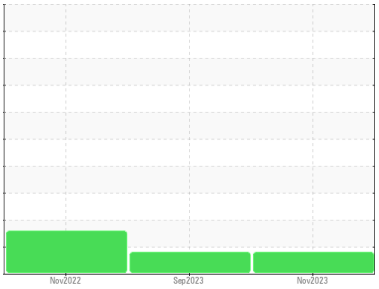
PROBLEM SUMMARY

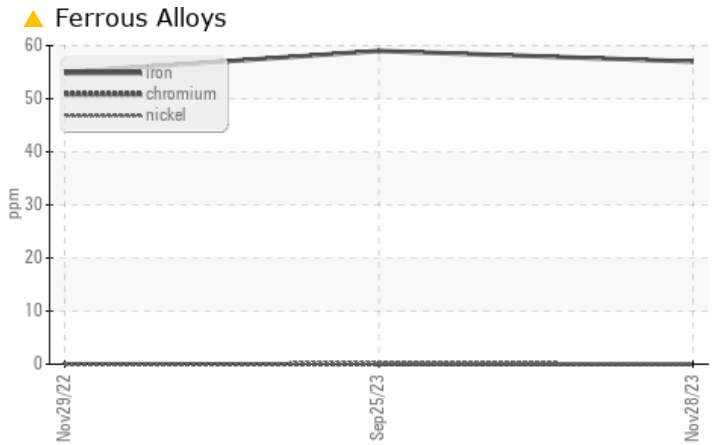
Sample Rating Trend

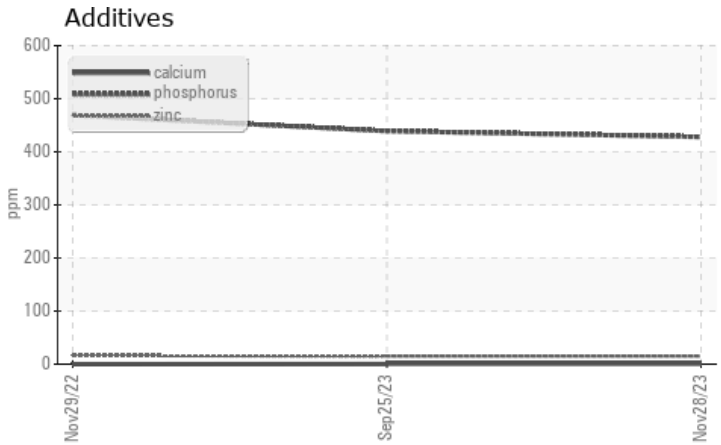


WEAR

Machine Id
HP5
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (430 LTR)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	ATTENTION	ATTENTION
Iron	ppm	ASTM D5185(m)	>20	▲ **57**	▲ 59	▲ 55

Customer Id: WESCAP
Sample No.: PC0076751
Lab Number: 02599712
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:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS

WEAR

25 Sep 2023 Diag: Kevin Marson

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 Environmental Oil. Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. 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. 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.

view report

WEAR

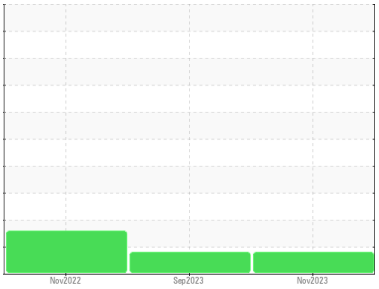
29 Nov 2022 Diag: Kevin Marson

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 Environmental Oil. Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. 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. 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.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
HP5
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.

▲ Wear

Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other 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		**PC0076751**	PC0076754	PC0029859
Sample Date		Client Info		**28 Nov 2023**	25 Sep 2023	29 Nov 2022
Machine Age	mths	Client Info		**76**	66	56
Oil Age	mths	Client Info		**0**	0	56
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ATTENTION**	ATTENTION	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	**NEG**	NEG	NEG

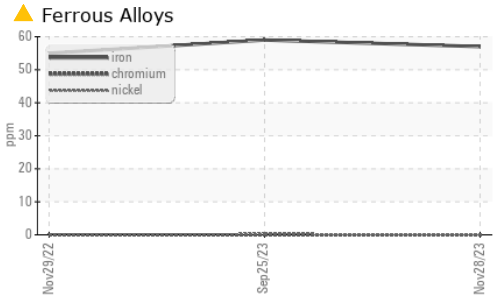
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**0**	0	0
Iron	ppm	ASTM D5185(m)	>20	▲ **57**	▲ 59	▲ 55
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>20	**<1**	<1	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**0**	0	0
Lead	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>20	**3**	3	3
Tin	ppm	ASTM D5185(m)	>20	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
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	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)	0	**<1**	<1	1
Magnesium	ppm	ASTM D5185(m)	0	**0**	0	0
Calcium	ppm	ASTM D5185(m)	50	**<1**	<1	▲ 0
Phosphorus	ppm	ASTM D5185(m)	330	**428**	439	469
Zinc	ppm	ASTM D5185(m)	430	**15**	15	▲ 16
Sulfur	ppm	ASTM D5185(m)	760	**815**	857	886
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

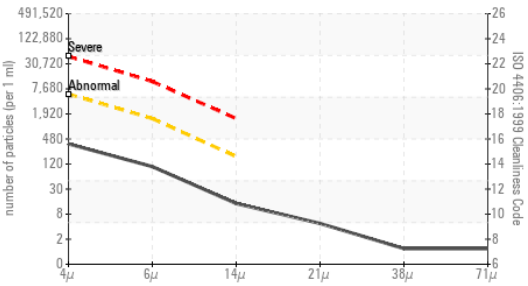
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**4**	3	4
Sodium	ppm	ASTM D5185(m)		**2**	2	3
Potassium	ppm	ASTM D5185(m)	>20	**0**	0	<1

OIL ANALYSIS REPORT

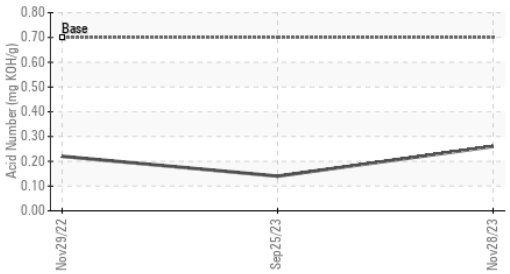
Ferrous Alloys



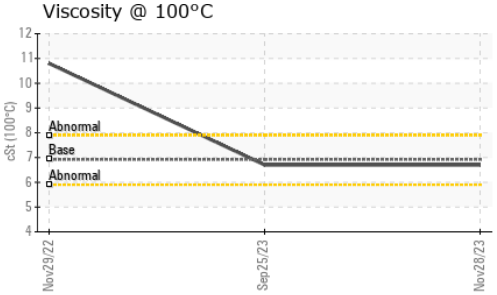
Particle Count



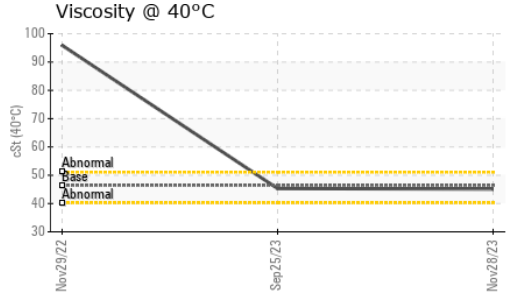
Acid Number



Viscosity @ 100°C



Viscosity @ 40°C



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**322**	392	106
Particles >6µm		ASTM D7647	>1300	**92**	131	26
Particles >14µm		ASTM D7647	>160	**12**	16	2
Particles >21µm		ASTM D7647	>40	**4**	6	1
Particles >38µm		ASTM D7647	>10	**1**	0	0
Particles >71µm		ASTM D7647	>3	**1**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**16/14/11**	16/14/11	14/12/9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	**0.26**	0.14	0.22

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	**45.1**	45.3	95.9
Visc @ 100°C	cSt	ASTM D7279(m)	6.92	**6.7**	6.7	10.8
Viscosity Index (VI)	Scale	ASTM D2270*	104	**100**	100	95

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076751 **Received** : 29 Nov 2023
Lab Number : 02599712 **Diagnosed** : 01 Dec 2023
Unique Number : 5684792 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KV100, PQ, TAN Man, 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.

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