



Machine Id  
**VIBRATORY HAMMER**

Component  
**Hydraulic System**

Fluid  
**CHEVRON CLARITY HYDRAULIC AW 46 (200 GAL)**

**DIAGNOSIS**

**Recommendation**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

**Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

**SAMPLE INFORMATION** method limit/base current history1 history2

Sample Number	Client Info	<b>ST44443</b>	---	---
Sample Date	Client Info	<b>28 Mar 2024</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---
Oil Age	hrs	Client Info	<b>0</b>	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>NORMAL</b>	---	---

**WEAR METALS** method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	---	---
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---

**ADDITIVES** method limit/base current history1 history2

Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185m		<b>3</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>217</b>	---	---
Zinc	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>435</b>	---	---

**CONTAMINANTS** method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>15	<b>5</b>	---	---
Sodium	ppm	ASTM D5185m		<b>0</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.002</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>25</b>	---	---

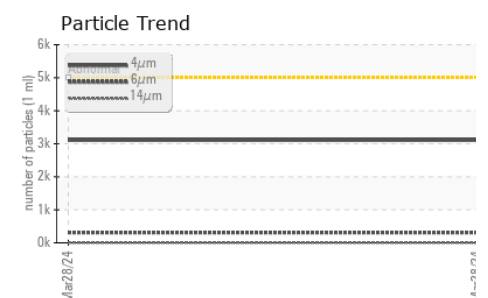
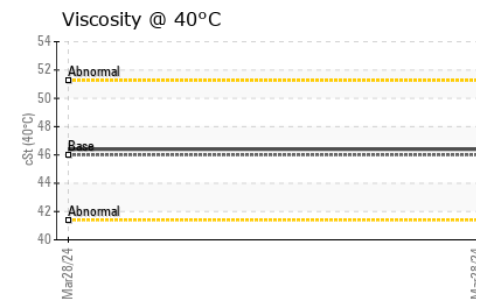
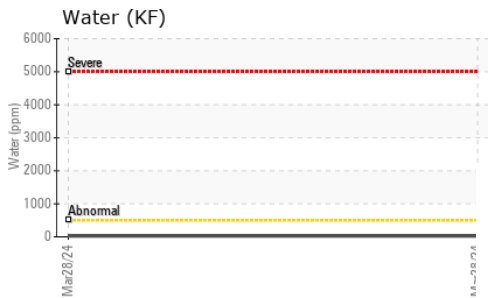
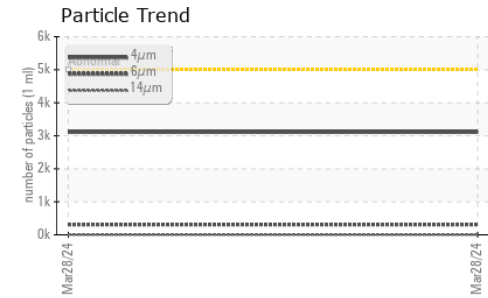
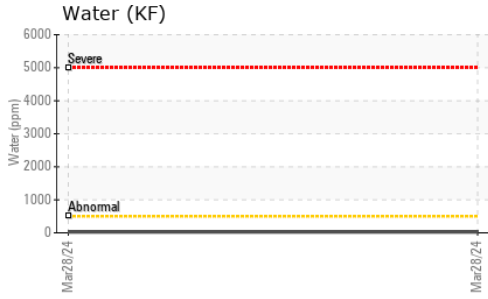
**FLUID CLEANLINESS** method limit/base current history1 history2

Particles >4µm		ASTM D7647	>5000	<b>3109</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>311</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>6</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>2</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/15/10</b>	---	---

**FLUID DEGRADATION** method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.30</b>	---	---
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# OIL ANALYSIS REPORT



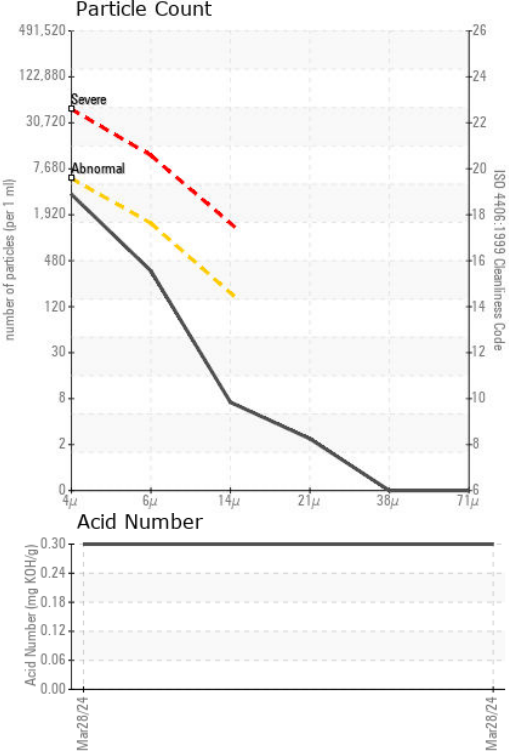
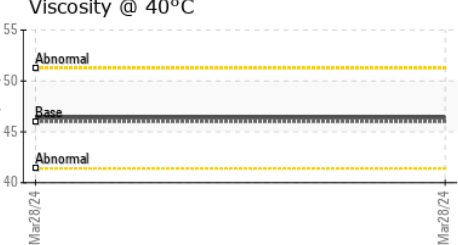
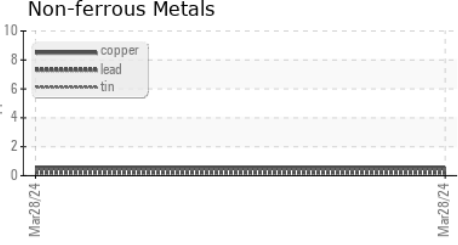
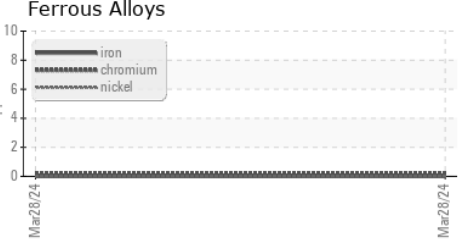
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.0	46.4	---

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ST44443  
**Lab Number** : 06133324  
**Unique Number** : 10952789  
**Test Package** : IND 2 ( Additional Tests: KF )

**Received** : 29 Mar 2024  
**Tested** : 01 Apr 2024  
**Diagnosed** : 01 Apr 2024 - Doug Bogart

**SCDOT**  
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 CAMDEN, SC  
 US 29020  
 Contact: Service Manager  
 branhammr@scdot.org  
 T: (803)572-8527  
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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)