
Magnesium	ppm ASTM D5185m	<1	4	0
Calcium	ppm ASTM D5185m 48	44	41	48
Phosphorus	ppm ASTM D5185m 340	350	362	364
Zinc	ppm ASTM D5185m 430	455	441	483
Sulfur	ppm ASTM D5185m	1060	737	887

CONTAMINANTS

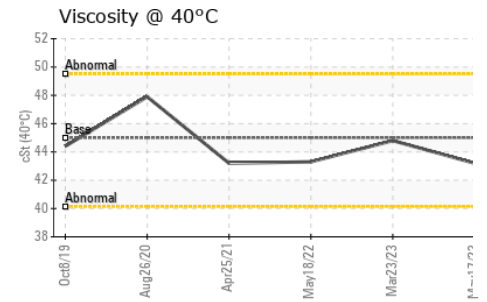
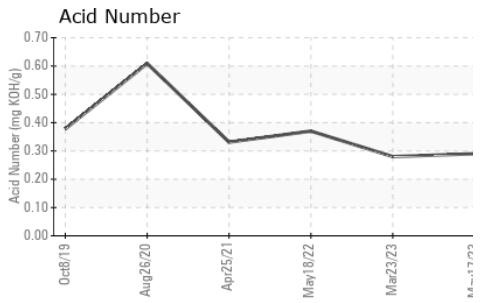
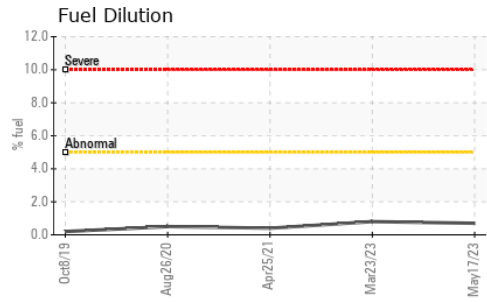
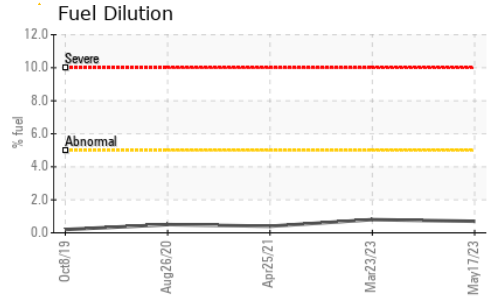
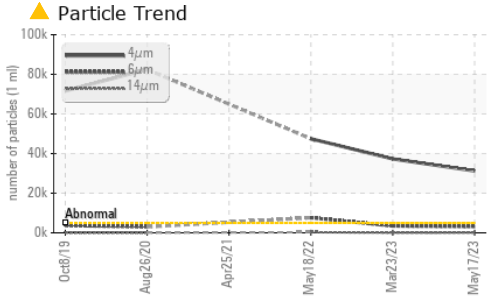
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	<1	0	0
Sodium	ppm ASTM D5185m	1	<1	0
Potassium	ppm ASTM D5185m >20	<1	0	<1
Fuel	% ASTM D3524	0.7	0.8	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 31241	▲ 37321	▲ 47474
Particles >6µm	ASTM D7647 >1300	▲ 3131	▲ 3457	▲ 7613
Particles >14µm	ASTM D7647 >160	95	57	▲ 323
Particles >21µm	ASTM D7647 >40	28	12	▲ 84
Particles >38µm	ASTM D7647 >10	3	2	4
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 22/19/14	▲ 22/19/13	▲ 23/20/16



OIL ANALYSIS REPORT

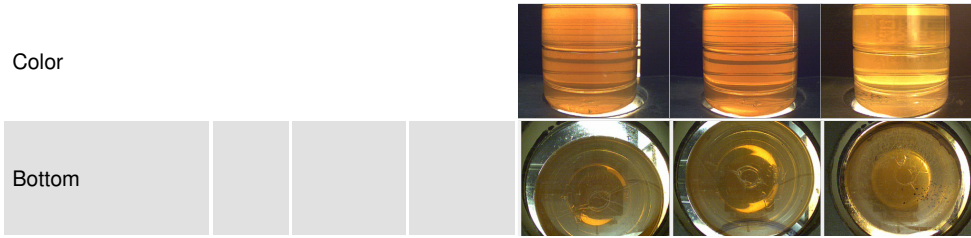


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.29	0.28	0.37

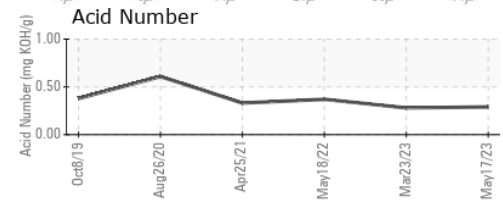
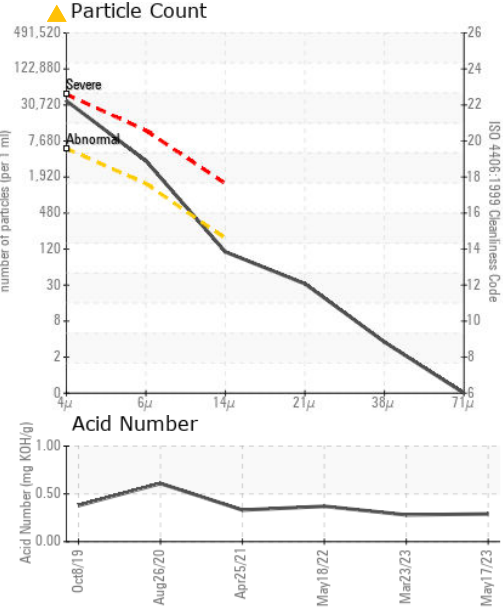
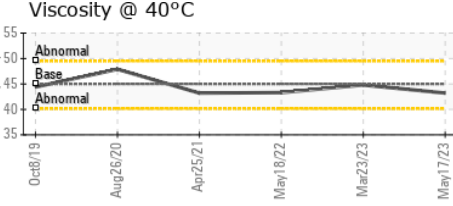
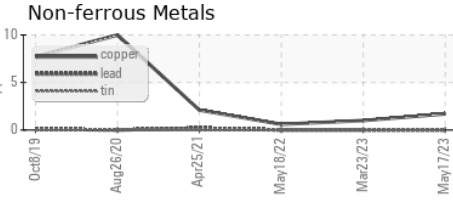
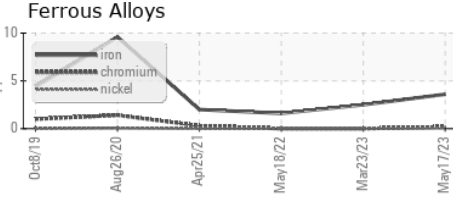
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	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	45.0	43.2	44.8	43.3

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0801321 **Received** : 31 May 2023
Lab Number : **05860730** **Tested** : 01 Jun 2023
Unique Number : 10495195 **Diagnosed** : 01 Jun 2023 - Wes Davis
Test Package : IND 2 (Additional Tests: FuelDilution, PercentFuel)

Altium Packaging - TRACY - Plant 1308A
 75 W VALPICO RD
 TRACY, CA
 US 95376
 Contact: Rojie Sarmiento
 rojie.sarmiento@altiumpkg.com
 T: (209)831-2908
 F: (209)820-1735

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)