

PROBLEM SUMMARY

Sample Rating Trend

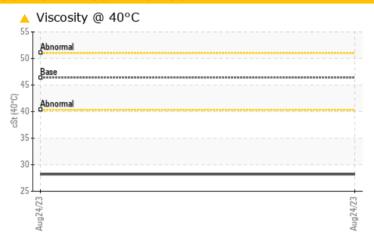


CINCINNATI Cincinnati (S/N 0000)

Top Hydraulic System

PETRO CANADA HYDREX AW 46 (40 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 **ATTENTION** Visc @ 40°C cSt ASTM D445 46.4 **28.2**

Customer Id: TREELK Sample No.: PCA0104052 Lab Number: 05935088 Test Package: IND 1



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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY

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CINCINNATI Cincinnati (S/N 0000)

Component

Top Hydraulic System

PETRO CANADA HYDREX AW 46 (40 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

▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. Confirm oil type.

Sample Number Client Info PCA0104052 Sample Date Client Info 24 Aug 2023 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info Not Changd Sample Status ATTENTION WEAR METALS Iron ppm ASTM D5185m 20 0 Iron ppm ASTM D5185m >20 0 Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >20 0 Silver ppm ASTM D5185m >20 0 Aluminum ppm ASTM D5185m >20 0 Lead ppm ASTM D5185m >20 0 Copper ppm ASTM D5185m >20 <1							14 0000)
Sample Number Client Info PCA0104052			Aug2023				
Sample Date Client Info 24 Aug 2023 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info Not Changd Sample Status ATTENTION WEAR METALS method limit/base current history Iron ppm ASTM D5185m >20 0 Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >20 0 Titanium ppm ASTM D5185m >20 0 Aluminum ppm ASTM D5185m >20 0 Aluminum ppm ASTM D5185m >20 0 Aluminum ppm ASTM D5185m >20 0 Lead ppm ASTM D5185m >20 0	history2	history1	current	limit/base	method	MATION	SAMPLE INFORM
Machine Age hrs Client Info 0			PCA0104052		Client Info		Sample Number
Oil Age hrs Client Info 0 Oil Changed Client Info Not Changd Sample Status ATTENTION WEAR METALS method limit/base current history1 Long Mark METALS method limit/base current history1 WEAR METALS method no Chromium ppm ASTM D5185m >20 0 ASTM D5185m >20 0 Capper ppm ASTM D5185m >20 0 Tin ppm ASTM D5185m >20 0 Capper ASTM D5185m			24 Aug 2023		Client Info		Sample Date
Oil Changed Sample Status Client Info Not Changd ATTENTION WEAR METALS method limit/base current history1 Iron ppm ASTM D5185m >20 0 Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >20 0 Titanium ppm ASTM D5185m >20 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >20 0 Lead ppm ASTM D5185m >20 0 Copper ppm ASTM D5185m >20 0 Vanadium ppm ASTM D5185m >20 0 Vanadium ppm ASTM D5185m >20 0 Cadmium ppm ASTM D5185m 0 0 Boron ppm			0		Client Info	hrs	Machine Age
Sample Status			•			hrs	•
WEAR METALS method limit/base current history Iron ppm ASTM D5185m >20 0 Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m 0 Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m >20 0 Aluminum ppm ASTM D5185m >20 0 Lead ppm ASTM D5185m >20 0 Lead ppm ASTM D5185m >20 0 Copper ppm ASTM D5185m >20 <1					Client Info		
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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 0 Tin ppm ASTM D5185m >20 0 Vanadium ppm ASTM D5185m >20 0 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D51	history2	history1	current	limit/base	method	S	WEAR METALS
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Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >20 0 Lead ppm ASTM D5185m >20 0 Copper ppm ASTM D5185m >20 <1			0	>20	ASTM D5185m	ppm	Nickel
Aluminum ppm ASTM D5185m >20 0 Lead ppm ASTM D5185m >20 0 Copper ppm ASTM D5185m >20 <1			0		ASTM D5185m	ppm	Titanium
Lead ppm ASTM D5185m >20 0 Copper ppm ASTM D5185m >20 <1			0		ASTM D5185m	ppm	Silver
Copper ppm ASTM D5185m >20 <1 Tin ppm ASTM D5185m >20 0 Vanadium ppm ASTM D5185m <1			0	>20	ASTM D5185m	ppm	Aluminum
Tin ppm ASTM D5185m >20 0 Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 0 34 Calcium ppm ASTM D5185m 50 61 Phosphorus ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m <td></td> <th></th> <th>0</th> <td>>20</td> <td>ASTM D5185m</td> <td>ppm</td> <td>Lead</td>			0	>20	ASTM D5185m	ppm	Lead
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Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 50 61 Calcium ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			0	>20	ASTM D5185m	ppm	Tin
ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 50 61 Calcium ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			<1		ASTM D5185m	ppm	Vanadium
Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 0 34 Calcium ppm ASTM D5185m 50 61 Phosphorus ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			0		ASTM D5185m	ppm	Cadmium
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 0 34 Calcium ppm ASTM D5185m 50 61 Phosphorus ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1	history2	history1	current	limit/base	method		ADDITIVES
Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 0 34 Calcium ppm ASTM D5185m 50 61 Phosphorus ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			0	0	ASTM D5185m	ppm	Boron
Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 0 34 Calcium ppm ASTM D5185m 50 61 Phosphorus ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			0	0	ASTM D5185m	ppm	Barium
Magnesium ppm ASTM D5185m 0 34 Calcium ppm ASTM D5185m 50 61 Phosphorus ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			0	0	ASTM D5185m	ppm	Molybdenum
Calcium ppm ASTM D5185m 50 61 Phosphorus ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			0	0	ASTM D5185m	ppm	Manganese
Phosphorus ppm ASTM D5185m 330 295 Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1 Sodium ppm ASTM D5185m 6			34	0	ASTM D5185m	ppm	Magnesium
Zinc ppm ASTM D5185m 430 361 Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			61	50	ASTM D5185m	ppm	Calcium
Sulfur ppm ASTM D5185m 760 2886 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			295	330	ASTM D5185m	ppm	Phosphorus
CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 <1			361	430	ASTM D5185m	ppm	Zinc
Silicon ppm ASTM D5185m >15 <1 Sodium ppm ASTM D5185m 6			2886	760	ASTM D5185m	ppm	Sulfur
Sodium ppm ASTM D5185m 6	history2	history1	current	limit/base	method	TS	CONTAMINAN
			<1	>15	ASTM D5185m	ppm	Silicon
Potassium ppm ASTM D5185m >20 0			6		ASTM D5185m	ppm	Sodium
			0	>20	ASTM D5185m	ppm	Potassium
VISUAL method limit/base current history1	history2	history1	current	limit/base	method		VISUAL

Zinc	ppm	ASTM D5185m	430	361		
Sulfur	ppm	ASTM D5185m	760	2886		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1		
Sodium	ppm	ASTM D5185m		6		
Potassium	ppm	ASTM D5185m	>20	0		
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 PROPE	RTIES	method	limit/base	current	history1	history2

Visc @ 40°C

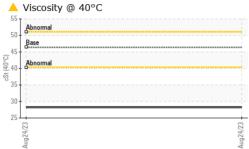
cSt

ASTM D445 46.4

28.2

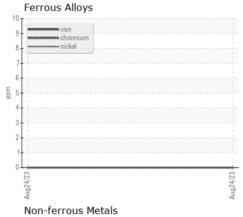


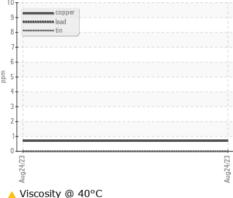
OIL ANALYSIS REPORT

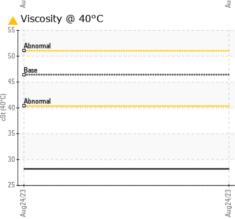




GRAPHS











Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10620359 Test Package : IND 1

: PCA0104052 : 05935088

To discuss this sample report, contact Customer Service at 1-800-237-1369.

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

: 25 Aug 2023 : 28 Aug 2023 TREND TECHNOLOGIES

737 FARGO AVE ELK GROVE VILLAGE, IL

US 60007

Contact: ROB GABL

rgabl@trendtechnologies.com T:

* - 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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