



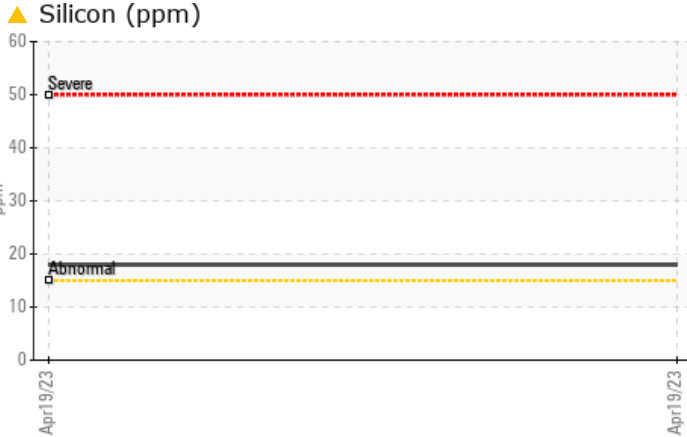
# PROBLEM SUMMARY

Sample Rating Trend



Machine Id  
**088V-06 WC-31 (S/N 215220)**  
 Component  
**Hydraulic System**  
 Fluid  
**CHEVRON RANDO HD 46 (69 GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Silicon	ppm	ASTM D5185m	>15	▲ 18	---	---
PrtFilter				no image	no image	no image

Customer Id: SMCSAN  
 Sample No.: PH0000593  
 Lab Number: 05827568  
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id  
**088V-06 WC-31 (S/N 215220)**

Component  
**Hydraulic System**

Fluid  
**CHEVRON RANDO HD 46 (69 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

Elemental level of silicon (Si) above normal indicating ingress of seal material. 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 suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	<b>PH0000593</b>	---	---
Sample Date	Client Info	<b>19 Apr 2023</b>	---	---
Machine Age	hrs	Client Info	<b>25186</b>	---
Oil Age	hrs	Client Info	<b>25186</b>	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >20	<b>3</b>	---
Chromium	ppm	ASTM D5185m >20	<b>0</b>	---
Nickel	ppm	ASTM D5185m >20	<b>0</b>	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---
Silver	ppm	ASTM D5185m	<b>0</b>	---
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	---
Lead	ppm	ASTM D5185m >20	<b>0</b>	---
Copper	ppm	ASTM D5185m >20	<b>15</b>	---
Tin	ppm	ASTM D5185m >20	<b>0</b>	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---

## ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	<b>0</b>	---
Barium	ppm	ASTM D5185m	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	---
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	---
Calcium	ppm	ASTM D5185m	<b>37</b>	---
Phosphorus	ppm	ASTM D5185m	<b>315</b>	---
Zinc	ppm	ASTM D5185m	<b>351</b>	---
Sulfur	ppm	ASTM D5185m	<b>699</b>	---

## CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >15	<b>▲ 18</b>	---
Sodium	ppm	ASTM D5185m	<b>2</b>	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	---

## FLUID CLEANLINESS

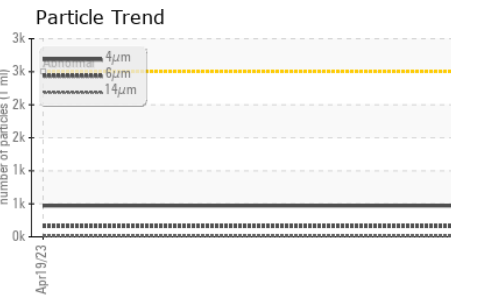
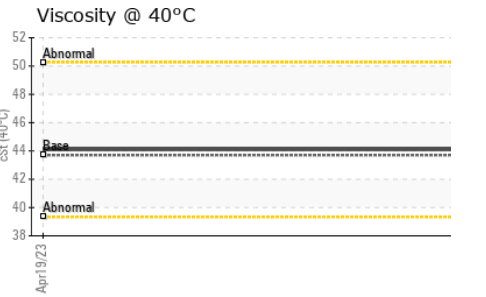
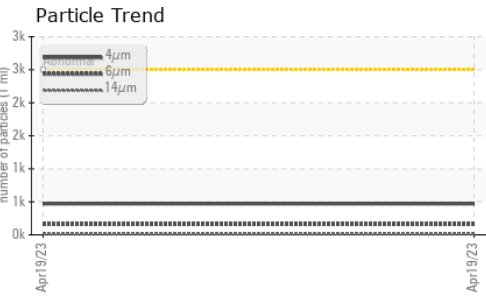
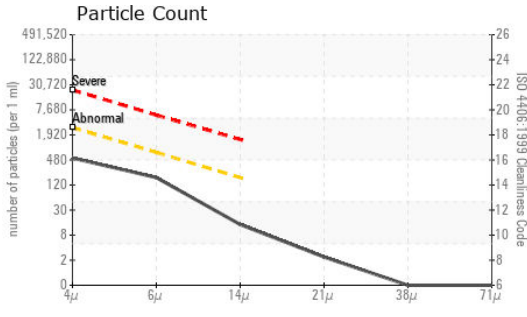
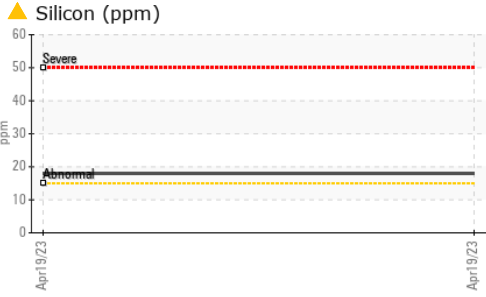
method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	>2500	<b>470</b>	---
Particles >6µm	ASTM D7647	>640	<b>160</b>	---
Particles >14µm	ASTM D7647	>160	<b>12</b>	---
Particles >21µm	ASTM D7647	>40	<b>2</b>	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---
Oil Cleanliness	ISO 4406 (c)	>18/16/14	<b>16/14/11</b>	---

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.30</b>	---



# OIL ANALYSIS REPORT

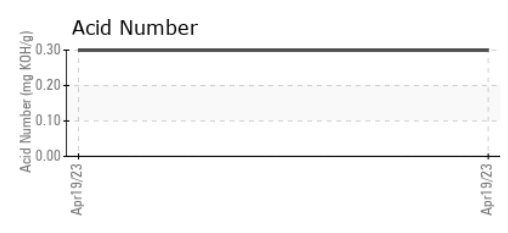
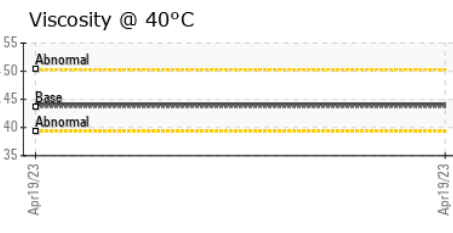
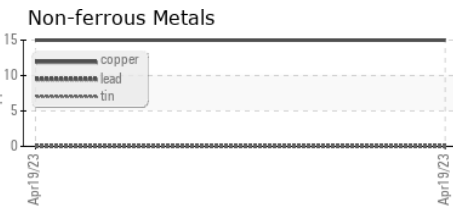
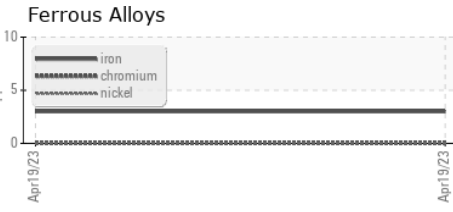


VISUAL	method	limit/base	current	history 1	history 2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	history 1	history 2	
Visc @ 40°C	cSt	ASTM D445	43.7	44.1	---	---

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color					
Bottom					
PrtFilter					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PH0000593      **Received** : 24 Apr 2023  
**Lab Number** : 05827568      **Diagnosed** : 26 Apr 2023  
**Unique Number** : 10441061      **Diagnostician** : Jonathan Hester  
**Test Package** : PLANT

**SMC LTD**  
 3250 BRICKWAY BLVD  
 SANTA ROSA, CA  
 US 95403  
 Contact: SUSAN BENNETT  
 susan.bennett@smcltd.com  
 T:  
 F:

Certificate L2367  
 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)