

# **PROBLEM SUMMARY**

Sample Rating Trend

**VIS DEBRIS** 

PIERCE T-10

Component **Hydraulic System** 

**AW HYDRAULIC OIL ISO 68 (--- GAL)** 

# **COMPONENT CONDITION SUMMARY**

No relevant graphs to display

## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC T	EST RE	SULTS				
Sample Status				ABNORMAL	NORMAL	NORMAL
Debris	scalar	*Visual	NONE	MODER	NONE	LIGHT

Customer Id: CHACHAVA **Sample No.:** WC0835793 Lab Number: 05933984 Test Package: FLEET

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**

Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.

### HISTORICAL DIAGNOSIS

## 26 Aug 2021 Diag: Wes Davis





Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 68. Please confirm.

Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.All component wear rates are normal. There is no indication of any contamination in the component(unconfirmed). The condition of the oil is acceptable for the time in service.



### 18 Jul 2020 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.All component wear rates are normal. There is no indication of any contamination in the component(unconfirmed). The condition of the oil is acceptable for the time in service.



## 29 Jun 2019 Diag: Wes Davis

NORMAL



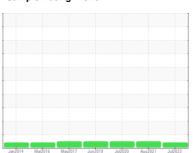
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.All component wear rates are normal. There is no indication of any contamination in the component(unconfirmed). The condition of the oil is acceptable for the time in service.





# **OIL ANALYSIS REPORT**

# Sample Rating Trend



# **VIS DEBRIS**



# PIERCE T-10

Component

Hydraulic System

**AW HYDRAULIC OIL ISO 68 (--- GAL)** 

# **DIAGNOSIS**

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

All component wear rates are normal.

# Contamination

Moderate concentration of visible dirt/debris present in the oil.

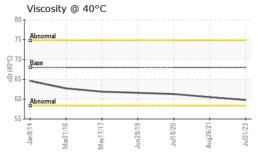
### **Fluid Condition**

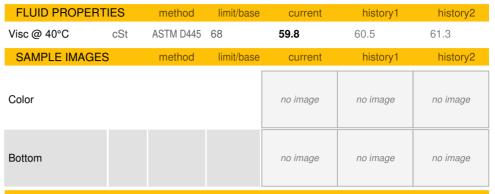
The condition of the oil is acceptable for the time in service.

Sample Date         Client Info         31 Jul 2023         26 Aug 2021         18 Jul 2020           Machine Age         hrs         Client Info         1552         0         0           Oil Age         hrs         Client Info         1616         0         0           Oil Changed         Client Info         N/A         Not Changd         N/A           Sample Status         ABNORMAL         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history1         history2			Jan 2014	Mar2016 May2017	Jun2019 Jul2020 Aug2021	Jul2023	
Client Info	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age   hrs   Client Info   1552   0   0   0   0   0   0   0   0   0	Sample Number		Client Info		WC0835793	WC0609526	WC0482918
Oil Age         hrs         Client Info         1616         0         0           Oil Changed         Client Info         N/A         Not Changd         N/A           Sample Status         Description         ABNORMAL         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >20         0         <1         1           Chromium         ppm         ASTM D5185m         >10         0         <1         1           Chromium         ppm         ASTM D5185m         >10         0         <1         0           Nickel         ppm         ASTM D5185m         >10         0         <1         0           Silver         ppm         ASTM D5185m         >10         0         0         0           Aluminum         ppm         ASTM D5185m         >10         0         0         0           Aluminum         ppm         ASTM D5185m         >10         0         0         0           Copper         ppm         ASTM D5185m         >10         0         0         0           Vanadium	Sample Date		Client Info		31 Jul 2023	26 Aug 2021	18 Jul 2020
Client Info	Machine Age	hrs	Client Info		1552	0	0
MEAR METALS	Oil Age	hrs	Client Info		1616	0	0
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >20         0         <1	Oil Changed		Client Info		N/A	Not Changd	N/A
	Sample Status				ABNORMAL	NORMAL	NORMAL
Chromium         ppm         ASTM D5185m         >10         0         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>20	0	<1	1
Description   Description	Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Silver         ppm         ASTM D5185m         0         0         0         0           Aluminum         ppm         ASTM D5185m         >10         <1	Nickel	ppm	ASTM D5185m	>10	0	<1	0
ASTM D5185m   >10	Titanium	ppm	ASTM D5185m		0	0	0
Lead         ppm         ASTM D5185m         >10         0         0         2           Copper         ppm         ASTM D5185m         >75         2         <1         <1           Tin         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m          <1         <1         <1           Vanadium         ppm         ASTM D5185m         <1         0         0         0           Cadmium         ppm         ASTM D5185m         <1         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         5         0         <1         1           Barium         ppm         ASTM D5185m         5         0         <1         1           Magnesium         ppm         ASTM D5185m         5         <1         1         0           Magnesium         ppm         ASTM D5185m         20         120         48         113           Phosphorus         ppm         ASTM D5185m         20         120         48	Silver	ppm	ASTM D5185m		0	0	0
Copper         ppm         ASTM D5185m         >75         2         <1         <1           Tin         ppm         ASTM D5185m         >10         0         0         0           Antimony         ppm         ASTM D5185m          <1	Aluminum	ppm	ASTM D5185m	>10	<1	0	<1
Tin ppm ASTM D5185m >10 0 0 0 0  Antimony ppm ASTM D5185m	Lead	ppm	ASTM D5185m	>10	0	0	2
Trin ppm ASTM D5185m >10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Copper	ppm	ASTM D5185m	>75	2	<1	<1
Vanadium         ppm         ASTM D5185m         <1         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         5         0         <1         1           Barium         ppm         ASTM D5185m         5         0         0         0           Molybdenum         ppm         ASTM D5185m         5         <1         1         0           Manganese         ppm         ASTM D5185m         25         6         0         <1         0           Magnesium         ppm         ASTM D5185m         20         120         48         113           Phosphorus         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         370         760         397         765           Sulfur         ppm         ASTM D5185m         2500         2143         7	Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium         ppm         ASTM D5185m         <1         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         5         0         <1         1           Barium         ppm         ASTM D5185m         5         0         0         0           Molybdenum         ppm         ASTM D5185m         5         0         0         0           Manganese         ppm         ASTM D5185m         5         <1         1         0           Magnesium         ppm         ASTM D5185m         25         6         0         <1           Calcium         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         370         760         397         765 <td>Antimony</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th></th> <td>&lt;1</td> <td>&lt;1</td>	Antimony	ppm	ASTM D5185m			<1	<1
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         5         0         <1	Vanadium	ppm	ASTM D5185m		<1	0	0
Boron	Cadmium	ppm	ASTM D5185m		0	0	0
Barium         ppm         ASTM D5185m         5         0         0         0           Molybdenum         ppm         ASTM D5185m         5         <1         1         0           Manganese         ppm         ASTM D5185m         25         6         0         <1           Calcium         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         200         186         602           Zinc         ppm         ASTM D5185m         2500         2143         740         1599           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         <1         1         2           Sodium         ppm         ASTM D5185m         >20         <1         1         2           Sodium         ppm         ASTM D5185m         >20         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         5         <1         1         0           Manganese         ppm         ASTM D5185m         <1	Boron	ppm	ASTM D5185m	5	0	<1	1
Manganese         ppm         ASTM D5185m         <1         0         0           Magnesium         ppm         ASTM D5185m         25         6         0         <1	Barium	ppm	ASTM D5185m	5	0	0	0
Magnesium         ppm         ASTM D5185m         25         6         0         <1           Calcium         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         300         562         186         602           Zinc         ppm         ASTM D5185m         370         760         397         765           Sulfur         ppm         ASTM D5185m         2500         2143         740         1599           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         <1	Molybdenum	ppm	ASTM D5185m	5	<1	1	0
Calcium         ppm         ASTM D5185m         200         120         48         113           Phosphorus         ppm         ASTM D5185m         300         562         186         602           Zinc         ppm         ASTM D5185m         370         760         397         765           Sulfur         ppm         ASTM D5185m         2500         2143         740         1599           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         <1	Manganese	ppm	ASTM D5185m		<1	0	0
Phosphorus         ppm         ASTM D5185m         300         562         186         602           Zinc         ppm         ASTM D5185m         370         760         397         765           Sulfur         ppm         ASTM D5185m         2500         2143         740         1599           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         <1         1         2           Sodium         ppm         ASTM D5185m         >20         0         0         8           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 <t< td=""><td>Magnesium</td><td>ppm</td><td>ASTM D5185m</td><td>25</td><th>6</th><td>0</td><td>&lt;1</td></t<>	Magnesium	ppm	ASTM D5185m	25	6	0	<1
Zinc         ppm         ASTM D5185m         370         760         397         765           Sulfur         ppm         ASTM D5185m         2500         2143         740         1599           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         <1	Calcium	ppm	ASTM D5185m	200	120	48	113
Sulfur         ppm         ASTM D5185m         2500         2143         740         1599           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         <1	Phosphorus	ppm	ASTM D5185m	300	562	186	602
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         <1	Zinc	ppm	ASTM D5185m	370	760	397	765
Silicon	Sulfur	ppm	ASTM D5185m	2500	2143	740	1599
Sodium	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         0         0         8           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         NORM         NORML         <	Silicon	ppm	ASTM D5185m	>20	<1	1	2
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       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       >0.1       NEG       NEG	Sodium	ppm	ASTM D5185m		<1	<1	<1
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	Potassium	ppm	ASTM D5185m	>20	0	0	8
Yellow Metal       scalar       *Visual       NONE       NORML       NO	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE MODER NONE 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 >0.1 NEG NEG							
Silt     scalar     *Visual     NONE     NONE     NONE     NONE       Debris     scalar     *Visual     NONE     MODER     NONE     LIGHT       Sand/Dirt     scalar     *Visual     NONE     NONE     NONE     NONE       Appearance     scalar     *Visual     NORML     NORML     NORML     NORML     NORML       Odor     scalar     *Visual     NORML     NORML     NORML     NORML     NORML       Emulsified Water     scalar     *Visual     >0.1     NEG     NEG     NEG	Yellow Metal	scalar	*Visual	NONE			
Debris     scalar     *Visual     NONE     MODER     NONE     LIGHT       Sand/Dirt     scalar     *Visual     NONE     NONE     NONE     NONE       Appearance     scalar     *Visual     NORML     NORML     NORML     NORML     NORML       Odor     scalar     *Visual     NORML     NORML     NORML     NORML     NORML       Emulsified Water     scalar     *Visual     >0.1     NEG     NEG     NEG	•						
Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG		scalar		NONE		NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG	Debris	scalar	*Visual	NONE	▲ MODER	NONE	
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG

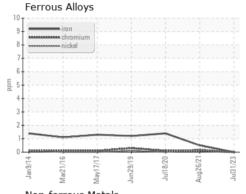


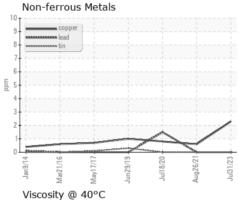
# **OIL ANALYSIS REPORT**

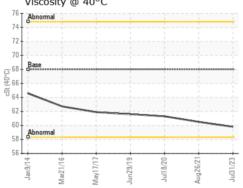




## **GRAPHS**











Certificate L2367

Laboratory Sample No. Lab Number

Unique Number : 10619255 Test Package : FLEET

: WC0835793 : 05933984

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed Diagnostician : Don Baldridge

: 24 Aug 2023 : 26 Aug 2023

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)

**CHARLOTTESVILLE FIRE** 203 RIDGE RD

CHARLOTTESVILLE, VA US 22903

Contact: ALLEN KUSER kusera@charlottesville.org T: (434)970-3437

Submitted By: RANDY PRICE

Report Id: CHACHAVA [WUSCAR] 05933984 (Generated: 08/28/2023 15:28:56) Rev: 1