



Machine Id
CASE 590SM 2531000
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 32 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0072623	PC0043412	---
Sample Date		Client Info		12 Dec 2023	27 Jan 2022	---
Machine Age	hrs	Client Info		10568	9227	---
Oil Age	hrs	Client Info		0	1000	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	Not Changd	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>65	5	8	---
Chromium	ppm	ASTM D5185(m)	>6	0	<1	---
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>5	<1	<1	---
Lead	ppm	ASTM D5185(m)	>45	<1	1	---
Copper	ppm	ASTM D5185(m)	>120	5	7	---
Tin	ppm	ASTM D5185(m)	>4	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the component(unconfirmed).

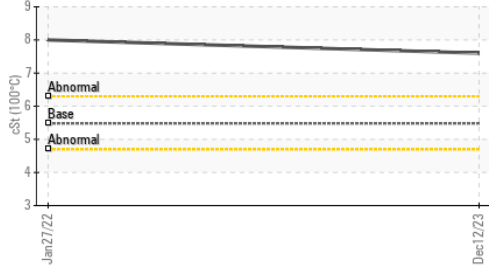
Silicon	ppm	ASTM D5185(m)	>25	<1	2	---
Potassium	ppm	ASTM D5185(m)	>20	<1	0	---
Water		WC Method	>0.1	NEG	NEG	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---

FLUID CONDITION

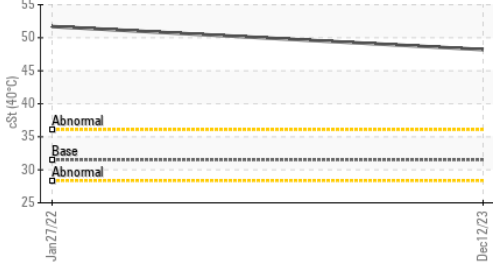
Viscosity of sample indicates oil is within ISO 46 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	1	---
Boron	ppm	ASTM D5185(m)	0	2	4	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	4	<1	---
Manganese	ppm	ASTM D5185(m)	0	0	<1	---
Magnesium	ppm	ASTM D5185(m)	0	59	5	---
Calcium	ppm	ASTM D5185(m)	50	365	471	---
Phosphorus	ppm	ASTM D5185(m)	330	383	372	---
Zinc	ppm	ASTM D5185(m)	430	459	404	---
Sulfur	ppm	ASTM D5185(m)	760	1144	1110	---
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	▲ 48.2	▲ 51.7	---
Visc @ 100°C	cSt	ASTM D7279(m)	5.48	▲ 7.6	▲ 8	---
Viscosity Index (VI)	Scale	ASTM D2270*	110	122	123	---

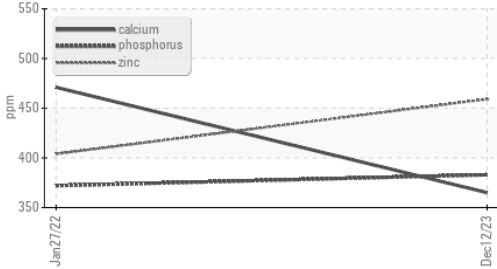
▲ Viscosity @ 100°C



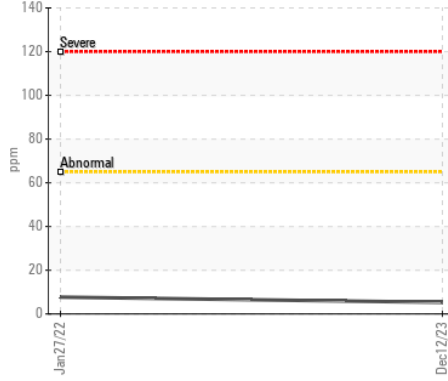
▲ Viscosity @ 40°C



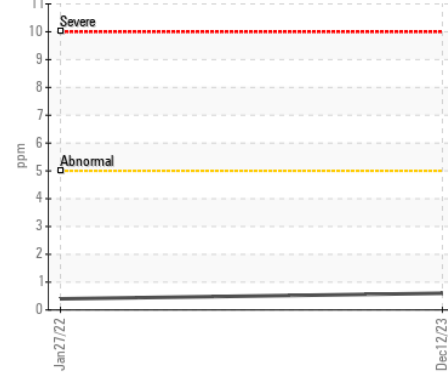
Additives



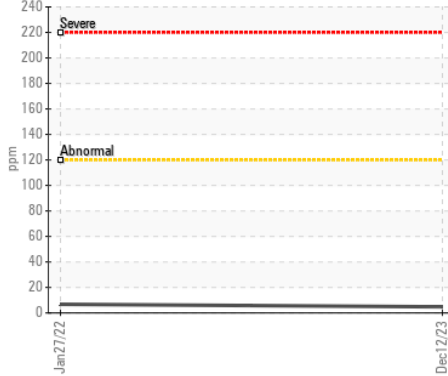
Iron (ppm)



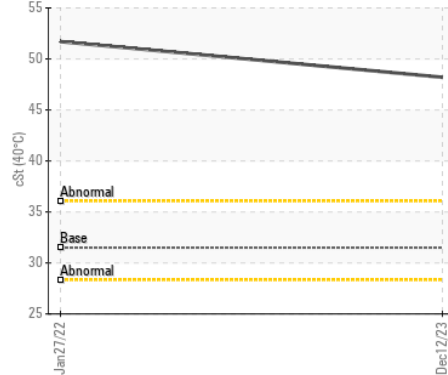
Aluminum (ppm)



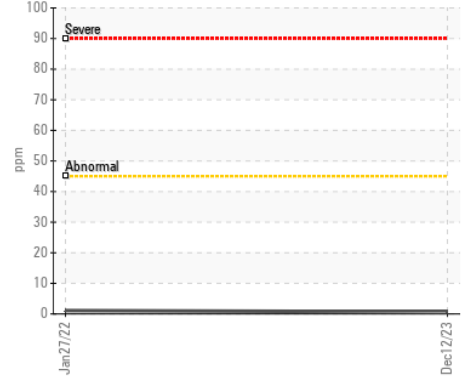
Copper (ppm)



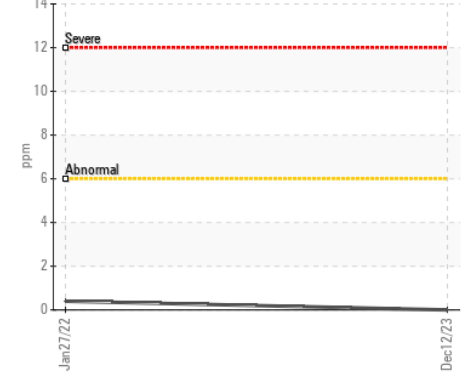
▲ Viscosity @ 40°C



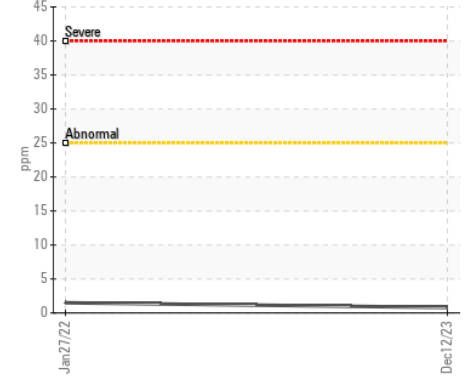
Lead (ppm)



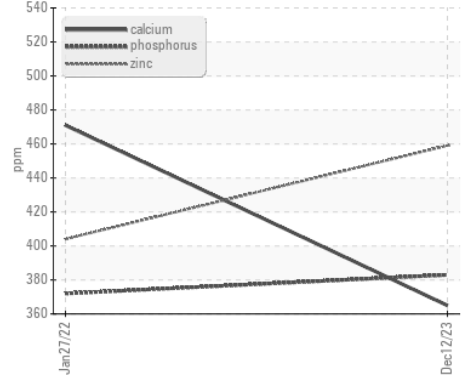
Chromium (ppm)



Silicon (ppm)



Additives



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0072623 **Received** : 08 Jan 2024
Lab Number : 02607140 **Diagnosed** : 10 Jan 2024
Unique Number : 5708226 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (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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