

Machine Id  
**HP4**

Component  
**Hydraulic System**

Fluid  
**PETRO CANADA HYDREX AW 46 (430 LTR)**

**DIAGNOSIS**

**Recommendation**

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA HYDREX AW 46, however, a fluid match indicates that this fluid is ISO 46 Hydraulic Oil (Food Grade). Please confirm the oil type and grade on your next sample.

**Wear**

All component wear rates are normal.

**Contamination**

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

**Fluid Condition**

Additive levels indicate the addition of a different brand, or type of oil. 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>PC0076755</b>	PC0029857	---
Sample Date	Client Info	<b>25 Sep 2023</b>	29 Nov 2022	---
Machine Age	mths Client Info	<b>0</b>	56	---
Oil Age	mths Client Info	<b>0</b>	56	---
Oil Changed	Client Info	<b>N/A</b>	N/A	---
Sample Status		<b>NORMAL</b>	ATTENTION	---

**WEAR METALS** method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>20	<b>4</b>	5	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Copper	ppm	ASTM D5185(m)	>20	<b>1</b>	1	---
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

**ADDITIVES** method limit/base current history1 history2

Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	---
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	---
Calcium	ppm	ASTM D5185(m)	50	<b>&lt;1</b>	▲ 0	---
Phosphorus	ppm	ASTM D5185(m)	330	<b>445</b>	475	---
Zinc	ppm	ASTM D5185(m)	430	<b>13</b>	▲ 13	---
Sulfur	ppm	ASTM D5185(m)	760	<b>787</b>	798	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

**CONTAMINANTS** method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>15	<b>3</b>	3	---
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---

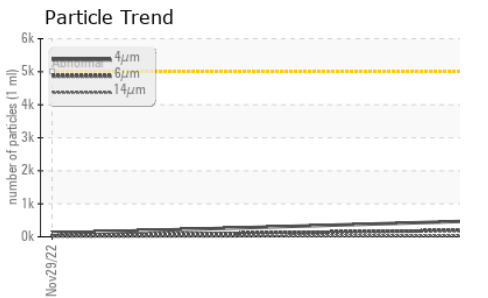
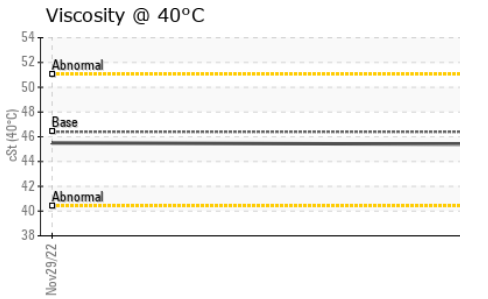
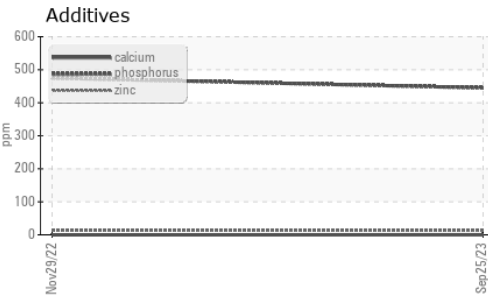
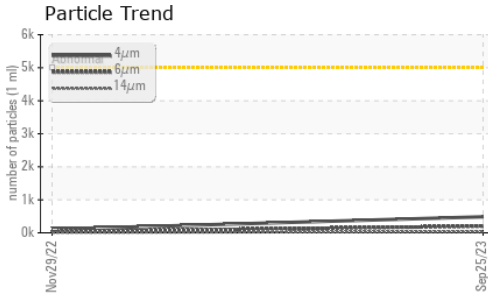
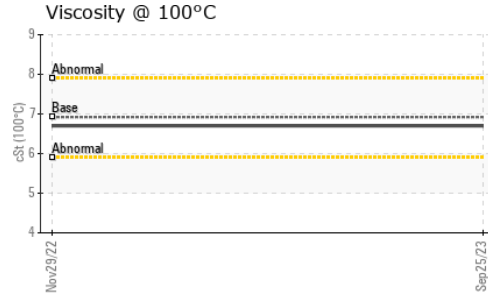
**FLUID CLEANLINESS** method limit/base current history1 history2

Particles >4µm	ASTM D7647	>5000	<b>485</b>	108	---
Particles >6µm	ASTM D7647	>1300	<b>200</b>	33	---
Particles >14µm	ASTM D7647	>160	<b>29</b>	4	---
Particles >21µm	ASTM D7647	>40	<b>9</b>	2	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	0	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>16/15/12</b>	14/12/9	---

**FLUID DEGRADATION** method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	<b>0.20</b>	0.20	---
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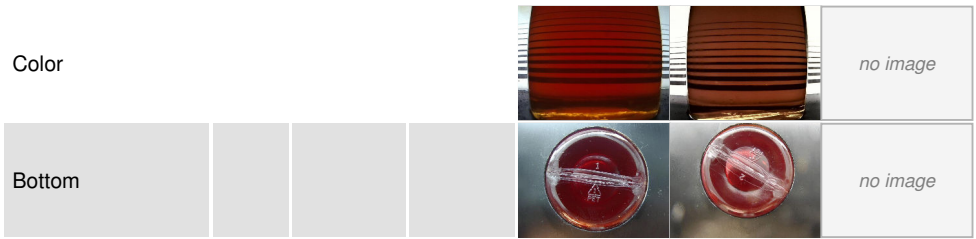
# OIL ANALYSIS REPORT



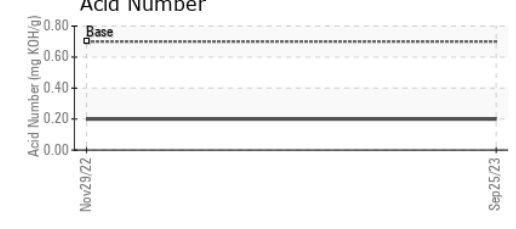
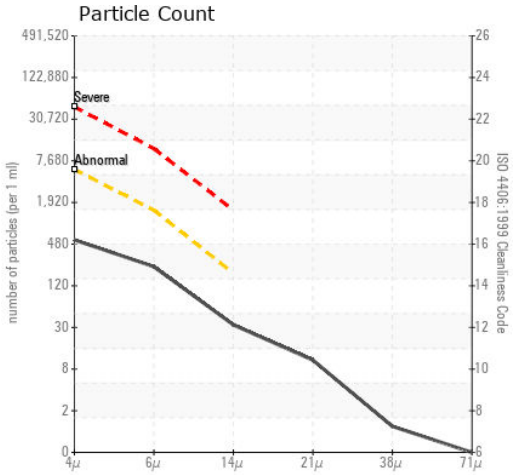
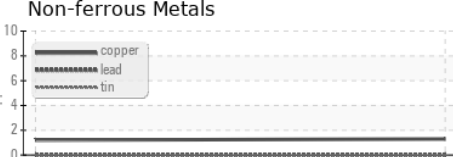
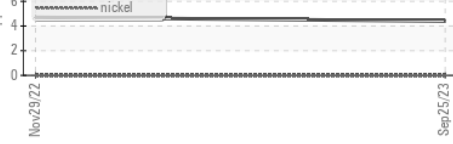
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	45.5	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.92	6.7	---
Viscosity Index (VI)	Scale	ASTM D2270*	104	99	---

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0076755 **Received** : 28 Sep 2023  
**Lab Number** : 02585845 **Diagnosed** : 02 Oct 2023  
**Unique Number** : 5654911 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

**WESTMORLAND FISHERIES**  
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 CAP-PELE, NB  
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 T: (506)530-0426  
 F:

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.