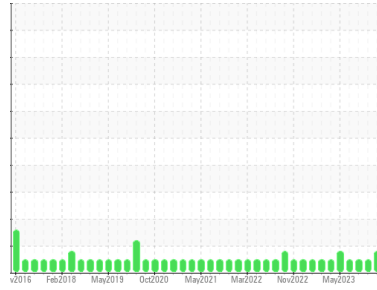


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
TEAM 3
Machine Id
165360
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (83 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. 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	PC0077087	PC0074787	PC0069888
Sample Date	Client Info	13 Jan 2024	25 Oct 2023	27 Sep 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	<1	<1	<1
Chromium	ppm ASTM D5185(m) >20	0	0	0
Nickel	ppm ASTM D5185(m) >20	<1	0	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	0	<1	<1
Aluminum	ppm ASTM D5185(m) >20	<1	0	0
Lead	ppm ASTM D5185(m) >20	1	2	2
Copper	ppm ASTM D5185(m) >20	4	7	8
Tin	ppm ASTM D5185(m) >20	0	0	0
Antimony	ppm ASTM D5185(m)	0	0	0
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	0	<1	<1
Barium	ppm ASTM D5185(m) 0	0	<1	<1
Molybdenum	ppm ASTM D5185(m) 0	0	0	0
Manganese	ppm ASTM D5185(m) 0	0	0	0
Magnesium	ppm ASTM D5185(m) 0	<1	0	0
Calcium	ppm ASTM D5185(m) 50	43	41	41
Phosphorus	ppm ASTM D5185(m) 330	335	321	327
Zinc	ppm ASTM D5185(m) 430	407	406	418
Sulfur	ppm ASTM D5185(m) 760	778	715	718
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

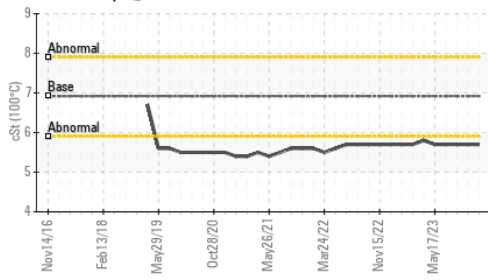
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	0	0	<1
Sodium	ppm ASTM D5185(m)	0	<1	<1
Potassium	ppm ASTM D5185(m) >20	<1	0	0

FLUID CLEANLINESS

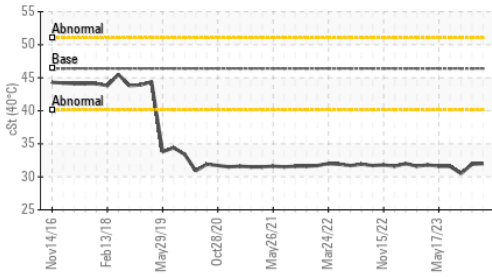
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	1086	---	839
Particles >6µm	ASTM D7647 >1300	302	---	269
Particles >14µm	ASTM D7647 >160	20	---	25
Particles >21µm	ASTM D7647 >40	5	---	7
Particles >38µm	ASTM D7647 >10	1	---	0
Particles >71µm	ASTM D7647 >3	1	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/14	17/15/11	---	17/15/12

OIL ANALYSIS REPORT

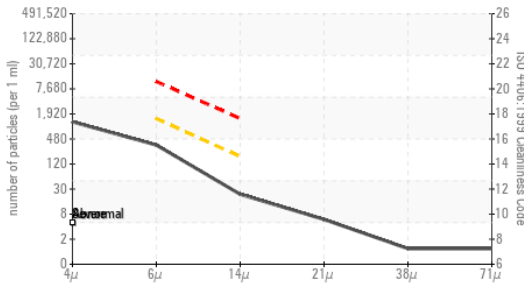
▲ Viscosity @ 100°C



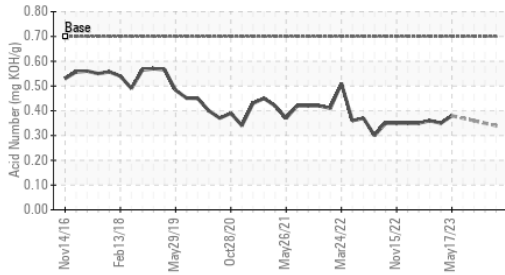
▲ Viscosity @ 40°C



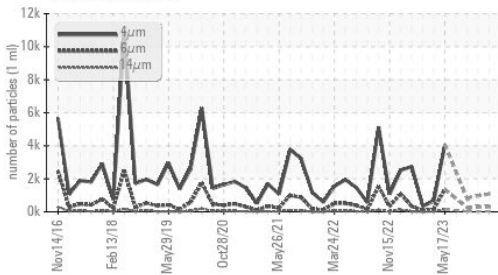
Particle Count



Acid Number



Particle Trend



FLUID DEGRADATION method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	0.34	---	0.36
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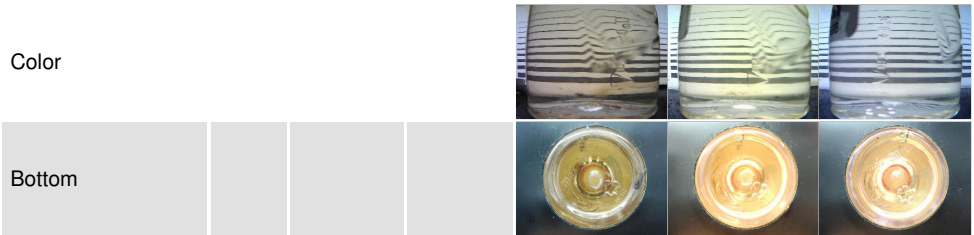
VISUAL method limit/base current history1 history2

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	▲ 32.0	31.9	30.5
Visc @ 100°C	cSt	ASTM D7279(m)	6.92	▲ 5.7	5.7	5.7
Viscosity Index (VI)	Scale	ASTM D2270*	104	119	119	129

SAMPLE IMAGES method limit/base current history1 history2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0077087 **Received** : 24 Jan 2024
Lab Number : **02610905** **Diagnosed** : 25 Jan 2024
Unique Number : 5720000 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: 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.

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