

Machine Id  
**#4 SCHWING (S/N 0000203551)**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 46 (1200 LTR)**

### RECOMMENDATION

We advise that you check for the source of water entry. 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 advise that you follow the water drain-off procedure for this component. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. Re-sampling is suggested to confirm test results prior to significant maintenance activities being performed. Please indicate that this is a resample on your Sample Information Form (SIF). 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 MOB 3 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

### WEAR

Chromium ppm levels are severe. Copper ppm levels are abnormal. Cylinder liner, rod or spool wear is indicated. Oil cooler core leaching or motor piston wear is indicated.

### CONTAMINATION

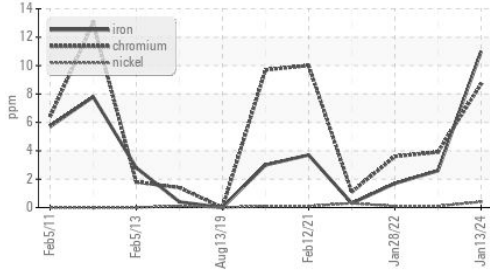
There is a moderate concentration of water present in the oil. Excessive free water present.

### FLUID CONDITION

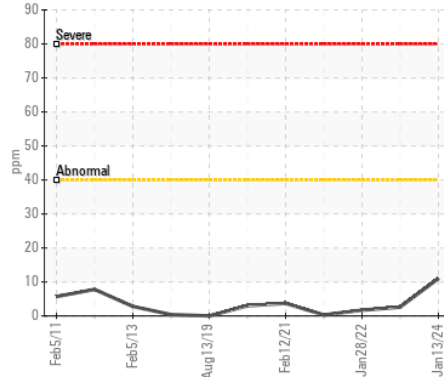
The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0075710</b>	PC0075632	PC0023276
Sample Date		Client Info		<b>13 Jan 2024</b>	07 Sep 2023	28 Jan 2022
Machine Age	hrs	Client Info		<b>62027</b>	61598	58211
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	N/A
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	N/A
Sample Status				<b>SEVERE</b>	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>40	<b>11</b>	3	2
Chromium	ppm	ASTM D5185(m)	>4	<b>9</b>	4	4
Nickel	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>10	<b>4</b>	3	2
Copper	ppm	ASTM D5185(m)	>60	<b>79</b>	66	39
Tin	ppm	ASTM D5185(m)	>4	<b>2</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<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
Silicon	ppm	ASTM D5185(m)	>20	<b>3</b>	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304*	>0.05	<b>0.462</b>	0.166	---
ppm Water	ppm	ASTM D6304*	>500	<b>4625</b>	1662.5	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	VLITE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>LAYRD</b>	WGOIL	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	<b>.2%</b>	.2%	NEG
Sodium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
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>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	50	<b>31</b>	29	45
Phosphorus	ppm	ASTM D5185(m)	330	<b>314</b>	327	321
Zinc	ppm	ASTM D5185(m)	430	<b>369</b>	355	391
Sulfur	ppm	ASTM D5185(m)	760	<b>1116</b>	881	858
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	<b>47.7</b>	46.0	46.0
Visc @ 100°C	cSt	ASTM D7279(m)	6.92	<b>6.4</b>	8.9	7.4
Viscosity Index (VI)	Scale	ASTM D2270*	104	<b>75</b>	177	124

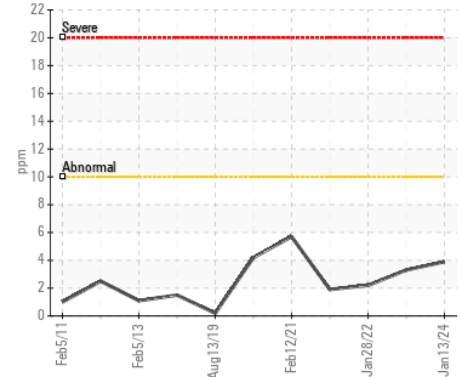
**Ferrous Alloys**



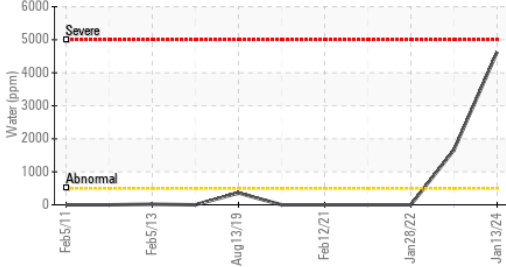
**Iron (ppm)**



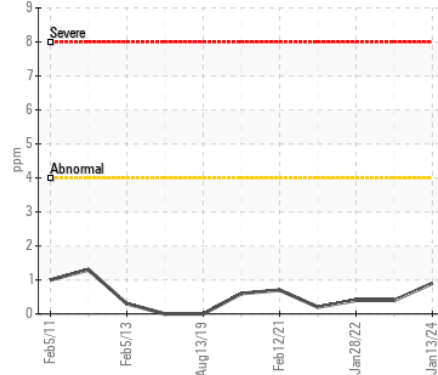
**Lead (ppm)**



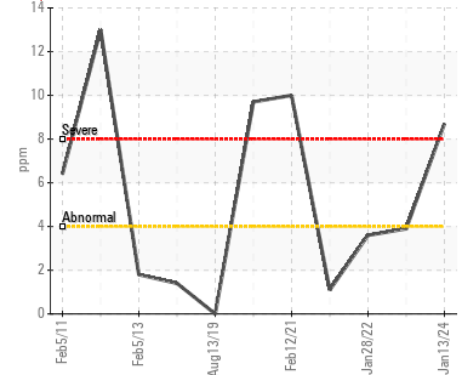
**Water (KF)**



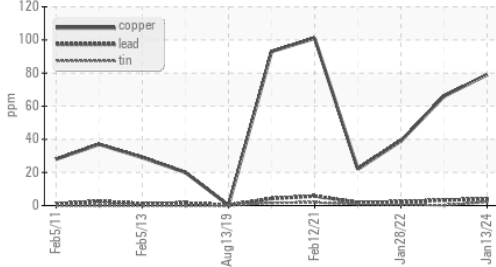
**Aluminum (ppm)**



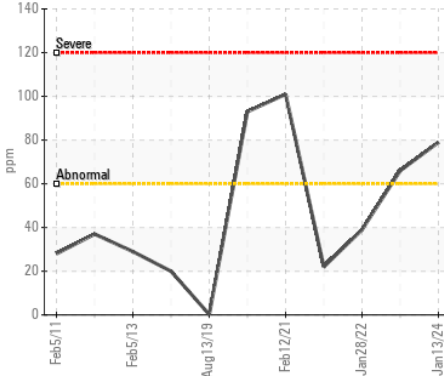
**Chromium (ppm)**



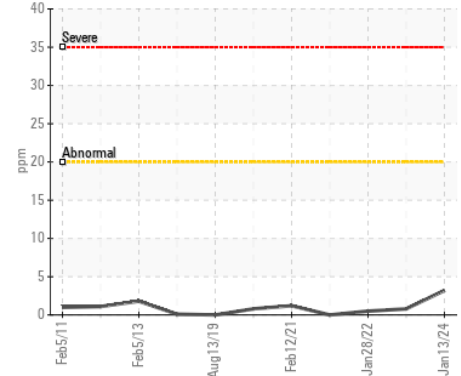
**Non-ferrous Metals**



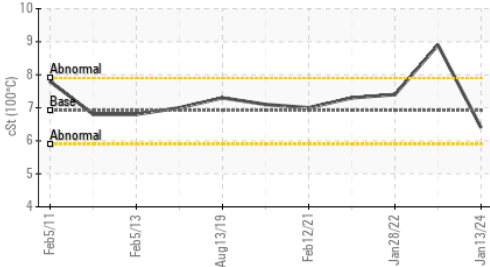
**Copper (ppm)**



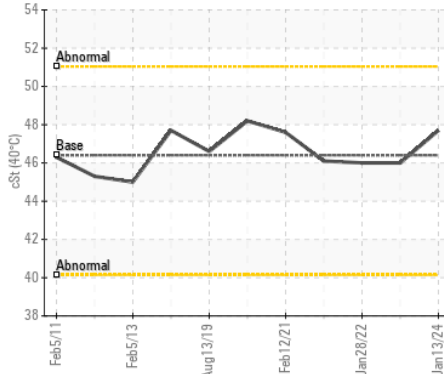
**Silicon (ppm)**



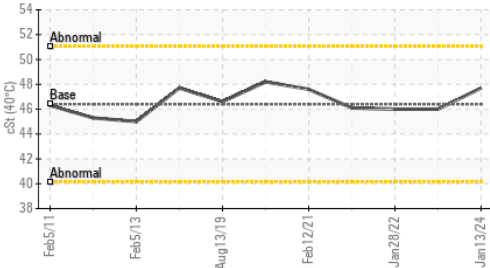
**Viscosity @ 100°C**



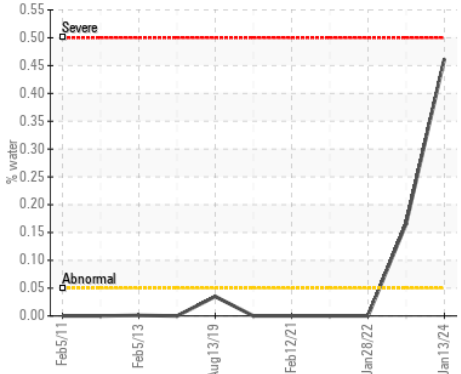
**Viscosity @ 40°C**



**Viscosity @ 40°C**



**Water**



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 ONTARIO CLEAN WATER AGENCY- SOUTH PEEL FACILITIES  
**Sample No.** : PC0075710 **Received** : 16 Jan 2024  
**Lab Number** : 02609141 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 5710227 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: KF, KV100, 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.

1300 LAKESHORE RD  
 MISSISSAUGA, ON  
 CA L5E 1E9  
 Contact: Angelo Magnifico  
 amagnifico@ocwa.com  
 T: (905)274-1223  
 F: (905)274-2076