



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**X8180 - RICHARDS BUILDING SUPPLY**  
 Component  
**Hydraulic System**  
 Fluid  
**CHEVRON RANDO HDZ 32 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0813914</b>	WC0597959	WC0517032
Sample Date		Client Info		<b>02 Dec 2023</b>	07 Dec 2022	08 Dec 2021
Machine Age	hrs	Client Info		<b>530</b>	4550	422
Oil Age	hrs	Client Info		<b>530</b>	0	45
Filter Age	hrs	Client Info		<b>0</b>	0	45
Oil Changed		Client Info		<b>Not Changed</b>	N/A	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>0</b>	<1	1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

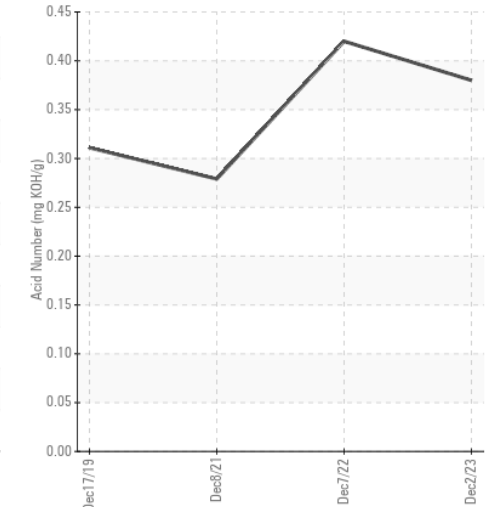
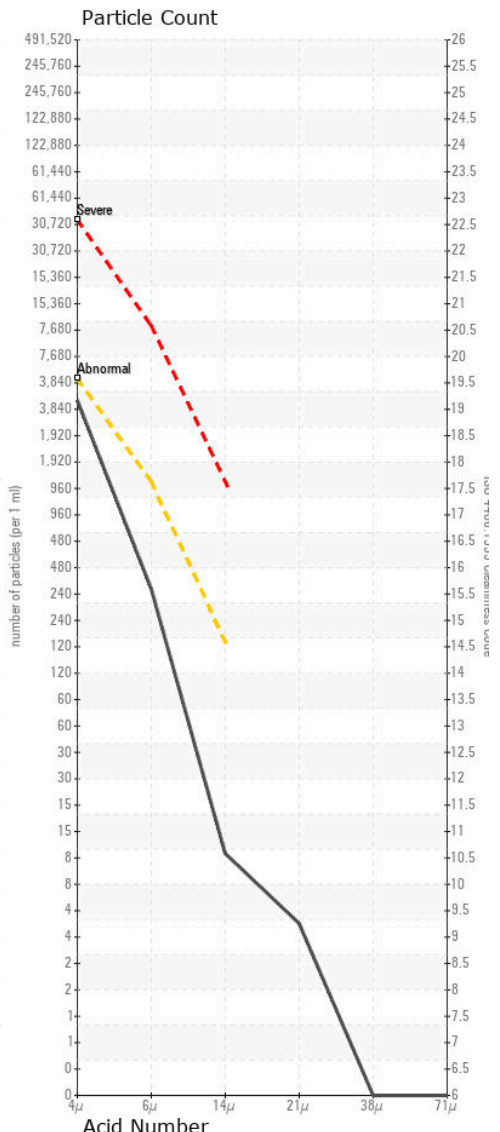
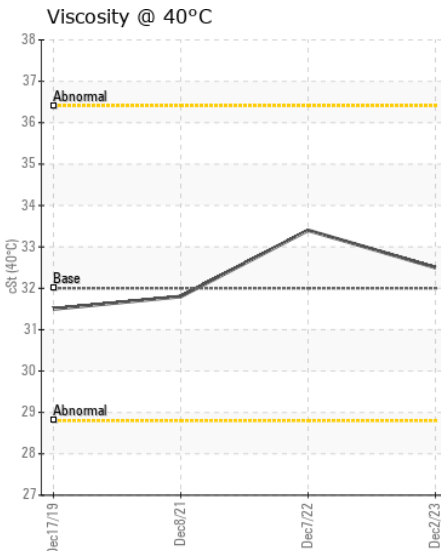
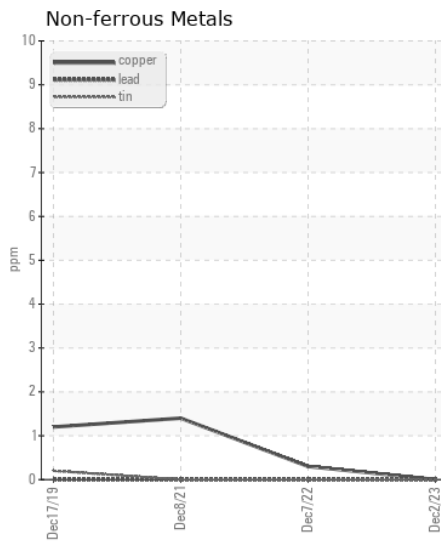
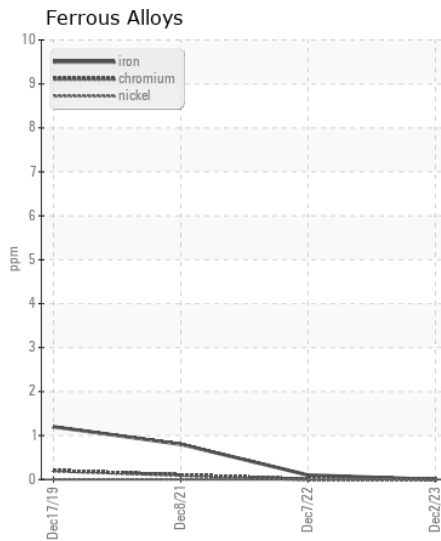
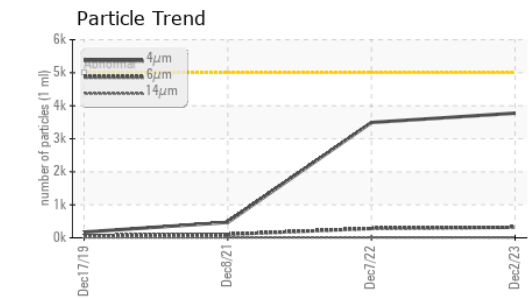
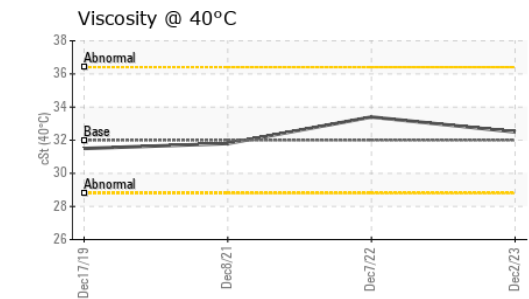
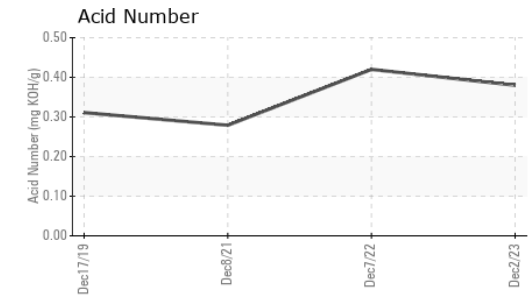
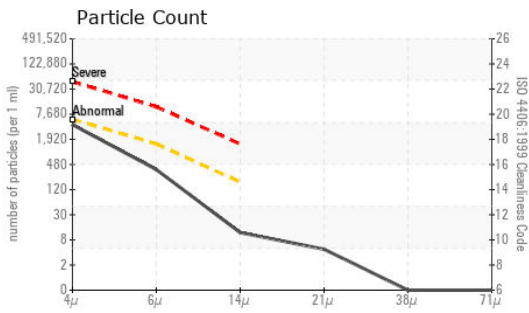
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>0</b>	2	1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>3774</b>	3493	469
Particles >6µm		ASTM D7647	>1300	<b>319</b>	282	105
Particles >14µm		ASTM D7647	>160	<b>10</b>	11	10
Particles >21µm		ASTM D7647	>40	<b>4</b>	3	2
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/15/10</b>	19/15/11	16/14/10
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>2</b>	<1	3
Calcium	ppm	ASTM D5185m		<b>63</b>	64	119
Phosphorus	ppm	ASTM D5185m		<b>368</b>	416	333
Zinc	ppm	ASTM D5185m		<b>464</b>	521	453
Sulfur	ppm	ASTM D5185m		<b>977</b>	1102	1089
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.38</b>	0.42	0.279
Visc @ 40°C	cSt	ASTM D445	32.0	<b>32.5</b>	33.4	31.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0813914 **Received** : 12 Jan 2024  
**Lab Number** : 06059231 **Diagnosed** : 15 Jan 2024  
**Unique Number** : 10830613 **Diagnostician** : Wes Davis  
**Test Package** : CONST

**PALFINGER - BRANCH 440**  
 2376 CASSENS DR  
 FENTON, MO  
 US 63026  
 Contact: LARRY YOUNG  
 l.young@palfinger.com

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)

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F: