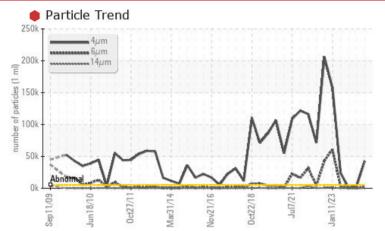


## **PROBLEM SUMMARY**

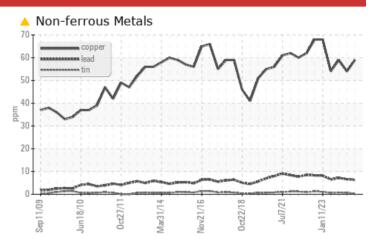
## PRESS #8

Component Hydraulic System Fluid PETRO CANADA HYDREX AW 68 (10000 GAL)

### COMPONENT CONDITION SUMMARY



# Sample Rating Trend WEAR



#### RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.

#### PROBLEMATIC TEST RESULTS

			<b>-</b>			
Sample Status				SEVERE	ATTENTION	ATTENTION
Copper	ppm	ASTM D5185(m)	>20	<u> </u>	<b>5</b> 4	<u> </u>
Particles >4µm		ASTM D7647	>5000	<b>42541</b>	3669	778
Particles >6µm		ASTM D7647	>1300	<u> </u>	255	200
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>e</b> 23/18/13	19/15/12	17/15/11

Customer Id: EXTWOO Sample No.: PC0062177 Lab Number: 02600534 Test Package: IND 2



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

*To change component or sample information:* Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Filter			?	We recommend you service the filters on this component.			
Resample			?	Resample in 30-45 days to monitor this situation.			
Contact Required			?	Please contact your representative for information regarding the proper sampling kits for your service.			
Alert			?	NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.			
Check Breathers			?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.			
Check Seals			?	Check seals and/or filters for points of contaminant entry.			

#### **HISTORICAL DIAGNOSIS**

#### 30 May 2023 Diag: Kevin Marson

WEAR

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 Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.Copper ppm levels are noted. All other 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 acceptable for the time in service (unconfirmed).



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#### 19 Apr 2023 Diag: Kevin Marson



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 Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.Copper ppm levels are noted. All other 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 acceptable for the time in service (unconfirmed).

#### 18 Apr 2023 Diag: Kevin Marson

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.Copper ppm levels are noted. All other component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service (unconfirmed). The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report





## **OIL ANALYSIS REPORT**

Sample Rating Trend

WEAR

PRESS #8

Component Hydraulic System Fluid

PETRO CANADA HYDREX AW 68 (10000 GAL)

#### DIAGNOSIS

#### Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.

#### 📥 Wear

Copper ppm levels are noted. All other component wear rates are normal.

#### Contamination

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

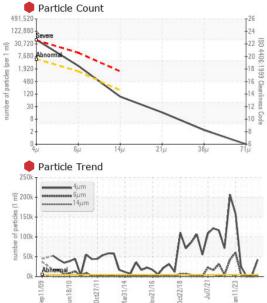
#### **Fluid Condition**

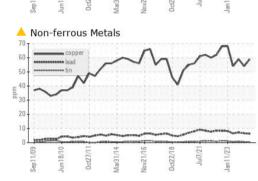
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service (unconfirmed). The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

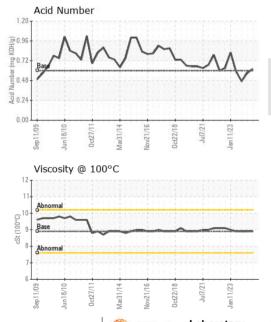
JAL)		52009 Jun20	10 Oct2011 Mar2014	Nov2016 Oct2018 Jul2021	Jan2023	
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0062177	PC0076110	PC0062185
Sample Date		Client Info		30 Nov 2023	30 May 2023	19 Apr 2023
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ATTENTION	ATTENTION
CONTAMINA	ΓΙΟΝ	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METAL	_S	method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>20	31	27	26
Chromium	ppm	ASTM D5185(m)	>20	<1	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	6	6	6
Lead	ppm	ASTM D5185(m)	>20	6	7	7
Copper	ppm	ASTM D5185(m)	>20	<u> </u>	<b>4</b> 54	<b>5</b> 9
Tin	ppm	ASTM D5185(m)	>20	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	<1
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<1	<1	<1
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	45	34	15
Calcium	ppm	ASTM D5185(m)	50	69	54	36
Phosphorus	ppm	ASTM D5185(m)	330	567	567	537
Zinc	ppm	ASTM D5185(m)	430	482	420	357
Sulfur	ppm	. ,	760	1713	1601	1601
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	4	4	3
Sodium	ppm	ASTM D5185(m)		2	1	<1
Potassium	ppm	ASTM D5185(m)	>20	0	<1	0



## **OIL ANALYSIS REPORT**







	FLUID CLEANL	INESS	method	limit/base	current	history1	history2
F	Particles >4µm		ASTM D7647	>5000	<b>•</b> 42541	3669	778
F	Particles >6µm		ASTM D7647	>1300	<u> </u>	255	200
F	Particles >14µm		ASTM D7647	>160	80	21	13
F	Particles >21µm		ASTM D7647	>40	14	6	4
F	Particles >38µm		ASTM D7647	>10	2	1	1
F	Particles >71µm		ASTM D7647	>3	0	0	1
C	Dil Cleanliness		ISO 4406 (c)	>19/17/14	<b>e</b> 23/18/13	19/15/12	17/15/11
	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
ŀ	Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.62	0.57	0.47
	VISUAL		method	limit/base	current	history1	history2
٧	White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
١	ellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
F	Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
5	Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Ľ	Debris	scalar	Visual*	NONE	NONE	NONE	NONE
S	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
ŀ	Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
C	Ddor	scalar	Visual*	NORML	NORML	NORML	NORML
E	Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
F	Free Water	scalar	Visual*		NEG	NEG	NEG
	FLUID PROPER	RTIES	method	limit/base	current	history1	history2
١	/isc @ 40°C	cSt	ASTM D7279(m)	67.4	65.0	65.2	64.9
١	/isc @ 100°C	cSt	ASTM D7279(m)	8.9	8.9	8.9	8.9
١	/iscosity Index (VI)	Scale	ASTM D2270*	105	111	110	111
	SAMPLE IMAG	ES	method	limit/base	current	history1	history2
C	Color						Contraction of the
_	2 - 14				1000 - 1000	0	
E	Bottom						
E	Bottom						

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Laboratory CALA Sample No. : PC0062177 Received : 04 Dec 2023 Lab Number : 02600534 Diagnosed : 05 Dec 2023 ISO 17025:2017 Accredited Laboratory Unique Number : 5685614 Diagnostician : Kevin Marson Test Package : IND 2 (Additional Tests: KV100, PQ, VI) 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.

411 CHRISLEA ROAD

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