

**OIL ANALYSIS REPORT** 

300-02

Component

**Hydraulic System** 

**CHEVRON RANDO HD 46 (100 GAL)** 

# Sample Rating Trend



## Recommendation

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

All component wear rates are normal.

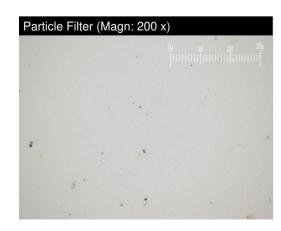
# Contamination

There is a moderate amount of particulates present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

# **Fluid Condition**

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

				Sep 2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PH0001071		
Sample Date		Client Info		25 Sep 2023		
Machine Age	yrs	Client Info		0		
Oil Age	yrs	Client Info		0		
Oil Changed	y.0	Client Info		Not Changd		
Sample Status		Chorte trillo		ATTENTION		
			11 11 11		11.1	1:1.0
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead	ppm	ASTM D5185m	>20	0		
Copper	ppm	ASTM D5185m	>20	5		
Tin	ppm	ASTM D5185m	>20	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current	history1	history2
	ppm		limit/base			· · · · · · · · · · · · · · · · · · ·
Boron		ASTM D5185m	limit/base	<1		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	<1 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 0 2		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 0 2 63		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 0 2 63 316		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 0 2 63 316 394		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 <1 0 2 63 316 394 770		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	<1 0 <1 0 2 63 316 394 770	     history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	<1 0 <1 0 2 63 316 394 770 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	<1 0 <1 0 2 63 316 394 770 current 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20	<1 0 <1 0 2 63 316 394 770 current 0 <1		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20 limit/base >10000	<1 0 <1 0 2 63 316 394 770 current 0 <1 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20 limit/base	<1 0 <1 0 2 63 316 394 770 current 0 <1 0 current 5283		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >15 >20 limit/base >10000 >2500	<1 0 <1 0 2 63 316 394 770 current 0 <1 0 current 5283 2587		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  MEthod ASTM D5185m ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >10000 >2500 >320	<1 0 <1 0 2 63 316 394 770 current 0 <1 0 current 5283 2587 502		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  METHOD  ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >10000 >2500 >320 >80	<1 0 <1 0 2 63 316 394 770 current 0 <1 0 current 5283 2587 502 177		history2 history2

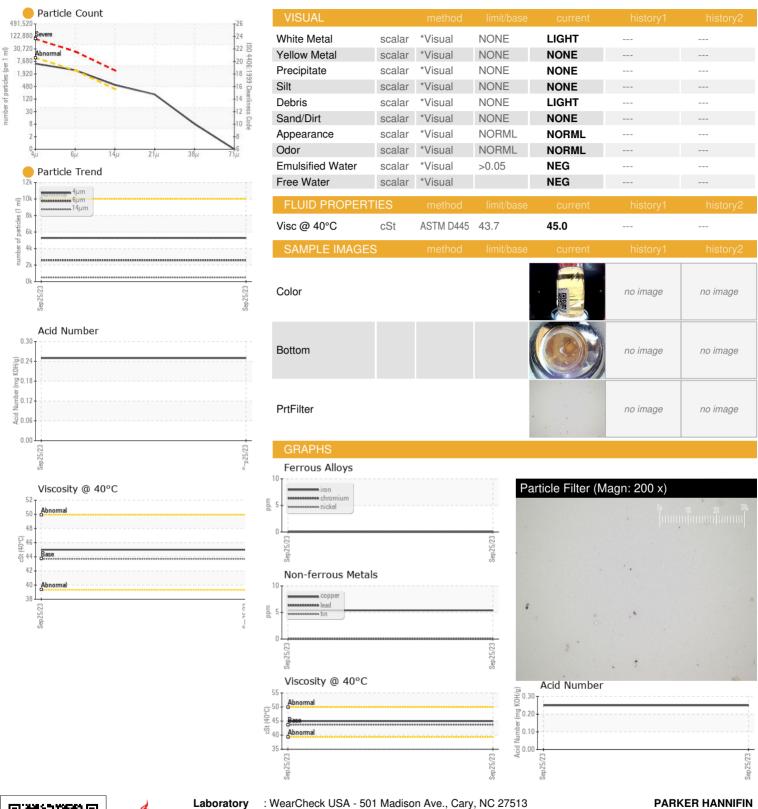


FLUID DEGRADATION Acid Number (AN) mg KOH/g ASTM D8045

Contact/Location: RAE MONKA - PARMANWI



# **OIL ANALYSIS REPORT**







Certificate L2367

Laboratory Sample No. Lab Number : 05999032

: PH0001071

**Unique Number** : 10727392

**Tested** Diagnosed

Received

: 06 Nov 2023

: 08 Nov 2023

: 08 Nov 2023 - Jonathan Hester

Test Package: PLANT (Additional Tests: PrtFilter) 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.

1440 N 24TH ST

MANITOWOC, WI US 54220

Contact: RAE MONKA rae.monka@parker.com

T: F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)