

Machine Id

HP2

Component

Hydraulic System

Fluid

PETRO CANADA HYDREX AW 46 (--- GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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	PC0076757	PC0029858	---
Sample Date	Client Info	25 Sep 2023	29 Nov 2022	---
Machine Age	mths Client Info	66	56	---
Oil Age	mths Client Info	0	56	---
Oil Changed	Client Info	N/A	N/A	---
Sample Status		NORMAL	NORMAL	---

WEAR METALS method limit/base current history1 history2

PQ	ASTM D8184*		0	0	---
Iron	ppm ASTM D5185(m)	>20	36	37	---
Chromium	ppm ASTM D5185(m)	>20	0	0	---
Nickel	ppm ASTM D5185(m)	>20	<1	<1	---
Titanium	ppm ASTM D5185(m)		0	0	---
Silver	ppm ASTM D5185(m)		0	0	---
Aluminum	ppm ASTM D5185(m)	>20	0	<1	---
Lead	ppm ASTM D5185(m)	>20	1	<1	---
Copper	ppm ASTM D5185(m)	>20	3	2	---
Tin	ppm ASTM D5185(m)	>20	0	0	---
Antimony	ppm ASTM D5185(m)		0	<1	---
Vanadium	ppm ASTM D5185(m)		0	0	---
Beryllium	ppm ASTM D5185(m)		0	0	---
Cadmium	ppm ASTM D5185(m)		0	0	---

ADDITIVES method limit/base current history1 history2

Boron	ppm ASTM D5185(m)	0	<1	<1	---
Barium	ppm ASTM D5185(m)	0	<1	0	---
Molybdenum	ppm ASTM D5185(m)	0	0	0	---
Manganese	ppm ASTM D5185(m)	0	0	<1	---
Magnesium	ppm ASTM D5185(m)	0	0	<1	---
Calcium	ppm ASTM D5185(m)	50	1	0	---
Phosphorus	ppm ASTM D5185(m)	330	433	459	---
Zinc	ppm ASTM D5185(m)	430	21	23	---
Sulfur	ppm ASTM D5185(m)	760	829	872	---
Lithium	ppm ASTM D5185(m)		<1	<1	---

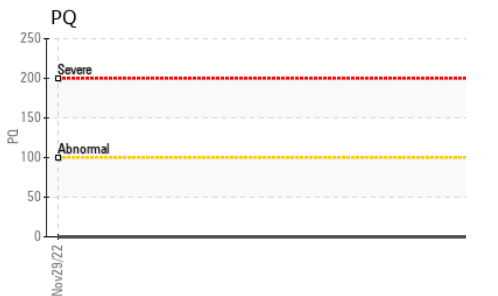
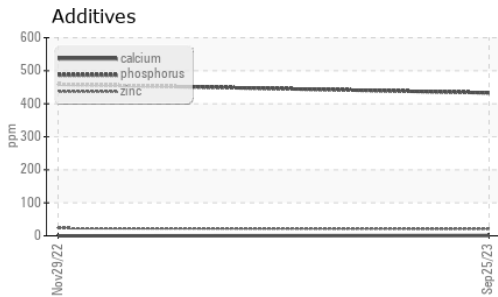
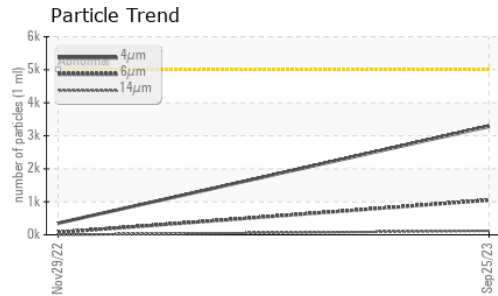
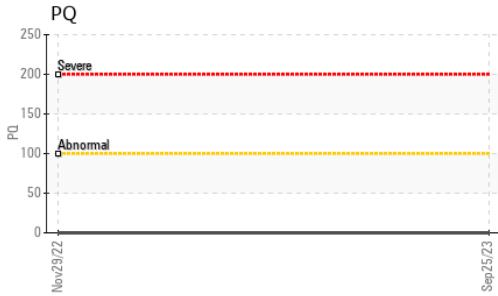
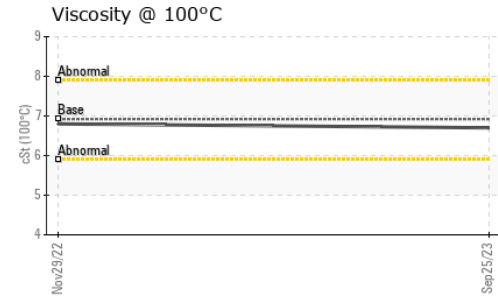
CONTAMINANTS method limit/base current history1 history2

Silicon	ppm ASTM D5185(m)	>15	4	3	---
Sodium	ppm ASTM D5185(m)		2	2	---
Potassium	ppm ASTM D5185(m)	>20	<1	<1	---

FLUID CLEANLINESS method limit/base current history1 history2

Particles >4µm	ASTM D7647	>5000	3285	352	---
Particles >6µm	ASTM D7647	>1300	1050	71	---
Particles >14µm	ASTM D7647	>160	119	2	---
Particles >21µm	ASTM D7647	>40	39	1	---
Particles >38µm	ASTM D7647	>10	3	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/17/14	16/13/9	---

OIL ANALYSIS REPORT



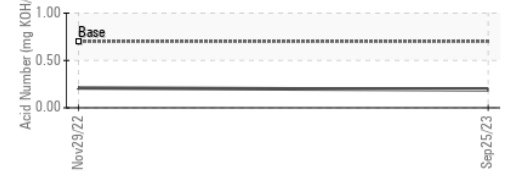
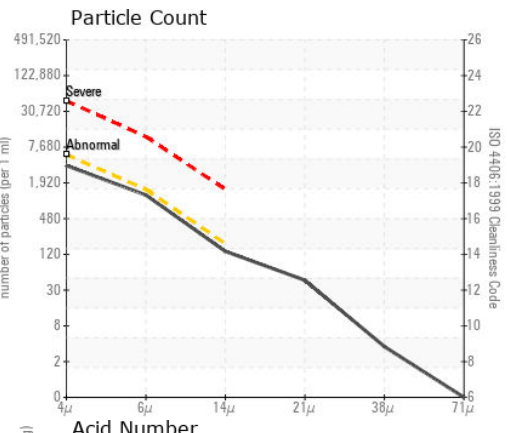
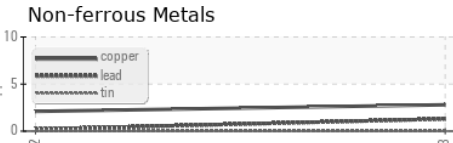
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	0.19	0.21	---

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 D7279(m)	46.4	45.3	45.3	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.92	6.7	6.8	---
Viscosity Index (VI)	Scale	ASTM D2270*	104	100	104	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						no image
Bottom						no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076757 **Received** : 28 Sep 2023
Lab Number : 02585863 **Diagnosed** : 02 Oct 2023
Unique Number : 5654929 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KV100, PQ, VI)

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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.