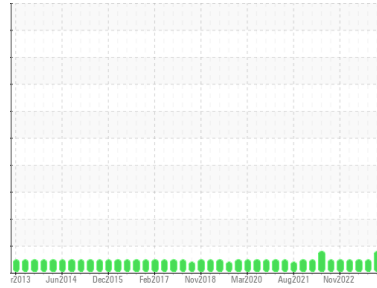


# PROBLEM SUMMARY

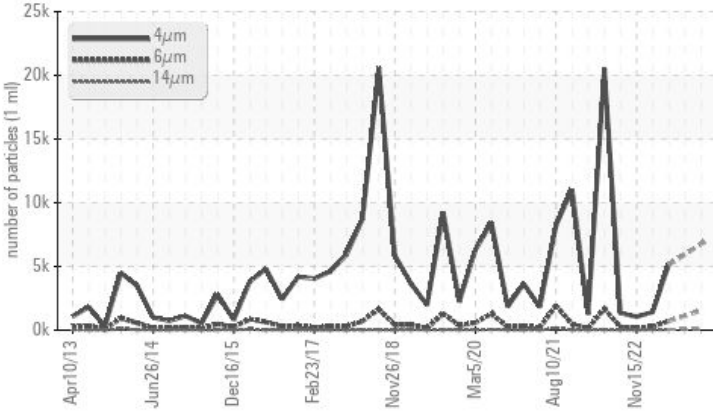
Area  
**TEAM 3**  
Machine Id  
**166179**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 46 (33 GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	NORMAL	NORMAL
Particles >6µm	ASTM D7647 >1300	▲ 1546	---	720
Oil Cleanliness	ISO 4406 (c) >--/17/14	▲ 20/18/14	---	20/17/13

Customer Id: CANDRY  
Sample No.: PC0069848  
Lab Number: 02594998  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

To change component or sample information:  
Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 08 Aug 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid. All component wear rates are normal. There is no indication of any contamination in the component (unconfirmed). The condition of the oil is acceptable for the time in service.

view report



### 24 May 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 06 Feb 2023 Diag: Wes Davis

NORMAL

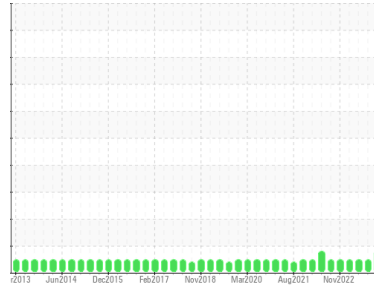


Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area  
**TEAM 3**  
Machine Id  
**166179**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 46 (33 GAL)**



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

### 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	history1	history2
Sample Number	Client Info		<b>PC0069848</b>	PC0074810	PC0070254
Sample Date	Client Info		<b>20 Oct 2023</b>	08 Aug 2023	24 May 2023
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ATTENTION</b>	NORMAL	NORMAL

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>0</b>	<1	0
Lead	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	2	<1
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

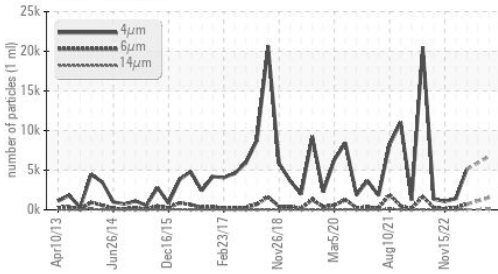
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m) 50	<b>37</b>	36	37
Phosphorus	ppm	ASTM D5185(m) 330	<b>313</b>	338	356
Zinc	ppm	ASTM D5185(m) 430	<b>408</b>	407	405
Sulfur	ppm	ASTM D5185(m) 760	<b>695</b>	715	757
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	0

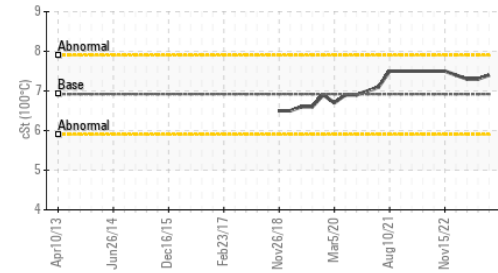
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>6755</b>	---	5144
Particles >6µm	ASTM D7647	>1300	<b>1546</b>	---	720
Particles >14µm	ASTM D7647	>160	<b>89</b>	---	51
Particles >21µm	ASTM D7647	>40	<b>23</b>	---	14
Particles >38µm	ASTM D7647	>10	<b>1</b>	---	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	0
Oil Cleanliness	ISO 4406 (c)	>--/17/14	<b>20/18/14</b>	---	20/17/13

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.70	<b>0.35</b>	---	0.36

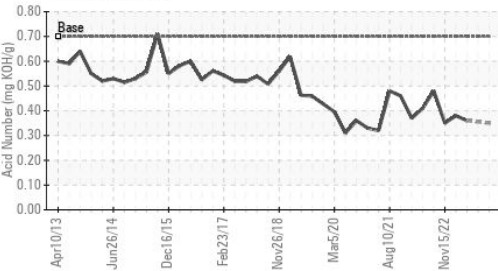
▲ Particle Trend



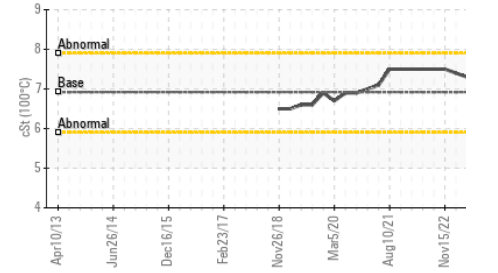
Viscosity @ 100°C



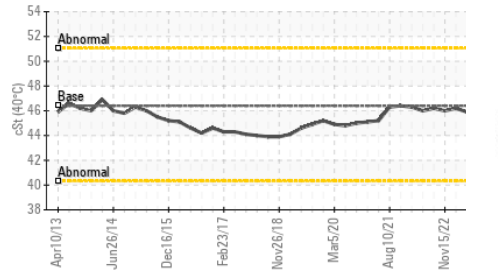
Acid Number



Viscosity @ 100°C



Viscosity @ 40°C

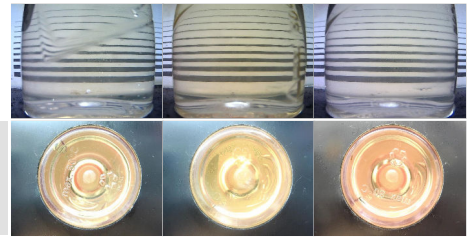


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D2729(m)	46.4	46.1	45.9
Visc @ 100°C	cSt	ASTM D2729(m)	6.92	7.4	7.3
Viscosity Index (VI)	Scale	ASTM D2270*	104	124	120

SAMPLE IMAGES

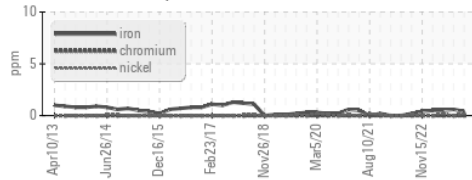
Color



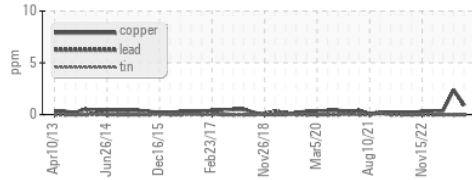
Bottom

GRAPHS

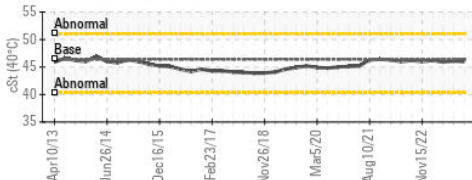
Ferrous Alloys



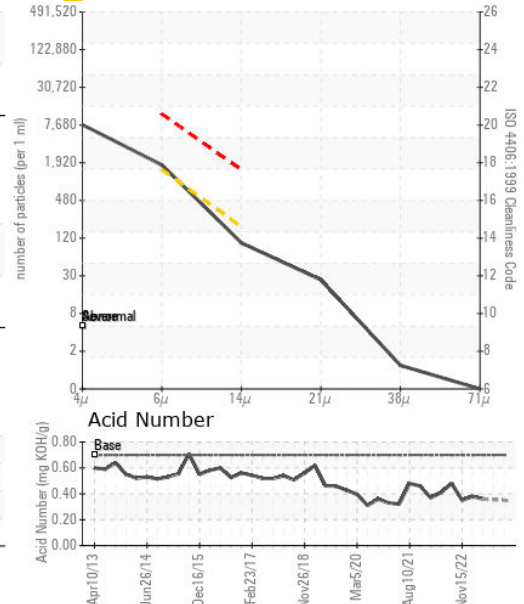
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0069848 **Received** : 08 Nov 2023  
**Lab Number** : 02594998 **Diagnosed** : 09 Nov 2023  
**Unique Number** : 5672077 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

**Dryden Fibre**  
 Box 3001, 1 Duke Street  
 Dryden, ON  
 CA P8N 2Z7  
 Contact: Adebukola Adekanye  
 AADEKANYE@DRYDENFIBRE.CA  
 T: (807)223-9950  
 F: (807)223-9176

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.