PROBLEM SUMMARY

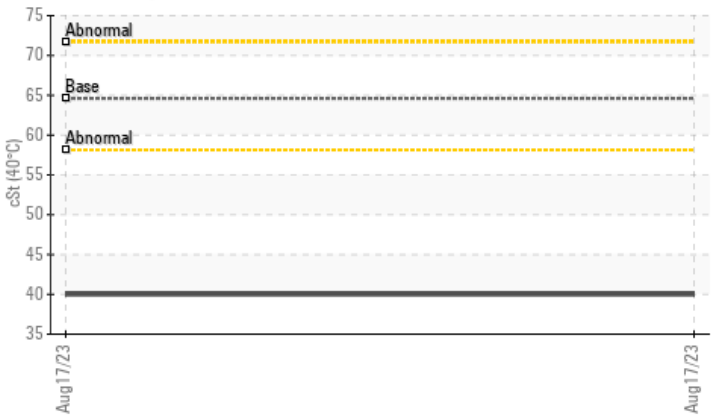
Sample Rating Trend

VISCOSITY

Machine Id
Hiab Hiab 358E-5
Component
Tank Hydraulic System
Fluid
CHEVRON HYDRAULIC AW ISO 68 (45 GAL)

COMPONENT CONDITION SUMMARY

Viscosity @ 40°C



Particle Trend

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	---	---
Particles >4µm		ASTM D7647	>5000	▲ **7281**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/17/13**	---	---
Visc @ 40°C	cSt	ASTM D445	64.6	▲ **40.0**	---	---

Customer Id: PALALT
Sample No.: WC0780298
Lab Number: 05936629
Test Package: CONST

To manage this report scan the QR code

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

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY

Machine Id
Hiab Hiab 358E-5
Component
Tank Hydraulic System
Fluid
CHEVRON HYDRAULIC AW ISO 68 (45 GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. 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 moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition
The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0780298**	---	---
Sample Date		Client Info		**17 Aug 2023**	---	---
Machine Age	hrs	Client Info		**2247**	---	---
Oil Age	hrs	Client Info		**2247**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**ATTENTION**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**3**	---	---
Chromium	ppm	ASTM D5185m	>10	**<1**	---	---
Nickel	ppm	ASTM D5185m	>10	**0**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**<1**	---	---
Aluminum	ppm	ASTM D5185m	>10	**<1**	---	---
Lead	ppm	ASTM D5185m	>10	**0**	---	---
Copper	ppm	ASTM D5185m	>75	**2**	---	---
Tin	ppm	ASTM D5185m	>10	**0**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**0**	---	---
Manganese	ppm	ASTM D5185m		**<1**	---	---
Magnesium	ppm	ASTM D5185m		**3**	---	---
Calcium	ppm	ASTM D5185m		**174**	---	---
Phosphorus	ppm	ASTM D5185m		**407**	---	---
Zinc	ppm	ASTM D5185m		**512**	---	---
Sulfur	ppm	ASTM D5185m		**5057**	---	---

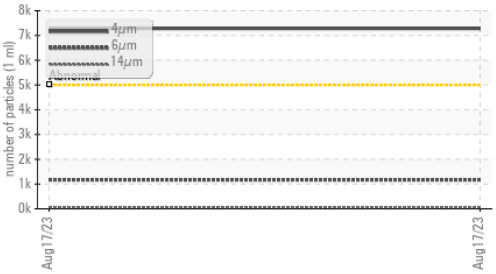
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**<1**	---	---
Sodium	ppm	ASTM D5185m		**1**	---	---
Potassium	ppm	ASTM D5185m	>20	**0**	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **7281**	---	---
Particles >6µm		ASTM D7647	>1300	**1170**	---	---
Particles >14µm		ASTM D7647	>160	**63**	---	---
Particles >21µm		ASTM D7647	>40	**16**	---	---
Particles >38µm		ASTM D7647	>10	**1**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/17/13**	---	---

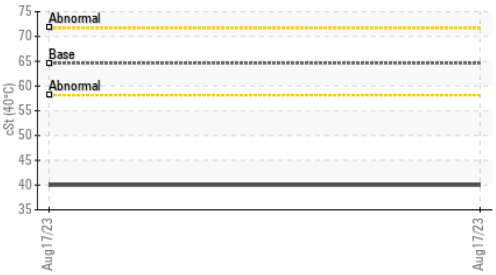
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.39**	---	---

OIL ANALYSIS REPORT

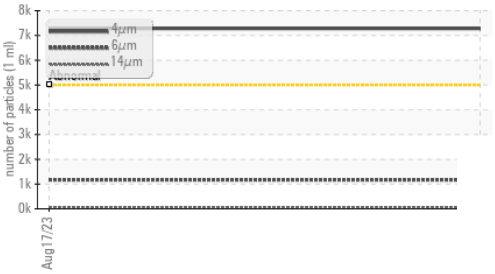
Particle Trend



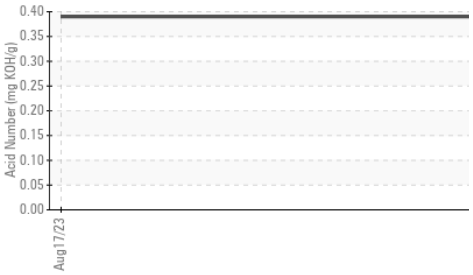
Viscosity @ 40°C



Particle Trend

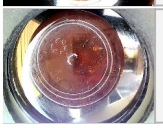


Acid Number



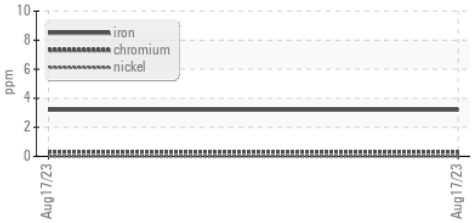
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	**NORML**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.1	**NEG**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	64.6	▲ **40.0**	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

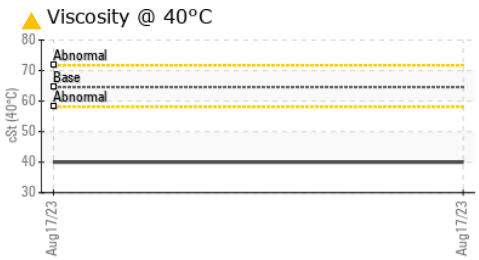
GRAPHS

Ferrous Alloys

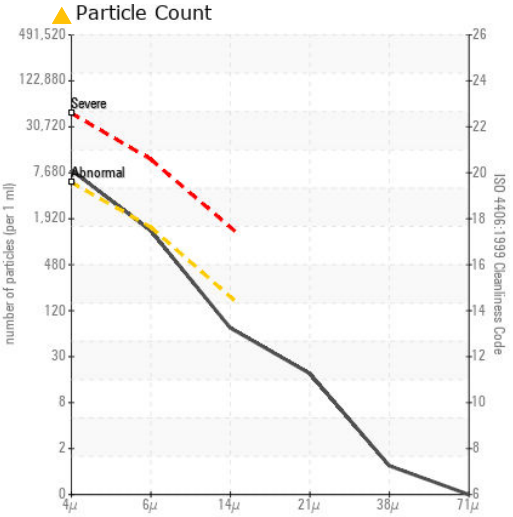


Non-ferrous Metals

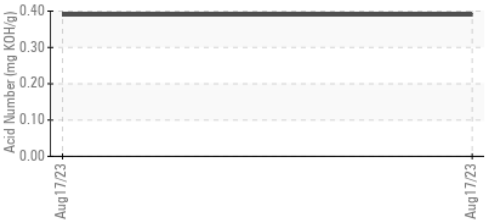
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0780298 **Received** : 28 Aug 2023
Lab Number : 05936629 **Diagnosed** : 29 Aug 2023
Unique Number : 10621900 **Diagnostician** : Don Baldridge
Test Package : CONST

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)

PALFINGER USA LLC
19585 NW ZACK SEGERS LN
ALTHA, FL
US 32421
Contact: CHUCK GOAD
ch.goad@palfinger.com
T: (850)771-5638
F: